EMBEDDING VOCABULARY INSTRUCTION INTO THE ART EXPERIENCE: AN INSTRUMENTAL CASE STUDY

BY

ROSEANN LABROCCA

A dissertation defense submitted to
The Graduate School of Education
Rutgers, The State University of New Jersey
in partial fulfillment of the requirements
for the degree of Doctor of Education

Approved by

Dr. Lesley Mandel Morrow, Chair

Dr. Carrie Lobman, Committee

Dr. Mary Curran, Committee

Dr. Caroline Clauss- Ehlers, Committee

New Brunswick, New Jersey
January, 2015
EMBEDDING VOCABULARY INSTRUCTION INTO THE ART EXPERIENCE

Abstract

The Arts are a core academic subject necessary to prepare students for the 21st century. Art Standards demand that students know, use and apply appropriate visual and verbal vocabulary for the arts. Common Core ELA Standards for Vocabulary Use and Acquisition also demand students use grade-appropriate, domain specific vocabulary. The problem is that art standards imply that students will learn this vocabulary mostly through the processes of creating and critiquing art. The research on vocabulary has supported explicit instruction and rich extended exposure to words. Yet, there is limited research on using hands-on engagement in the arts combined with evidence-based strategies to provide rich experiences to learn vocabulary. The questions that guided this study were:

How do children use art vocabulary when it is explicitly taught with evidenced-based vocabulary strategies in an art unit on sculpture?

Does the explicit vocabulary instruction improve students’ performance on assessments?

The study was rooted in Vygotsky’s theory of Social Constructivism where learning was scaffolded. Students constructed knowledge through social situations within their zone of proximal development.

Methods

This teacher action research used instrumental case study design. A 14-week unit of art study on sculpture was designed that included interactive word wall activities, illustrating words, vocabulary tally chart, explicit vocabulary instruction through the use of read-aloud and art discussions, and journal writing for four third grade students during their weekly art class. Pre/post quizzes and vocabulary self-rating scales were administered to assess the outcome of the study. Interviews, observations, documents, artifacts and field notes were collected before, during, and after vocabulary instruction.
EMBEDDING VOCABULARY INSTRUCTION INTO THE ART EXPERIENCE

Results

Findings indicated that students used words in a variety of ways while sculpting with clay. Explicit vocabulary instruction through the use of read-alouds and interactive word wall activities helped teach and encourage students to use art vocabulary. It also increased performance on assessments. The visual and social environment of the art room emerged as one way to help students make meaning of art vocabulary. The results also suggest that evidence-based literacy strategies may be used and modified to meet the needs of special area subjects/content areas where teacher and student contact time is limited.
EMBEDDING VOCABULARY INSTRUCTION INTO THE ART EXPERIENCE

Acknowledgements

This journey would not have been possible without the support of my husband, my partner, and best friend who endured my endless hours of reading, writing and time away from home with understanding and love. To my children whose words of encouragement gave me strength. To my friends in the EdD cohort who offered support just when I needed it most. To Marianne, a dear friend and extraordinary reading teacher, who understood the importance of art for young children. Lastly to Dr. Lesley Mandel Morrow, my dissertation chair, advisor and mentor, whose dedication, wisdom and passion for early childhood literacy, inspired and guided me throughout this study. My sincerest and deepest thanks for believing.
EMBEDDING VOCABULARY INSTRUCTION INTO THE ART EXPERIENCE

Table of Contents

Abstract .......................................................................................................................... i
Acknowledgements ...................................................................................................... iii
List of Tables ............................................................................................................... vi
List of Figures ............................................................................................................ vii
Chapter 1: Introduction to the Study ........................................................................... 1
  Problem of Practice .................................................................................................... 2
  Purpose of the Study .................................................................................................. 3
Chapter 2: Literature Review and Theoretical Framework ......................................... 6
  Value of Art in the Life of a Child ............................................................................. 6
  Studies that Support the Value of the Arts and Engagement .................................... 7
    How Participating in Art Changes Students ............................................................. 9
    Positive Attitudes and Dispositions ....................................................................... 11
    Family Involvement ............................................................................................... 12
    Misconceptions in Defining Art-Based Learning ..................................................... 12
  The Case for Arts Integration .................................................................................... 14
  Interdisciplinary Literacy .......................................................................................... 16
  Literacy Strategies .................................................................................................... 18
    Read-Alouds ........................................................................................................... 18
    Vocabulary Development and Read-Alouds ............................................................ 18
    Rich Vocabulary Instruction .................................................................................. 20
    Explicit Vocabulary Instruction ............................................................................. 23
    Word Walls ............................................................................................................ 24
    Journals .................................................................................................................. 26
    Discussions/Critiques ............................................................................................ 28
  Theoretical Framework ............................................................................................. 29
    Social Constructivism .............................................................................................. 29
    Scaffolding .............................................................................................................. 30
    Conclusions ............................................................................................................ 32
Chapter 3: Methodology and Research Design .............................................................. 34
  Context of the Study ................................................................................................. 36
  The Study Group ...................................................................................................... 38
  Data Collection Procedures ...................................................................................... 42
    Pilot Study ............................................................................................................. 43
    Methodologies Used ............................................................................................... 45
  Overview of Unit ....................................................................................................... 46
    Procedures for Word Walls ...................................................................................... 47
    Procedures for Illustrating Words ........................................................................... 49
    Procedures for Vocabulary Tally Chart .................................................................. 49
    Procedures for Explicit Instruction, Vocabulary Review, Discussions .................. 50
    Procedures for Writing about Art .......................................................................... 54
    Procedures for Unguided Social Interactions ......................................................... 55
  Validity of the Study ................................................................................................. 56
  Data Analysis ............................................................................................................ 59
EMBEDDING VOCABULARY INSTRUCTION INTO THE ART EXPERIENCE

Chapter 4: Results and Discussions ................................................................. 62
Word Walls ........................................................................................................ 64
Illustrating Words .............................................................................................. 69
Vocabulary Tally Chart .................................................................................... 72
Explicit Instruction, Vocabulary Review, Discussions .................................... 76
Writing about Art ............................................................................................... 94
Unguided Social Interactions ............................................................................. 100
Assessments ..................................................................................................... 103
Competing Explanations .................................................................................. 109
Analysis ............................................................................................................. 114
Conclusions ...................................................................................................... 121

Chapter 5: Summary of Study, Implications, Conclusions
From Harry Potter to Dave the Potter ............................................................... 122
Implications for Practice and Future Research ................................................ 151
Ending Remarks ............................................................................................... 156
References ........................................................................................................ 158

Appendix A: Timeline of Unit of Instruction .................................................. 172
Appendix B: Consent Forms
B1: Children Consent ....................................................................................... 174
B2: Parent Consent Study Group ...................................................................... 176
B3: Parent Consent Study Class ........................................................................ 178
Appendix C: Student Interview Protocol .......................................................... 180
Appendix D: Data Base Labels .......................................................................... 181
Appendix E: Assessments ................................................................................ 182
Appendix F: Word Wall ..................................................................................... 187
Appendix G: Word Illustrations ....................................................................... 188
Appendix H: Vocabulary Tally Chart ................................................................. 192
Appendix I: Vocabulary Review, Checklists, Transcripts
I1: Explicit Instruction ....................................................................................... 193
I2: Vocabulary Review Illustrations ................................................................. 194
I3: Read Aloud Checklist ................................................................................ 195
I4: Transcripts .................................................................................................. 196
I5: Transcripts .................................................................................................. 198
I6: Checklist ..................................................................................................... 201
I7: Art Discussion Checklist ............................................................................ 202
I8: Art Discussion Transcript ........................................................................... 203
Appendix J: Writing ........................................................................................... 205
Appendix K: Rubric .......................................................................................... 208
Appendix L: Codes ............................................................................................ 210
Appendix M: Lesson Plans ................................................................................. 211
List of Tables

Table 1 .................................................................................................................106
Table 2 .................................................................................................................107
Table 3 .................................................................................................................108
Table 4 .................................................................................................................109
List of Figures

Figure 1 ........................................................................................................105
Figure 2 ........................................................................................................106
Figure 3 ........................................................................................................108
Chapter 1

When I began my career as a K-3 art teacher 18 years ago, the visual arts curriculum was transitioning to Discipline Based Art Education (DBAE). DBAE began as an effort by the Getty Foundation to change existing ideas of art education that held that the teaching of art in schools should be more substantive and demanding. Instruction in DBAE encompassed four disciplines: Aesthetics, Art Criticism, Art History and Performance or creating art. Aesthetics is a branch of philosophy questioning the nature and value of art. Art Criticism is about language, thoughtful writing and talking about art to understand and appreciate art, artists and the role of the arts in culture and society. Art History develops the ability to read and understand works of art and to learn why and by whom a work was created and the original purpose of its creation (Lasher, R., Beattie, D.K. DiBuono, G., Fogler, D. Pugliese, L. & Valenti, P., 2001). These four disciplines eventually became the foundation for State and National Standards in the Visual Arts.

One summer, I participated in the Hands and Minds Institute with a group of art professionals and art educators. The purpose of this institute was to develop guidelines for school districts to use for visual arts curriculum that addressed the components of DBAE. I left with many questions about the pedagogy of teaching young children about the history of art, the processes of critique and aesthetics. These conversations continued with art education leaders during my years working to help develop the Early Childhood Art Assessment for the National Board of Professional Teaching Standards. I was grateful to my school administration at that time for allowing me the opportunity to explore a variety of strategies, most of which were grounded in literacy. My training as a regular classroom teacher guided me to use: (a) read-alouds about artists and art periods, (b) group and class discussions about art, (c) personal and famous art works as prompts for writing, and (d) art vocabulary while students were creating art. Although
my students responded enthusiastically to these strategies, their use of art vocabulary in their conversations was inconsistent.

Today, the Arts are a core academic subject necessary to prepare students for the 21st century. Art Standards created at both the state and national levels address the need to create a sequence of art learning from Preschool-Grade 12. They call for basic and artistic literacy. The standards demand that students know, use and apply appropriate visual and verbal vocabulary for the arts (New Jersey Department of Education, 2009). The Common Core English Language Art Standard L.3.6 for Vocabulary Acquisition and Use also demands students “Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships” (Common Core State Standards, 2010). The problem is that the state and national art standards imply that students will learn this vocabulary mostly through the processes of creating and critiquing art instead of planned explicit instruction.

Research in the field of literacy on vocabulary acquisition state that learning vocabulary is complex and that explicit instruction is needed. Over the years that I have been teaching art at the K-3 level, I wondered how literacy strategies could effectively be used in an art room. Would students use vocabulary that was explicitly taught in their writing about art? Would they use it in their discussions? How would students respond to learning this vocabulary in art? Overall, does embedding literacy in art enhance students’ art experiences? This journey led to this study that examined how four third grade students used art vocabulary when evidenced-based literacy strategies were embedded into the art experience.

**Weakness in Current Research**
Research conducted by the College Board and the National Coalition for Core Art Standards (The College Board, 2014) aligned Common Core State Standards for English Language Arts with art. A new generation of visual art standards was developed to reflect this alignment. Despite this, the research in art education was limited in its connections to literacy. Specifically, the research on vocabulary development supported explicit instruction and rich extended exposure to words. There was little to no research on using hands-on engagement in the arts combined with read-alouds, word walls, journals and discussions to provide rich experiences to learn vocabulary. I continued to wonder why this research was not used to augment and support student learning in the areas of art criticism, art history or aesthetics.

To consider the goals of this study, it became imperative to first acknowledge a basic premise that students need to use vocabulary to discuss art at higher levels. Discussing art at higher levels engages critical thinking, analysis and judgment skills. According to Eliot Eisner, the use of technical language of art processes provided an indication as to the depth of student’s understanding of a work. These cues gave us insight as to what students have learned (2002). The objective then was to invite these students into the art conversation – a meaningful discussion in which even elementary students can partake.

Therefore, the purpose of this study was to examine students’ responses while they were engaged in the art process and in discussing, writing, reading about and learning vocabulary related to the art. The following questions were investigated:

**Question 1**: How do children use art vocabulary when it is explicitly taught with evidenced-based vocabulary strategies in an art unit on sculpture? Each evidenced-based vocabulary strategy was discussed in the following sub-questions.
1a. How do children use art vocabulary when it is explicitly taught to them using interactive word wall activities?
1b. How do children use art vocabulary when they are illustrating words?
1c. How do children use art vocabulary when a vocabulary tally chart is used?
1d. How do children use art vocabulary about sculpture as a result of before, during and after discussions of read-alouds of informational and narrative literature and poems?
1e. How do children use art vocabulary when they write about their art before, during and after use of evidence based vocabulary strategies in the art unit?
1f. How do children use art vocabulary when they are interacting with their peers?

**Question 2:** Does the explicit vocabulary instruction improve students’ performance on assessments?

A study like this, while small and not generalizable beyond my school, is intended to begin a conversation about leaning on literacy research to support learning art vocabulary in art. Perhaps it may inspire art teachers without a background in literacy to use these strategies in their art classrooms.

My belief is that art education is undergoing another transition, one that is driven by the emphasis on literacy demanded by the Common Core. The arts continue to engage children by providing them with hands-on experiences that encourage problem solving and higher order thinking skills. They promote critical thinking through conversations and experiences. Despite this, the connections between art and literacy have not been fully explored in a real art classroom setting. There is a sense of urgency that requires teachers to investigate ways to meet these demands yet still maintain the integrity of the arts as a cognitive discipline. By examining the students’ responses while they were engaged in making, responding and reflecting on their art, I
hoped to suggest or construct ways in which literacy-based strategies in teaching may be used or modified to meet the needs of special area subjects/content areas where teacher and student contact time is limited. In this way, the art experience may be enhanced with literacy. This study was rooted in Vygotsky’s theory of Social Constructivism where learning was scaffolded. Students constructed knowledge through social situations and experienced learning within their Zone of Proximal Development.
Chapter 2: Literature Review

This review of literature explores embedding literacy strategies with a specific emphasis on vocabulary into the art curriculum. It is grounded in the idea that art can provide rich contexts and experiences for developing vocabulary through discussions and writing. This review draws from two areas in the curriculum, art and literacy. The literature review is comprised of three sections. Section one emphasizes the value of art in the life of a child. In addition, it focuses on research that supports art engagement and discusses integrating art into other content areas. It analyzes and reflects on the challenges for art teachers in public schools. Section two argues that art, like science and social studies, is a discipline that could support the development of reading and writing, therefore contributing to interdisciplinary literacy. Section three includes research studies that address the teaching of literacy in art. Since limited research is available on this topic, studies include those that address the integration of literacy into other content areas. Art teachers face a myriad of challenges that are also discussed. For example, to meet the new Common Core and State and National Visual Arts Standards, literacy strategies need to be embedded. As previously stated, a unit of sculpture was designed that embedded evidence-based vocabulary strategies. This leads to the purpose of my study which was to examine students’ responses while they were engaged in the art process and in discussing, writing, reading about and learning vocabulary related to the art.

Value of Art in the Life of a Child

Experts in the field of art and art education agree on the value of the arts in the life of a child (Greene, 1995; M., Eisner, E, 2002; Efland, 2002; Gardener, 1973; Deasey, 2005; Catterall, 2007; Winner & Hetland, 2007). The arts are experiential, multisensory and developmentally appropriate for children while addressing social, emotional and cognitive domains. Some
scholars emphasize the aesthetic value of the arts and imagination (Greene; 1995). Others study the arts for its cognitive value (Gardener, 1973; Efland, 2002; Eisner, E., 2002). Most connect this hands-on engagement with the arts as producing experiences of “flow” where the activity itself becomes autotelic or intrinsically rewarding (Csikszentmihalyi, 1990). Finally, there are others who study the impacts of arts engagement on student learning, the integration of the arts into other disciplines and its impact on disadvantaged students (Heath, 1998; Catterall & Peppler, 2007; Stevenson & Deasey, 2005; Vicars & Senior, 2013).

**Studies that support the value of the arts and engagement**

Hetland, Winner, Veenema & Sheridan (2007) conducted research grounded in Eisner’s work, on what the arts teach and what art students learn. Video observations, interviews, photos and curriculum documents were collected over a period of one school year in three high schools that focused on the arts. Students were from middle to high socioeconomic class and admitted by portfolio review. Few had highly developed skills in art upon admission. Teacher participants were practicing artists. Patterns of interactions and use of time and space were analyzed. In this study, two major categories were identified: Studio Structures and Students at Work. Their analysis determined eight categories of a “hidden curriculum” that the discipline of art teaches. Reflecting, expressing, exploring, engaging and persisting were identified as Studio Habits of Mind critical to success in many academic areas and daily life. They align with requirements in the Common Core Standards for English Language Arts. These cognitive attitudinal dispositions are not reflected in test scores but could have positive impacts on student learning across the curriculum by creating verbal and non-verbal thinking culture (Winner & Hetland, 2008).

Studies were published to support the academic and social effects of art (Deasey, 2002). Through the Arts Education Partnership, Stevenson & Deasey (2002) conducted one case study
on 10 schools to find out how the arts contribute to school improvement in economically disadvantaged communities. The schools that were selected had to have outstanding art programs in which at least 50% of the students were from economically disadvantaged families. Ten schools were selected from different regions around the country and included elementary, middle and high schools. These schools were representative of the complexities faced in public schools today, including large numbers of students learning English as a second language and special education students. The researchers, who were experienced in arts education research, recorded and transcribed interviews with teachers, students, artists and representatives of the community. They conducted site visits to each of the schools, compiling indicators of schools’ quality. The data they gathered led them to two perspectives, the processes that the schools built to sustain the arts as a part of the school and the nature and effects of the programming.

Across all the schools in this study, researchers found strong examples of arts integration especially in the areas of literacy. Thematic units were developed and led by teacher artists that integrated visual arts, drama and literature. Researchers determined that arts integration developed specific literacy skills including an increased desire to comprehend complex texts and themes in oral and written interpretations of text. Teachers reported that the increased engagement helped students grow in their ability to reflect on their work and develop meta-cognitive skills.

Furthermore, the art and literacy experiences were meaningful and central to the children’s learning and engagement. Although test scores in participating schools from Arizona, Mississippi and South Carolina increased, school administrators made no attempts to attribute this to the arts. School leaders from all schools saw the arts as new thinking for teaching and learning, a “third space.” Stevenson and Deasey (2002) concluded that the arts play an important
role in the lives of disadvantaged children. However, a limitation to this study is that results could not be generalized (Stevenson & Deasey, 2002).

Some small classroom-based qualitative studies used arts-based read-alouds to show how students effectively engaged in literacy while they were engaged in the arts (Carger, 2004; Cornett, 2006). Carger (2004) placed art at the center of the read-aloud experience through the use of journals, discussions for a small group of English language learners. This study found that picture books and the art experience supported and encouraged communication of literate comprehension. In these studies, school leaders and teachers were unique in their commitment to the arts and integration. Changing a school culture and centering it on the arts was dependent on this level of commitment. These are challenges for today when test scores and accountability are at the forefront of educational agendas.

The following section discusses other studies about students’ engagement in art and emphasize how art changes students, how they develop positive dispositions, and the importance of family involvement. It concludes with a study that integrates reading with art that claims to be arts based.

**How participating in art changes students.** Catterall & Peppler (2007) conducted a five-month study into the effects of rich, sustained visual arts instruction on 103 inner city 9-year-olds in two major US cities, Los Angeles and St. Louis. It explored changes in students over time. Through the lenses of social learning theory, theories of motivation and self-efficacy, and research on artistic thinking, they investigated the programs’ effects on children’s self-beliefs and creative thinking. The study used a pre–post measure, treatment-comparison group design along with structured observations of participant and comparison group classrooms. A survey instrument using a four point Likert scale was created and administered by the researchers for
general self-concept, general self-efficacy, and internal vs. external attributions for success. A creativity scale based on Torrance’s creativity was designed and previously validated for younger children. Students in both treatment and comparison groups were third graders. No random sampling was done. The treatment group attended the pull-out program, while the control group did not. Both art programs in each city that the children attended were off site but affiliated with the student’s schools. The sites were well equipped with materials and equipment for clay, drawing and painting. In one program, a cohort of children attended once a week for an hour; in the other 90 minutes twice a week for 30 weeks. In the first program, the students used clay. Literacy was embedded as students researched their ideas about the content of art works and connected poetry to artistic creations. This program taught the students to work effectively and cooperatively in groups. It fostered a sense of pride among the students and their families about their own achievements, their school, and the cultural heritage of their neighborhood (Catterall & Peppler, 2007).

The results showed that the arts students made significant comparative gains on a self-efficacy scale and on originality subscale of a standard creativity test. These effects were attributed to children’s engagement in art and to the social organization of instruction including reinforcing peer and student–adult relationships. Treatment and control group scale comparisons were used to assess the percentages of students making meaningful gains using chi square and sample t tests. More than half of the students who participated in the program made significant gains in self-efficacy after their art program experience.

Catterall & Peppler (2007) also used a formal observation instrument to document the nature of the visual art experiences and children’s responses. These were conducted at the home school and the off site location at least once a week over 20-30 weeks. The art students were observed
in their regular classrooms every two-three weeks. Observations were gathered in time segments using a descriptive rubric developed by the researchers. Levels of children’s engagement, focus on their work, relations with both their classmates and adults, and the types of children’s questions were recorded. The results showed that students who were more engaged were able to sustain periods of high focus and high engagement for longer periods of time during their work in the arts than in their home classrooms. During arts classes, the entire class was engaged and focused 15% to 30% more of the time than in their home classrooms, depending on which participating class was observed. Participating students were able to maintain higher levels of focus and engagement in their home classrooms as well for longer periods of time when compared to their non-participating peers (Catterall & Peppler, 2007)

**Positive attitudes and dispositions.** Heath, Soep & Roach (1998) conducted a 10-year study on organizations in high-risk neighborhoods outside school that were judged by local youth to be effective learning environments. Thirty-four locations around the US in urban, rural and mid-sized town communities were selected. Unlike the study by Catterall & Peppler (2007), these 120 organizations had minimal resources. The organizations were clustered into three categories; 48 of the centers were organized around arts-based activities, including drama, music and the visual arts. Eight different methods were used to collect data to answer the following question: What happens in these organizations that draws young people to sustained participation?

After seven years of gathering data, themes of arts engagement were identified. Students participating in the arts had the following characteristics: motivation, persistence, critical analysis and planning. Data from this study was compared to data collected from these students by the National Educational Longitudinal Survey. The study concluded that the arts promote cognitive, linguistic, socio-relational and managerial capacities. Students in the arts engaged with
written text in many ways and communicated effectively. In the arts-based groups, critiques played an important role. Students relied on each other for advice articulating the processes and using the terminology of art to communicate thoughtfully (Heath, Soap & Roach, 1998).

The methodologies used in the studies by Catterall & Pfeller (2007) and Heath, Soep & Roach (1998) were considered rigorous by the RAND report in that they used observations, surveys and interviews to follow students. Heath’s study was significant in that it followed students for a period of 10 years. Overall, weaknesses for studies done in the arts show that there were limited standard validated observational tools or rubrics being used. While they were conducted in programs outside the public schools with disadvantaged populations, all of these studies reflected positive attitudes and dispositions that influence learning which reaffirms the habits of mind (Hetland, Winner, Veneema & Sheridan, 2007).

**Family involvement.** To understand how engagement in the arts affects student cognition, some studies point to family involvement and encouragement in art programs (Melnick, Witmer & Strickland, 2011). This study showed significant differences in reading and math achievement between groups of students who participated with their families in out-of-school arts activities as compared to those who did not. This study implied that families with high socioeconomic status are more likely to participate in these types of activities.

**Misconceptions in defining art-based learning.** Some researchers attempt to determine causal effects, claiming that learning skills in the arts guarantee transfer to other subjects. Nine studies over the course of 13 years were conducted to refine an arts-based learning program developed by Rose & Magnotta (2012) called Reading in Motion (RIM). A four-year longitudinal study was conducted that began with 243 students to determine the effects of RIM. Students from kindergarten through grade three participated in arts-based instruction in reading
that taught phonemic awareness, systematic phonics, and oral reading fluency using small groups and peer-assisted instruction with frequent, corrective feedback. For example, to teach phonemes, students were led through a series of songs that helped them to blend sounds.

Although the two groups were nearly identical upon entering kindergarten, the at-risk treatment students \((N = 57)\) significantly outperformed control students \((N = 48)\) at the end of kindergarten and grades one and two.

There are weaknesses to the claim that RIM is arts based, implying that it includes a wide array of the arts. Only music and drama were represented. The visual arts were not included. The details of the program also implied that the music/drama activities supplemented effective research based-reading strategies. In addition, the attrition rate was high. The researchers concluded that this program was effective, yet no evidence was given that supported this program as being arts-based other than the fact that the students became more engaged in reading when they were involved in music and drama.

The RAND Report (2004) criticized studies conducted in the arts that tried to establish correlations between arts involvement and the presence of certain effects or transfer in other study subjects. Cognitive benefit studies failed to use rigorous analytical methods, experimental or quasi-experimental designs to test for effects. However, this report supports the findings by Catterall & Peppler (2007) and Heath, Soep & Roach (1998). It concludes with its support of the intrinsic benefits of the arts, how it engages students, and how art may be used as a communicative tool (McCarthy, Ondajtee, Zakaras & Brooks, 2004).

For many of these studies in the arts, one might argue that conditions were contrived. For example, research sites had administrative support, students were voluntary participants and availability of resources in each study differed. The studies concluded that through the arts the
students became engaged in learning. The arts encouraged students to use literacy skills to communicate through their art. This was evidenced in levels of engagement in art processes and students’ discussions about art through critiques. However, most of the studies did not take place in traditional public schools. This supports data collected by the National Center for Educational Statistics (Parsad & Spiegelman, 2012) on challenges that exist for effective art instruction and arts integration in public schools. An emphasis on testing and accountability are putting constraints on public schools.

**The Case for Art Integration**

From a historical perspective starting in the 1850’s, art education in schools was rooted in practical purposes. It evolved into a progressive view for self-constructed meaning through the work of Dewey who believed in curriculum practices that integrated art with other fields of study (Efland, 2002). Reasons for integrating art have changed over the years (Eisner, 1997). The 20th century saw conflict in the field of art education, because there were those who believed in teaching content of art and those who believed art to be only for self-expression. This created the myth that art is for a talented few, or that it is an easy non-academic subject (Efland, 1990).

Different perspectives continue to exist. For example, there is said to be disconnect between early childhood educators and art specialists. This could be attributed to the fact that conversations between teacher educators in the arts and early childhood educators occur too infrequently (Bresler, 2002). It could also be because the connections between art and literacy may not been fully explored (Thompson, in Bresler, 2002). It might also be argued that elementary teachers’ content area knowledge in the arts may be weak (Albers, 1997). Some argue that art curriculum integration may jeopardize the integrity of the arts (Miller, 2013).
When the arts become more closely related to the central aims of schooling, the possibilities for integrated learning become more apparent (Bresler, 1995; Bresler, 1999; Thompson, 1997).

A growing challenge to art curriculum integration is the emphasis on high stakes testing (Brand & Tripett, 2012). In 2009-2010, The National Center for Education Statistics reported on the status of Arts Education in public and secondary schools. Findings show that only 59% of elementary schools offered any professional development to visual art teachers. Sixty-nine percent of art teachers participated in integrating art into other content areas. Fifty-eight percent collaborated with other teachers on designing units that integrated visual arts into other content areas.

Despite these statistics, there is a growing body of research that points to the social, emotional and cognitive value of the arts and their importance in the development of literacy. The International Reading Association (IRA) views art forms, such as painting, sculpture, drama, dance, singing and playing a musical instrument, as forms of communication that require interpretation and integration of past knowledge with new information, just as print does. The IRA recommends that visual, communicative and performative art forms not be “pulled” apart in their considerations of what achieving “literacy” means. Yet the history of formal schooling continues to isolate the arts from the regular classroom setting (Flood, Heath and Lapp, p xvi, 2008).

The federal government recognizes the importance of arts integration into the general education curriculum. It is reflected in the President’s Council on the Art and Humanities (PCAH) landmark report titled Reinvesting in America: Winning America’s Future through Creative Schools (2011). Their view is that arts integration models have been yielding promising results in school reform and closing the achievement gap. They admit, however, that
budget constraints and the emphasis on high stakes testing are contributing to a downward trend in arts education. They make recommendations to further develop the field of arts integration through better teacher preparation and professional development, sharing ideas about arts integration (PCAH, p vii).

**Interdisciplinary Literacy**

The interdisciplinary approach to literacy promoted by the Common Core State Standards (2012) demand that literacy be a shared responsibility within a school (http://www.corestandards.org/ELA-Literacy). Studies support interdisciplinary curriculum integrating literacy into content areas like science and social studies (Morrow, Pressley, Smith & Smith, 1997; Osbourn, 2009; Romance & Vitale, 2012; Connor, Rice, Canto, Sutherland, Underwood et al, 2012; Guthrie, Wigfield & You, 2012 in Christenson, Wiley & Reschly, 2012 eds.) However, a case study examining interdisciplinary teaching teams in two large cities showed that implementing interdisciplinary curriculum could challenge the integrity of each subject area (Applebee, Adler, & Flihan, 2007; Miller, 2013).

Art is recognized as a core academic subject necessary to prepare students for the 21st century. As a discipline, art has its own vocabulary, one that is interconnected with hands-on engagement and processes of art making. Scholars who conducted research with experts in other content areas such as math, history and science, agree that these subject areas have their own literacy and vocabulary that must be understood in order to comprehend content (Shanahan & Shanahan, 2008; Shanahan, Shanahan & Misischia, 2011; Shanahan, 2012). Specific materials, tools, techniques and processes are also integral to understanding, making and responding to art. Art, like science, social studies, and math, places an emphasis on the unique tools that experts use to engage in the work of that discipline (Shanahan & Shanahan, 2012). Students should be
presented with opportunities to use and learn academic vocabulary in their discipline (Nagy & Townsend, 2012). The study suggested that teachers who teach in these content areas should create new strategies that are more aligned with their area of specialty (Kamil & Heibert, 2005).

While State and National Standards for the Visual Arts require students to understand and use appropriate art vocabulary, visual art specialists face challenges to meet standards that demand an integrated literacy model required by the Common Core ELA. It is a valid goal, but reality generates special challenges. For example, for 2009-2010 the National Center for Educational Statistics (Parsad & Spiegelman, 2012) reported that while 83% of elementary schools had full-time visual art specialists, 43% taught at more than one school. Teachers taught an average of 22 classes a week. Instructional time for special subject areas such as art decreased 35% from 154 minutes per week in 1999-2000 to 100 minutes per week in 2009-2010. Students with wide ranges of ability and special needs were mainstreamed in art classes, many times without teacher support or teacher training (Center on Education Policy, 2008; Sabol, 2010). For visual arts specialists, no statistics were available on their training in literacy. Furthermore, domains of knowledge in the arts are structurally different. They demand different approaches to instruction and assessment (Ellis & Lawrence, 2007). Addressing interdisciplinary literacy in art means recognizing structural difference when designing and integrating curriculum in the arts (Efland, 2002).

Some literacy strategies are beyond the scope of what could take place in an art room. Therefore, the subsequent literature on literacy strategies reviews the research on read-alouds, word walls, explicit vocabulary instruction, reflective journals and discussions. A limitation is that there is no empirical and little available research on strategies to teach art vocabulary for third grade students in an art class. Therefore, the review of the literature will be grounded in
literacy. It is appropriate that this be discussed in this context since this study spans both art and literacy.

**Literacy Strategies**

**Read-Alouds**

There is an extensive body of research on read-alouds. Reading aloud allows students to make sense of complex ideas. To develop an understanding of the language in read-alouds involves engaging students in discussions about these ideas (Cochran-Smith, 1984; Heath, 1983; Dickinson & Smith, 1991). Effective read-alouds are not passive. Research supports interactive talk (Dickinson & Tabor, 1991; Morrow; 1988).

Moreover, the research addresses different approaches to book reading, ways in which adults read books to children and book reading events (Bus, van IJzendoorn, & Pellegrini, 1994; Dickinson, 1994; Heath, 1982; Cochran-Smith, 1984; Senechal & Cornell, 1993; Morrow, 1988). Other studies on read-alouds examine vocabulary through use of narrative, informational and non-fiction texts (Duke & Kays, 1996; Yopp & Yopp, 2006).

**Vocabulary Development and Read-Alouds**

According to Eliot Eisner, the use of technical language of art processes provides an indication as to the depth of students’ understanding of a work. These cues give us insight as to what students have learned (2002). Studies show that vocabulary can be acquired through read-alouds. Research supports the use of read-alouds for vocabulary acquisition, asserting that children can acquire vocabulary through incidental exposure and direct instruction (Elley, 1989; Duke & Kays, 1996; Coyne, McCoach & Kapp, 2007; Maynard, Pullen & Coyne, 2010).

Duke & Kays (1996) conducted a three-month descriptive study on 20 kindergarten students that used both narrative and informational text. Students were read to aloud almost daily. Book
reading sessions included natural book discussions. No specific features of the information books were pointed out. Children “pretended to read” in September and December. They concluded that children showed increases in knowledge of information book language from September to December and increased engagement in the text. Only a slightly greater number of children included technical vocabulary in their December readings. Researchers attributed this to the fact that the December pretend readings were longer. They concluded that the technical vocabulary and words to which the students were exposed were unlikely to occur in their everyday speech.

Elley (1989) conducted an experiment on seven classes of seven-year old children, where a single text was read three times in one week without explanation of targeted words. Variables that were analyzed included the number of times the words occurred in the text and the number of times each word was pictured in the story. A feature that contributed to whether a word was learned was its frequency in the text. The results showed that the typical child learned three words that were not known before.

Elley (1989) conducted a second experiment on 127 eight-year old children, divided into three groups. Two different illustrated storybooks were used. The first storybook was read to the first group with teacher explanation of the words. Another group was read the same story without any explanation. A third group was not read the story at all. Two post-tests were given, one directly after, another three months after the stories. Results showed a 39.9% mean gain in vocabulary for the group that received teacher explanation and a 14.8% gain without explanation. The control group showed a mean gain of less than two percent. The results of these studies support the hypothesis that vocabulary can be acquired incidentally through read-alouds without teacher explanation.
While read-alouds also allow students to experience new vocabulary in context, the research suggests more intentional instruction for Tier Two or Tier Three words (Beck, Perfetti & McKeown, 1982; Baker, Santoro, Chard, Fien, Park & Otterstedt, 2013; Baumann, Ware & Edwards, 2007) and teaching new content (Heisey & Kucan, 2010; Alexander-Shea, 2011). Tier Two words are likely to appear frequently in a wide variety of texts and in the written and oral language of mature language users. Tier Three words are specialized words that are specific to subject areas such as math, social studies, and science. Moreover, many art words are polysyllabic, suggesting that game-like strategies may be helpful for decoding (Cunningham, 1978). For third grade students who are making the transition from learning to read and reading to learn, the effects of direct vocabulary instruction are significant (McKeown, Beck, Omanson & Pople, 1985; Beck, Perfetti & McKeown, 1982; Maynard, Pullen & Coyne, 2010; Coyne, McCoach and Kapp, 2007; Baumann, Ware & Edwards, 2007).

**Rich Vocabulary Instruction.** McKeown, Beck, Omanson & Pople (1985) conducted research on the nature of vocabulary instruction. Three conditions were created for fourth graders in three urban public schools: a rich, a rich-extended and traditional instructional from a basal reader. The rich group elaborated and discussed words, meanings and their uses. The rich-extended group was given activities that extended beyond the classroom. The words selected were semantically categorized and frequency of instruction was modified from the previous study. In discussing the students’ performance, the rich instruction group was able to develop networks of connections among the words because they discussed their meanings. The rich/extended group developed a wider semantic network for their words. Both rich and rich extended conditions supported higher levels of cognition and word accessibility.
Beck, Perfetti & McKeown (1982) defined rich extended instruction as having multiple encounters with words and extending learning outside the classroom. They conducted a study to see how multiple encounters with words affect long-term access in memory. They arranged conditions that would allow students to develop an awareness of words in their environment and help motivate students to use their environment to learn more words. A program called Word Wizard was used to encourage students to look for words outside the classroom. They conducted a long-term vocabulary instruction experiment with 27 fourth grade children where 104 words were taught over five months. The words were semantically categorized. For example, some categories included people, moods, how we move our legs. Words were taught in cycles, where students would have at least 10 encounters with each word. Different frequency situations exposed groups of students to none, some or many cycles of words. The results of this study showed that students in the “some” and “many” groups responded more accurately and more quickly to words taught at all three different levels of word knowledge meanings. Multiple exposures to words were effective. The students who participated in the Word Wizard group were more motivated. An unanticipated result was that the use of a word wall in one classroom resulted in the students learning words that were not directly taught.

Maynard, Pullen & Coyne (2010) conducted an experimental study to evaluate the effectiveness of rich, basic and incidental vocabulary instruction during shared storybook reading on targeted vocabulary. Two hundred twenty four first grade students in three schools with diverse at-risk populations were randomly assigned by classroom. Three 20 to 30 minute storybook sessions for each group were conducted over one week. Twelve target words were selected, six were taught and six were untaught. The rich group intervention consisted of a read-aloud protocol suggested by Beck, Perfetti and McKeown (1982). Vocabulary was taught within
the context of the story with interactive activity sessions with the words beyond the story. The basic group was read the definition during the story but there were no interactive sessions with the words after the story. In addition, the rich and basic group had three different words taught during the first two readings. In the incidental group, no words were directly taught. The results showed no substantial learning in the incidental group. Furthermore, incidental learning did not result in learning words well enough to use while speaking.

Coyne, McCoach and Kapp (2007) conducted studies with kindergarteners with similar results. This study showed that the students with explicit instruction maintained most of their word meanings eight to ten weeks after instruction. An extended approach that used target words outside the context of the story was also more effective. Although these strong bodies of research support explicit vocabulary instruction, the National Reading Panel report on Teaching Children How to Read found that research on vocabulary is limited in its ability to generalize to classroom contexts (National Institute of Child Health and Development, 2000). There is little research as to what combinations of instructional methods are most effective.

Empirical studies on effective vocabulary instruction recommend using a mixed methods approach, but suggest that not all methods have the same effect. Teaching words in context, definitions, allowing opportunities for deep processing and providing multiple exposures to words all enhance vocabulary acquisition (Stahl, 1986; Stahl& Fairbanks,1986). However, new classroom experiences have to be designed for students to acquire new words (Heibert& Kamil, 2006). This study explored how to teach vocabulary in art by scaffolding learning while students created art. It offers something new to this body of research that is especially relevant now that the Common Core requires literacy in all subject areas.
The following section of the literature reviews research on vocabulary strategies, word walls, discussions and journals. It concludes with theory grounding my study into a Social Constructivist theoretical framework.

**Explicit Vocabulary Instruction**

Research conducted on read-aloud strategies for vocabulary acquisition used narrative and informational texts (Beck & McKeown, & Kucan, 2002; Blachowicz & Obrochta, 2006). Beck & McKeown, & Kucan (2002) developed Text Talk and Questioning the Author using trade books to develop vocabulary. Two to four words were selected from each book and introduced in context during the story. Students were asked to repeat the word to create a phonological representation. The word’s meaning was explained and students used the words in different contexts. Words were recorded in books or note cards. To make meaning of text, the illustrations were covered.

Blachowicz and Obrochta (2006) studied the effects of two different read-aloud strategies with 54 first grade students of mixed ethnicity and reading ability. The strategies used were Standard Read-Aloud and Vocabulary Visit, an adaptation of Standard Read-Aloud. Four first grade teachers taught both processes. Standard Read-Aloud did not preview, teach or define target vocabulary words. It used a picture walk to activate prior knowledge. Vocabulary Visit differed in the following ways: (a) teachers used thematic sets of informational science text (b) ten to fifteen words were previewed across the text sets, (c) the topic was introduced and a First Write was used to activate prior knowledge, (d) a purpose for listening was established for both content and vocabulary (e) students used an interactive “thumbs up” when vocabulary was read in the text. This use of the senses engaged the children during the scaffolded read-aloud treatment, (f) vocabulary was discussed and recorded on the chart, (g) illustrations were used to
generate discussion, (h) a semantic sorting activity followed, and (i) students wrote in their journals.

The results on the posttest showed significant gains for the Vocabulary Visit group. Interviews were conducted with the teachers using cross-case analysis. Themes that emerged included greater student engagement and use of vocabulary outside the classroom. This study is significant because it addressed the needs of teachers who claimed they did not have time to teach science and social studies.

Both Text Talk (Beck & McKeown & Kucan, 2002) and Vocabulary Visit (Blachowicz & Obrochta, 2006) engaged students in learning vocabulary. In Vocabulary Visit, illustrations were used to help make meaning of content in informational text. Since Text Talk focused on making meaning from text, the illustrations were covered. Furthermore, Vocabulary Visit scaffolded the read-aloud to activate prior knowledge and build schema.

No generalizations could be made because of the small sample size of Vocabulary Visit (Blachowicz & Obrochta, 2006). Students were first graders not third graders, so some of the study’s implications may not apply to my cohort. Moreover, these studies took place in regular classrooms, not in art classrooms. However, this research supported the following strategies that were used in my study: the use of a thematic text set on sculpture, a word wall. Furthermore, vocabulary was pre taught and students responded in their journals.

**Word Walls**

The study conducted by Blachowitz & Obrochta (2006) concluded that word walls support student’s vocabulary learning. Words walls provide conversational scaffolds that structure how students study, use and think about words (Brabham & Villaume, 2001). Word walls contribute to making a classroom a print-rich environment. Primary classrooms use word walls for high
frequency words, sight words or vocabulary (Jasmine & Schiesl, 2009). Teachers’ perceptions of
teachers’ perceptions of word walls affect how they are used (Walton, 2000). For word walls to be effective, they should
be interactive and incorporated into the classroom instruction (Harmon, Wood, Hedrick, Vittner
& Willeford, 2009; Jasmine & Schiesl, 2009; Yates, Cuthrell & Rose, 2011; Jackson & Narvaez,
2013).

Yates, Cuthrell & Rose (2011) conducted a study on interactive word walls for middle school
students in a rural public school. Words from the eighth grade curriculum in Language Arts,
Math and Science were taught and placed on a content area word wall. They were also placed on
a larger word wall along with words from the other content areas in the school hallway. Results
of the study showed that making vocabulary learning intentional caused students to use the
words more frequently. In addition, double-digit gains were made in eighth-grade proficiency
scores in all state tested content areas. A limitation of this study is that it did not address other
variables that could have caused scores to increase.

Some studies suggest that word walls are effectively used to scaffold learning by encouraging
student choice (Harmon, Wood, & Kiser, 2009). Harmon, Wood, Hedrick, Vittner & Willeford
(2009) conducted a mixed methods study with 44 seventh graders in a suburban middle school.
Interviews, artifacts, field notes and audio taped interactions between teachers and students were
collected and coded. Quantitative data collected was the vocabulary portion of Group Reading
Assessment and Diagnostic Evaluation as a pre and post-test. In addition, six teacher-developed
tests were developed and used as an assessment.

A six-week vocabulary intervention was designed based on the research of Beck, Perfetti and
McKeown (1982) that guided the word wall intervention design. The students self-selected
words. The word wall vocabulary instruction included: (a) background information was built by
the teacher to guide student’s selections of vocabulary words, (b) students introduced self-selected words by color coding, (c) students drew symbols or illustrations to represent words on index cards, (d) students wrote sentence completion using vocabulary words on poster chart and, (e) students presented words to the class and added them to the word wall. Twenty-three students participated in this intervention. Twenty-one students used a traditional vocabulary program.

The results of the study showed that scores collected from six weekly tests at the end of the six weeks showed no significant difference. However, delayed test scores showed that word wall students achieved higher scores on application and sentence completion sections of the teacher developed tests. Moreover, students commented on the importance of color-coding and pictures as triggers to remember meanings. The study concluded that the use of an interactive word wall achieved a higher level of understanding of word meaning and application. This was a small study conducted with only 44 students; therefore, the results are not generalizable. These were seventh grade middle school students in a regular classroom, not an art classroom. Moreover, students were given the opportunity to choose words that they felt were important. However, this study is relevant because the ways in which students interacted with the word wall helped them become more aware of the using the word wall as tool to trigger their memory to remember words. Moreover, adding illustrations to the words that students wrote in their sketch journals appeared to be a feasible strategy to implement. These studies support the use of a word wall as a tool that contributes to frequent and varied exposure to vocabulary (McKeown, Beck, Omanson & Pople, 1985; NICHD, 2000; Stahl & Fairbanks, 1986). Based on this research, it appeared as if a word wall may be used effectively to teach vocabulary in art.

Journals
Journals are used across disciplines, since the act of silent writing generates emotions, ideas and observations (Fulwiler, 1980). In art, sketch journals are used for teaching and assessment (Dorn, Madeja & Sabol, 2004; Beattie, 1997; Hetland, Winner, Veenema & Sheridan, 2007). Journals encourage the exploration of ideas, techniques and practice for different media. They clarify thinking processes and guide thinking. Sketch journals may be used as a formative assessment to help teachers understand how children think and develop throughout the artistic process (Dorn, Madeja & Sabol, 2004; Beattie, 1997) Journals help students reflect and evaluate their artwork, one of Eight Studio Habits of Mind (Hetland, Winner, Veenema & Sheridan, 2007). Many times, writing accompanies drawing.

In a content-area classroom, student journals may be used to gather assessment information through the use of prompts or probes (Marzano, Pickering, McTighe, 1993). In literacy, journal writing in Writer’s Workshop makes passive learners into active learners (Calkins, 1986). Writing-to-learn journals generate short responses that encourage children to reflect and question, while encouraging the activation of prior knowledge (Gamill, 2006). Studies support the use of journals in content areas like social studies to assist in reading comprehension (Cantrell, Fusaro, & Dougherty, 2000). The physical act of writing also helps develop metacognitive skills (Carr, 2002). Journals may be used as a way to communicate learning to families (Wollman-Bonilla, 2000). While some may argue about reading student journals, giving feedback on journal entries is an important part of the learning process (Fulwiler, 1980).

Writing helps children develop conceptual understandings because the process of writing requires deliberate analytical action from a child (Vygotsky, 1962). For students who have difficulty writing, however, journal responses may be challenging. Thus, writing in any content area should be meaningful and relevant to a child (Vygotsky, 1978). This body of research
supports the use of journal writing across disciplines to guide students thinking, giving them time
to reflect and write about their art.

**Discussions / Critiques**

Through the lens of Social Constructivism, learning is socially based. Encouraging us of their
own speech frees children from the constraints of their environment. Talk helps young children
plan, order and control behavior. Speech helps with problem solving (Vygotsky, 1978). Further,
children learn by interacting with peers. In art classrooms, peer to peer dialogue, discussions and
interactions play an important role in the development of reasoning, critical thinking (Efland,
Research conducted on children’s talk points to the importance of teachers guiding students’ talk
recommend implementing more discussion based activities in classrooms including debating,
questioning, clarifying and elaborating.

Case study research by Hetland, Winner, Veneema, & Sheridan (2007) determined that art
critiques are discussions in art that occur at different stages during the art making process. These
discussions offer opportunities to hear how others interpret artwork and to apply art vocabulary.
They are social processes where peers learn from peers. Teachers in this study guided
conversations and used critiques to evaluate work, teach reflection and observation through
scaffolding.

Eisner (2002) asserts that talking about art is a linguistic achievement requiring the use of
similes and metaphors. This talk gives students permission to use words or language
imaginatively to describe felt qualities. These responses may be characterized as descriptive,
interpretive, judgmental or evaluative. They are the levels of art criticism (Eisner, 1997). To
summarize, the research supports scaffolded vocabulary instruction, discussions, journals and word walls. The evidence-based strategies that were used in this study were supported by research in literacy. Discussions and journal entries were evaluated on a rubric based on levels of art criticism. The gap will be in understanding how to apply it in an art room.

**Theoretical Framework: Vygotsky’s Social Constructivism.**

This study was grounded in a social learning perspective within the theoretical framework of Social Constructivism. From this perspective, learning is socially constructed and scaffolded. According to Vygotsky, young children learn first through interpersonal processes on the social level. Students learn in social situations between people before they internalize learning. Higher psychological functions originate as actual relations between humans. These interpersonal relations are transformed to an intrapersonal level, inside the child. They are the result of a long series of events (Vygotsky, 1978).

Vygotsky rejected the following theories about the relationships between learning and development and their implications for education: (a) development is an external process, learning trails development, therefore, learning is external process; (b) learning is development and, (c) Kofka’s claim that the difference between preschool and school age learning is that one is non systematic and the other is systematic. Vygotsky argued that, for children, a zone of proximal development exists. It consisted of two developmental levels: (a) students’ actual developmental level as determined by completed developmental cycles and, (b) mental developmental level, what students can do with teacher’s guidance or help. Within this zone, children are capable of doing much more in collective activity with adult guidance and support.

Vygotsky concluded that in this approach, developmental process lags behind the learning process. Therefore, good learning is in advance of development and is properly organized.
“Essential feature of learning creates a zone of proximal development that awakens internal developmental processes that are able to operate only when the child is interacting with his peers in his environment and in cooperation with his peers” (1978).

Vygotsky also stated that developing concepts is the result of complex activities designed to challenge students within their zone of proximal development, the discrepancy between a child’s mental age and the level he reaches when he solves problems with assistance. Each school subject has its own specific relation to the course of child development (1978). Efland (2002) discusses these implications for art education when he refers to the progressive schools of the 1920s and 1930s. Art teachers were guided by the idea of freedom for creative expression, believing that if left alone children would develop their creative potential. Efland applies the botanical metaphor used by Vygotsky (1978) to art and explains that while children were allowed to be free from adult intervention, they were neither developing skills nor interest in art.

A study conducted by Lowenfeld (1952, in Lowenfeld & Brittain, 1987) confirmed that older students who were not taught specific art skills become aware of their limitations and were discouraged from further participating in art. Opening up the zone of proximal development in art education means providing adult guidance and assistance in learning through scaffolding. New higher concepts transform the meaning of lower level concepts since direct teaching of concepts is impossible (Vygotsky, 1978). In this very rich, cultural, social environment of the art room, kids do things that they are not able to do in other places. The art environment is more creative and success is not based on what is right or wrong. Struggling students try things they may not do in a regular classroom. This is a value of art in school and fits the broader definition of the Zone of Proximal Development.

**Scaffolding**
More recent theorists like Bruner have taken this definition and put it to use by creating a teaching technique called scaffolding. One of the ways that the ZPD has been used is to talk about what children are able to do when teachers scaffold learning. Scaffolding is a term that has come to be used for interactional support. The scaffolding process is one in which the adult controls elements of a task that may be beyond the learners capability. In this way, adults support children’s cognitive development. To achieve higher levels of development, the idea or task is simplified, the child is encouraged, the important elements of the task are highlighted and models are given. This tutoring is a temporary structure and results in a gradual withdrawal of adult control and support as the child increases mastery of a given task (Wood, Bruner, & Ross, 1976). This study tried a more instrumental approach by applying the scaffolding technique to my art classroom through more explicit and direct instruction of vocabulary. Within this social and creative environment, the students’ vocabulary learning was scaffolded through the use of word walls, read-alouds, journals and discussions. I used this definition for this study because I was interested in seeing what happens when this more explicit instruction is brought into the art classroom. This study was grounded in these views. The scaffolded vocabulary instruction and hands-on engagement were designed to build a deeper conceptual understanding of the processes of sculpture. The clay materials, tools, used in this study posed unique challenges and constraints that influenced how students thought about art. Moreover, the nature of creating a hollow form with ceramic clay challenged the children within their zone of proximal development. Word walls, journals and discussions scaffolded literacy instruction into the art making process. This created a social art and literacy environment designed to enable students to be both challenged and successful.
Furthermore, this art classroom was designed to function as a community of practice where students were expected to help one another. For example, art classrooms have norms regarding thinking and behaviors that are meant to invite conversations (Eisner, 2002). Looking and talking about art is encouraged. The social interactions experienced by the children while making art and participating in small group discussions provided opportunities for students to experience learning in a social environment and to use vocabulary words taught in context within this unit of study. Within the design of this study, children were expected to solve practical tasks with the help of their speech as well as through their eyes and hands (Vygotsky, 1978).

**Conclusions**

A strong body of research in literacy supported the strategies that were used in embedding vocabulary instruction into the art experience. Scholars suggested that vocabulary instruction could be enhanced by providing children not only with guidance in relating words to personal experiences and concepts they already know but also with encouraging them to use words in new and varied contexts outside their own experience (Beck & McKeown, 2001; Blachowicz, 2006). Furthermore, research supports creating a classroom environment that encourages students to use vocabulary words in both discussions and writing as well as to develop an awareness of words (Graves & Watts-Taffe, 2008; Blachowicz, Fisher, Ogle, & Watts-Taffe, 2013). Research also suggests that students be engaged in learning, meaning that students are active, not passive recipients. Art is a cognitive discipline that engages students. Students need to know the vocabulary and processes of art to critique, communicate and meet Common Core State Standards and State and National Standards for the Visual Arts. Because of limitations and challenges in the structure of art classes, understanding how these students respond to this instruction may lead to ways in which literacy strategies may be modified. From a social
constructivist lens, this study hopes to close the gap by trying to understand how one group of students responded to embedding vocabulary instruction into the art experience. Furthermore by exploring the implications of joining literacy instruction with art education, methods can be discussed to help art teachers fulfill the Common Core requirements. Finally, it may help the teaching profession by beginning conversations that support recent College Board research aligning New National Visual Arts Standards with Common Core.
Chapter 3: Methodology

Research Design Overview

In order to fill the gap in the existing research regarding how students learn vocabulary in art class, I conducted an instrumental case study over the course of five months. An instrumental case study is defined as one that provides insight into an issue (Stake, in Denzin & Lincoln, 2000). Instrumental case studies require the researcher to choose cases that offer the opportunities to learn (Stake, in Denzin & Lincoln, 2000). This type of case study is instrumental because its lens is wider than understanding a particular person (Stake, 1995) therefore the study group played a supportive role to the art unit that was taught to 22 students in the study class. In bounding the case, the study group became the unit of analysis and was distinguished from the study class or the context (Yin, 2013). This design provided a rich description and understanding of how embedding literacy practices for four students in an art class enhances the art experience and builds art vocabulary for third grade students. This study was not meant to develop generalizations, since results were unique to this group of students in art class (Stake, in Denzin & Lincoln, 2000). It was, however, to suggest ideas for further investigations, in this case for embedding vocabulary instruction into art. Therefore, the purpose of my study was to examine students’ responses while they were engaged in the art process and in discussing, writing, reading about art and learning vocabulary related to art. Further, understanding how students’ respond may help to enhance the art curriculum to meet Common Core ELA standards.

Action Research

Educational action research is used to describe activities in curriculum development. Strategies of planned action are implemented, observed, reflected upon and subsequently changed. According to Lewin (in Carr & Kemmis, 1986) this spiraling makes action research a
social process. Its aims are to improve a practice, to improve the understanding of the practice, and to improve the situation in which the practice takes place. A 14-week unit of art study on sculpture was designed and taught to 22 students in the study class. It included explicit vocabulary instruction, interactive word wall activities, tally charts, word illustrations, read-alouds with discussions, small group discussions about art and journal writing for all third grade students during their weekly art class. Nineteen words were explicitly taught. They were: *clay, coil, potter, potter’s wheel, pottery, rim, mold, ceramic, rim, carve, hollow, hollow out, score clay, kiln, bronze, sculpture, statue, glaze, three-dimensional.* Four students were observed while they were engaged in art. Specific art and vocabulary strategies were taught during each week of the unit. In its application to this study, I strategically attempted to improve the teaching of art vocabulary by using the research in literacy to improve this practice. I sought to understand which strategies would work within the context of the art room and how to implement them.

After systematic observation and reflection in my pilot study, the unit was modified. In consulting with the classroom teachers of both the study and pilot class, similar strategies were developed in art for previewing the read-aloud and for read-aloud discussions. Data was gathered from students before, during and after vocabulary instruction. Weeks one, two and three were before vocabulary instruction, weeks four through fourteen were during vocabulary instruction.

Procedures for each week followed a timeline (see timeline, Appendix A). The data collected attempted to understand how children used art vocabulary when it was explicitly taught with evidence-based vocabulary strategies in an art unit on sculpture. This experience was enhanced through the use of explicit instruction using read-alouds and a word wall. Vocabulary activities were also embedded while the students were sculpting with clay.
Therefore, the purpose of my study was to describe children’s use of art vocabulary when it is explicitly taught with the following evidence-based vocabulary strategies: word wall activities, vocabulary tally chart, illustrating words, read-aloud and art discussions, writing about art, and unguided social interactions with peers. Social interactions with peers were essentially informal talk that demonstrated how the students used art vocabulary while they were sculpting. This was talk that was not guided by the teacher. It was also to see if this instruction improves students’ performance on assessments. Therefore, the research questions that guided this study were:

**Question 1**: How do children use art vocabulary when it is explicitly taught with evidence-based vocabulary strategies in an art unit on sculpture?

1a. How do children use art vocabulary when it is explicitly taught to them using interactive word wall activities?

1b. How do children use art vocabulary when they are illustrating words?

1c. How do children use art vocabulary when a vocabulary tally chart is used?

1d. How do children use art vocabulary about sculpture as a result of before, during and after discussions of read-alouds of informational and narrative literature and poems?

1e. How do children use art vocabulary when they write about their art before, during and after use of evidence-based vocabulary strategies in the art unit?

1f. How do children use art vocabulary when they are interacting with their peers?

**Question 2**: Does the explicit vocabulary instruction improve students’ performance on assessments?

**Context**

The third grade students in this study attend S Elementary School, a Pre K-3 school in District XYZ. It is located in a small, northeastern suburban town with population of 6,128. City data
reports the median household income is $106,000. District XYZ has two schools, S Elementary School, and K Middle School that together have 1015 students. District XYZ is in District Factor Group I, with 83% of revenues funded by local tax dollars. Students from District XYZ attend a regional high school with a population of students from a neighboring community with similar demographics in the same District Factor Group I. Parents in the community are very involved in the schools.

New Jersey School Performance Data for 2011-2012 reports the following for S School:
Language Diversity- 99.4% of the student population speaks English, .4 % speak Chinese. Enrollment by Ethnic /Racial Sub Group: 92.4% are white, 2.4% are 2 or more races, 2.0 % are Asian, 2% are American Indian, 2.7% are Hispanic and .2 % are Black. Sixteen percent of the total enrollment are students with disabilities, 1.1% are economically disadvantaged.

The district has met NCLB progress targets in Language Arts Literacy. For S School, 12% are Advanced Proficient, 82% Proficient and 5% Partially Proficient. The Academic Achievement Indicators for NJ Language Arts Proficiency on NJ ASK report that School-wide Performance is 95%, Peer Rank is in the 97th percentile (New Jersey School Performance Report, 2012).

School setting. The study took place at S School in my classroom, the art room. The room is in a section of the building where children’s activity in art does not disturb other classrooms. The space is large and allows students opportunities to move around freely to get materials. The room is well equipped with sinks for independent clean up and materials ranging from scissors to paint that are accessible to the children as needed. The art room has a kiln.

All the students in this K-3 school come into this room for art one time a week. Typically, students’ artwork is on display in the art room and in the hallway leading up to the art room. The room has one computer that is hooked up to an overhead projector. There is a Phonic Ear sound
system in every classroom. All teachers in district are required to use this sound system and wear a Phonic Ear microphone. A section of this room is designated for art-related books that are available for the students to read at anytime they are finished with their work. Book about artists or specific cultures that the students are studying are included. There is also an art game center consisting of Art Memory, Art Lotto and puzzles of famous art works. Each third grader has a sketch journal; the journals are stored in the art room.

Student routines are established at the beginning of the year. Students begin by sitting down as a group for their lesson on the floor and then proceed to their assigned seats. Students are seated facing each other to encourage conversations. Unless instructions are being given or a lesson is being taught, most of the students are talking during art.

Research Participants

Selection criteria. S Elementary School had 104 third grade students in 2013-2014. There were five classes; most classes averaged 22 students. Each class met on a different day of the week. I chose a class that met on Wednesday because there were more consecutive class meetings during the 14 weeks of the study. This is salient because qualitative studies seek out groups where specific processes are likely to occur (Denzin & Lincoln, 2000). For this study, which took place in my art classroom, I used convenience sampling. Convenient sampling is purposive sampling, not random. Using convenient sampling, I selected four students who were similar in achievement and typical for a third grader from one third-grade class to gather evidence from for this study. I chose two boys and two girls. These four students were on Fountas and Pinnell’s guided reading levels within range of grade level benchmark (L-N), as determined by classroom teacher’s running records. Academically, these students performed on grade level. I received this information from their classroom teacher. The district administers In
View, a norm-referenced test, to all second grade students. In View assesses cognitive skills and abilities in verbal, non-verbal and quantitative reasoning. The Cognitive Skills Index (CSI) is an age-based score that describes an individual’s performance on In View. The students in the study group performed above the CSI average score of 100.

Permission slips and consent forms were given to all parents and students in this class (see consent forms, Appendices B1, B2 & B3). I taught art to most of these students since kindergarten, which is notable because most third grade students were familiar with expectations in art, class routines and procedures. All teachers have an iPad that they use daily for assessment, recording and clerical procedures. While the students were engaged in art making, data was gathered about literacy strategies used as they relate to the art processes on my district iPad and a digital audio recorder.

**The Study Group**

As stated earlier, all members of the study group were my art students since kindergarten. Since there is little cultural diversity in the town, this group represents the demographics of the XYZ school district. While reading through transcripts during a member-checking session, each student chose a pseudonym that is used in this report. The following section will give a brief description of each child to demonstrate his or her different personality and personal experiences with art and literacy. The information was gathered through interviews and my own observations during the study.

**Mackenzie.** Mackenzie is a confident, observant and insightful art student with above average drawing ability. She admits that art is one of her favorite specials but cautions me not to let anyone else know. She enjoys attending a variety of art classes after school and is happy to share some of her other art experiences, which include family trips to museums. Mackenzie
attributes her love of art to an uncle that is a famous artist. Mackenzie’s mother owns a small bookstore in town to which she attributes her enjoyment of reading. Both Mackenzie and her mother are concerned with how Mackenzie struggles with spelling. She hopes to be a writer someday. Mackenzie believes she knows a lot about art because she studies it a lot, but admits before the study that “it’s hard to remember art words.”

**Francesca.** Francesca is a bubbly, social and self-confident art student with average drawing ability. She is willing to help her classmates if they struggle. She attends art classes after school and is confident in her own ability to create art. She states: “I’m a real big artist with drawing.” Francesca speaks frequently of her mom’s college art background. She takes her time with her artwork, occasionally losing her focus. Sometimes she has difficulty completing tasks. Francesca was referred to Intervention & Referral Services in first and second grade because her classroom teacher felt she was struggling with stamina in writing. She was released from Intervention and Referral Services at the end of second grade. Francesca speaks with expression. She participates enthusiastically during class discussions. In our interview, she told me that she reading and art are “a mixture of two things that I love.” When asked about learning vocabulary in art at the beginning of the study, she states: “At first I probably wouldn’t understand it, but then I’d understand it because I’d get used to it. “ She continued by saying that she would be excited to learn something new.

**Anthony.** Anthony is a quiet, serious art student with exceptional drawing ability. His drawings tend to be very detailed. He exhibits high levels of creativity in different media. For example, he created a drawing of an owl that is surrounded by foliage. His use of composition, perspective, and overlapping were exceptional for a third grader. Anthony says that his dad is “really good at art” and that he draws with his dad. Anthony takes art classes after school.
During art class, he quietly focuses on his artwork. When working with a group, he offers helpful suggestions. Anthony is cooperative and will work with anyone. However, if given a choice, he will gravitate toward students who share the same interests and art ability as he does. Anthony says when he works with these friends in class, they teach each other “techniques.” According to Anthony, books are helpful in art because they also teach techniques that could be used in making art. He especially liked books that taught him how to draw dragons with “lots of scales.” He felt that books could also teach him about shadows. He likes to look at the pictures in books “to see what they put in.” Anthony feels that new words can help him with “techniques that he can put in his art.” Anthony provides the listener with eye contact when he speaks; he exudes confidence.

Phil. Phil is a talkative student with a playful sense of humor. In the beginning of the year, he had some difficulty understanding and applying more advanced drawing concepts including overlapping and perspective. By the end of third grade, he began to show growth and control in his use of line and space. When Phil spoke to me about art experiences outside of school, he mentioned coloring at home and a popsicle catapult he and a friend made together. He also mentioned a papier-mâché mako shark he made for a second grade class project. Phil pauses quite often for long periods of time when he responding to questions. I noted that his responses were short and labored. However, Phil talked a lot while he worked with clay during our 14-week unit. He frequently changed his mind as he encountered challenges with the clay. Phil spoke about art and books, remembering a biography on Picasso we read in second grade. He associated books in art as ways to learn how to draw. He stated: “I used to not really like drawing but now I like it a lot more because I know how to draw a lot more things.” Phil participated in
class discussions. He enjoyed competing with students in the other third grade classes. This became more evident as the study progressed.

The section on data collection will begin with a description of the pilot study and methodologies used. This will be followed by an overview of the art and vocabulary unit and detailed descriptions of procedures used for each evidence-based vocabulary strategy organized by question and/or sub question. This will be followed by a discussion of strategies that were used to increase validity. The chapter will conclude with data analysis. Comprehensive lesson plans may be found in Appendix M.

**Data Collection Procedures**

This case study research used different methods of data collection with the purpose of triangulation to confirm and validate findings (Stake, in Denzin & Lincoln, 2000; Yin, 2013; Stake, 2013). Observations, interviews, field notes, reflective journal and artifacts were collected to see how students used explicitly taught vocabulary in an art room setting. This case study also used pre and post-test data to see how students performed on assessments when this vocabulary was explicitly taught. This quantitative data covered the outcomes of the case study. According to Yin (2013), the convergence of multiple sources of evidence helps to strengthen the construct validity of a case study.

Data was collected from January 2014 to May 2014. This period allowed ample time to collect 14 weeks of data by allowing for school breaks, vacations and days missed for weather-related reasons. It also allowed for data collection to conclude before NJ ASK state testing began. Members of the study group requested to continue meeting afterward. Therefore, I continued to keep observational notes until our last meeting in June.
**Pilot study.** For the 2013-14 school year, I planned lessons for the clay unit of instruction for five classes of third grade students, a total of 104 students. Each class averaged 21 students and attended art once a week for 45 minutes from 8:45 – 9:30 AM. From these classes, I chose one third-grade class that was similar to the study class as a pilot class. It was similar to the study class in that both classes had students who needed additional academic support. Both classes had paraprofessionals. After consulting with the classroom teacher of the pilot class, four students were chosen that were similar in both reading and academic ability as my study group. All were reading on grade levels as determined by classroom teacher assessments and running records.

The art unit that was designed for this study was tested on the pilot class. For the pilot class, I documented and took field notes on the four students focusing on what art and vocabulary strategies were effective or ineffective during art class. Pilot class field notes were reviewed for ways to improve the unit of instruction for the study class, not for content. I also consulted with the classroom teacher for strategies she used during classroom read-alouds. Together we discussed how the students could target vocabulary in context while independently reading. The art unit on sculpture for the pilot class began three weeks before that of the study class. This allowed me the opportunity not only to adjust lessons but allowed me ample time to gather additional research and resources if needed. Data collected from the pilot class group was not used in this study. Pilot field notes were kept in a separate binder.

Action research is a cyclical self-reflective spiraling process that begins with planning, implementation, reflection and change (Cochran –Smith & Lytle, 2009; Carr & Kemmis, 1986). For example, I struggled with managing the inclusion of a four chapter read-aloud *Ancient Soldiers of Clay* during one 45-minute art class. During my pilot study, two different third grade classes read the book in art class while taking notes. I noted that these students were distracted
because other students were still working with clay. In addition, students who were reading were asking if they could draw instead. In consulting with both the study class and the third grade pilot classroom teacher, I was able to arrange a time for their students to independently read the remaining chapters of the book I introduced in art later that week in their homeroom. This allowed me, as the art teacher, to focus the students’ time in art on their artwork. It also gave me the opportunity as a researcher to observe and take notes in their regular classroom while the students quietly read. As a result, the students were more engaged in discussing the story the following week during their weekly art class.

Second, research on vocabulary instruction supports games as one way to promote meta-linguistic vocabulary usage and development (Cunningham, 1978; Blachowicz, 2014). During a literacy workshop given by Dr. Blachowicz \(^1\) that I attended during this study I was introduced to additional interactive word wall activities. As a result, I was able to pilot and implement “Be a Mind Reader” in the unit of instruction (Cunningham, Hall & Sigmon, 1999; Cunningham, Cunningham, Hall & Moore, 2005; Cunningham, Loman, & Arens, 2007 & Blachowicz, 2014).

Finally, since some third grade students’ written responses were not providing enough information to answer the research question on how students used explicitly taught vocabulary, I had the opportunity to experiment and implement additional strategies to gather more data. For example, illustrating words using Picture Dictionary was researched from the district’s Reading A-Z subscription and subsequently implemented. Second, a checklist of vocabulary words was created, piloted and used to target students’ use of vocabulary read-aloud discussions. Third, Post-It Notes were collected during the study group’s independent classroom reading of the Ancient Soldiers of Clay. Fourth, during explicit-vocabulary instruction, student dyads

\(^1\) Dr. Camille Blachowicz is Co-Principal investigator of Multi-Faceted Comprehensive Vocabulary Instruction Program. Dr. Blachowicz’s research and publications are referenced in this study.
created illustrated vocabulary cards. Fifth, students used process logs for three weeks during the course of their work. Finally, rooted in the information that is provided in the provenance of a museum artifact (see www.getty.edu) the students created written museum descriptions for their finished art works. This followed a teacher-directed lesson on museum descriptions developed to motivate students to write about their art.

**Methodologies Used**

**Interviews.** Data collected included pre and post semi-structured interviews (see student interview, see Appendix C). In addition, each student was interviewed individually after observations. The hard copies were labeled (see data base labels, Appendix D) and organized in color-coded file folders for each student in the study group. The folders were kept in a file box at home. They were also saved as digital files.

**Observations.** Individual observations for each student were scheduled for specific weeks in the study (see timeline, Appendix A). Video observations of the group were conducted during each week of the study. Video was viewed along with field notes observations. These were transcribed nightly into Microsoft Word documents. Audio recordings were used to triangulate findings from video observations, filed notes and transcribed as soon as possible. The hard copies were kept organized in labeled and color-coded file folders for each student in the study group. The folders were kept in a file box at home. They were also saved as digital files.

**Documents.** To measure the outcome of the study, three tools were created that assessed the learning of the 22 students in the study class. Two 11-question multiple-choice quizzes and Vocabulary Self-Rating Scale (Blachowicz & Fisher, 2006) were given pre and post (see assessments, Appendix E). Documents were collected from the students throughout the unit.
These included students’ writing, Post-It Notes and illustrations. These hard copies were kept organized in labeled and color-coded file folders for each student in the study group.

**Artifacts.** An iPad and a digital camera were used to take photos of student work, materials and the environment (space) throughout the unit. These were printed, labeled and kept in a separate binder.

**Field notes.** A field note binder was kept and organized for each week of the study. It was reviewed nightly. In addition, a digital reflective journal was kept to record personal biases, ideas or suggestions for improvements.

**Overview of the art and vocabulary unit of instruction.** The goals of the art unit were: (a) to develop coiling and pinching skills in working with clay, (b) to demonstrate appropriate use of materials and tools and apply to both additive and subtractive sculpture, (c) to develop an appreciation of how sculpture is used in different cultures, (d) to develop creative solutions to the prompt, “If someone saw my art 100 years from now in the year 2113, what could they learn about me?” and, (e) to apply use of art vocabulary in conversations about art (see lesson plan, Appendix M). The unit met the following New Jersey Visual Arts Content Standards and Cumulative Progress Indicators: (NJCCCS, 1.3; NJCCCS CPI,1.3.5.4). In addition, the art history & cultural significance of African American and Ancient Chinese sculptures were addressed through three books that were read-aloud to the students. These readings meet NJCCCS CPI 1.3.5.D.2. The subsequent discussions addressed NJCCCS CPI 1.4.5.A to employ basic discipline specific arts terminology to categorize works of dance, music, theatre, and visual art according to established classifications.

The vocabulary unit was designed to open up the zone of proximal development (Vygotsky, 1978) for these students. This meant designing a series of lessons and tasks that were grounded
in the research on explicit vocabulary instruction (McKeown Beck, Omanson & Pople 1985; Perfetti, McKeown, Beck, McKeown & Kucan, 2002; Blachowicz & Obrochta, 2006). Therefore, a thematic series of texts and strategies for vocabulary acquisition was used in this art unit that was modeled after Vocabulary Visit (Blachowicz and Obrochta, 2006). As previously stated, detailed procedures will be discussed for each question and/or sub question.

**Question 1a. How do children use art vocabulary when it is explicitly taught to them using interactive word wall activities?**

Two word wall activities included open sorting and an interactive game, *Be a Mind Reader* (Cunningham, Hall & Sigmon, 1999; Cunningham, Cunningham, Hall & Moore, 2005; Cunningham, Loman, & Arens, 2007 & Blachowicz, 2014). The word sort was introduced during week eight. This was a transition time in the art unit, which meant that some students finished their sculptures and were waiting for their pieces to be fired. Before class began, the art vocabulary word cards used by the other third grade classes were removed from the word wall and placed on a counter where they were visible to the students. The students gathered on the floor in front of the class easel.

**Procedures for word wall and word sort.** Effective vocabulary instruction and learning should be intentional (Blachowicz & Fisher, 2006). Therefore, class began with a discussion about why vocabulary was important. I stated that a series of vocabulary activities would be introduced. One activity that students could participate in was the word wall. The objective of the word wall lesson was for the students to create an open sort whereby students’ understanding of the words developed inductively. Therefore, the lesson for the class began by modeling a word sort activity using the following sample words on index cards: *banana, orange, yellow, purple and green*. In small groups, the students discussed attributes or ways that these words
could be sorted. According to Blachowicz & Fischer (2006), an open sort encourages students to internalize patterns and understand rules, which is better accomplished if they see it themselves. Students suggested that the words could be sorted by color, texture, or as fruits. Individual students came up to the class easel and sorted the sample words by moving the cards. Once the class lesson was completed, students who finished their sculptures were ready to participate in sorting formed groups. Since the study group was still working on their sculptures, they participated in the whole class lesson, but not the word wall activity during week eight. During week nine, Philip and Anthony joined a group of four students.

The students also chose where to conduct their sort. They could use the easel, a table or word wall. They were told, however, that using the word wall would give the other third grade classes the opportunity to see their sort. Finally, at the end of class, the students who participated in the word wall activity explained their sort to the class (see word wall, Appendix F).

*Procedures for interactive word wall game.* An interactive game called “Be a Mind Reader” (Cunningham, Hall & Sigmon, 1999; Cunningham, Cunningham, Hall & Moore, 2005; Cunningham, Loman, & Arens, 2007 & Blachowicz, 2014) was used with the word wall and introduced during week 12 of the art unit. Each child was given a Post-It Note and a pencil. The art vocabulary words for the unit were on the word wall. The game was introduced as follows:

Teacher: “You are going to read my mind. I am thinking of an art vocabulary word. I will give you five clues to try and guess the word.

Clue 1. It’s a word on the Word Wall.
Clue 2: The word I’m thinking of has three syllables. Keep the word you have on your Post-It Note or change it. “Be a Mind Reader.”
Clue 3: The word has three vowels. Keep it or change it.
Clue 4: The word begins and ends with the same letter. Keep it or change it.
Clue 5: When a sculpture is finished, it is fired, it has been glazed and it becomes …

The class was surveyed to see how many students guessed the word on the fifth, fourth, third etc. clue. The Post-It Notes were collected.
**Question 1b. How do children use art vocabulary when they are illustrating words?**

*Procedures for illustrating words.* During the unit, students illustrated art vocabulary during the unit in three different ways: (a) As previously stated, during weeks specified for vocabulary review, student dyads were given white index cards as they entered the art room; (b) As vocabulary was explicitly taught, students chose a new word to illustrate as they wrote it in their journals and, (c) During week nine, students were introduced to Picture Dictionary, an assigned activity to complete when their sculptures were finished. For Picture Dictionary, students chose four new words they learned and drew a picture that showed they knew what the words meant (see word illustrations, Appendix G). Picture Dictionary worksheets were placed on the counter. Observations, field notes and artifacts were collected to triangulate findings. A post interview was also conducted with Ms. Green, their classroom teacher.

**Question 1c. “How do children use art vocabulary when a vocabulary tally chart is used?”**

*Procedures for vocabulary tally chart.* During week six, a vocabulary tally chart was introduced at the same time the students began sculpting with clay. The tally charts for this unit were modified for the art room from a program called Word Wizard as a way for children to play with words (Beck, McKeown & Kucan, 2002). Six white tag board charts were set up below the word wall, one for each third grade class. Class began with a vocabulary review and a review of processes for sculpture. The chart was introduced as follows: “We have spent quite a bit of time learning new art words. In order for us to know these words well, we need to use them. Listen carefully to your classmates over the next few weeks. Your job is to catch them using the words. If you hear anyone use any new words, add them to the tally chart.” Students recorded tallies the following week (see vocabulary tally chart, Appendix H).
Question 1d. How do children use art vocabulary about sculpture as a result of before, during and after discussions of read-alouds of informational and narrative literature and poems?

The books. The books selected were integral to the study, since the art vocabulary related to the unit of sculpture appeared in context. Specifically, the books included a narrative picture book, *Dave the Potter*, by Laban Carrick Hill, an anthology of poems *Etched in Clay* by Andrea Cheng, and an expository book, *The Ancient Soldiers of Clay* by Susan Markowitz Meredith. I selected *Dave the Potter* because it could be previewed, read aloud and discussed during one art class. I chose *Etched in Clay*, because it is a biography of Dave the Potter written as a collection of free verse. Two poems “The Pottery Lesson” and “That’s My Jar” were read aloud to provide the students with the opportunity to hear the art words used in a different context. *The Ancient Soldiers of Clay* was a five-chapter non-fiction book. Since this book could not be read during art class, black and white copies of the book were made for each student to take back to their classroom for independent reading.

Procedures for explicit vocabulary instruction. Before each read-aloud event, art vocabulary words were explicitly taught using the instructional steps to create phonological representation (Beck, McKeown & Kucan, 2002; Blachowicz & Obrochta, 2006; Blachowicz, Fisher, Ogle & Watts-Taffe, 2013). To teach the words, the following steps were modeled for the students: Students looked at the word on index card, said the word, listened for the number of syllables, clapped it, and discussed the meaning (see explicit instruction, Appendix I 1). As a class, any word meaning misconceptions were clarified. Finally, students used the word in a sentence and placed the word on the word wall.
**Procedures for vocabulary review.** Before the students entered the art room, student dyads were given blank index cards and a pencil. Each dyad was assigned one word from the previous week’s lesson to illustrate on the card (see vocabulary review illustrations, Appendix I 2). Each dyad shared its picture with the class and put the picture in a Ziploc bag. The students called this bag their schema suitcase.

**Procedures for Dave the Potter.** To develop an understanding of the language in read-alouds involves engaging students in discussions about ideas (Cochran-Smith, 1984; Heath, 1983; Dickinson & Smith, 1991). Effective read-alouds are not passive. Since the research supports interactive talk (Dickinson & Tabors, 1991; Morrow, 1988), each book was read aloud to the class two times, once during week four and once during week five.

**Procedures for read-aloud, week four.** The vocabulary instruction and week four read-aloud began by previewing *Dave the Potter* with a KWL chart. Student dyads discussed the book’s cover to make predictions on Post-It Notes, and a guided whole-class discussion followed. Students added their Post-It Notes to a chart that showed predictions made by other third grade classes. Explicit vocabulary instruction as described above was planned to scaffold learning vocabulary before reading. The vocabulary words were written on white cards and revealed to the students. The first time I read it to teach the vocabulary pausing for the illustrations. The students gave interactive thumbs up when they heard the words in the story.

**Procedures for read-aloud, week five.** The next week’s art period began with a review of the vocabulary words. I met the students at the door. As they entered the room, student dyads were given a blank index card. Each group was assigned one vocabulary word to write and illustrate on the card. As a class, each word was discussed and added to a “schema suitcase,” a Ziploc bag. The word *schema* was used by their classroom teacher and repeated by the children during an
introductory lesson where we discussed the significance of learning vocabulary. I reread the story the following week without pausing before the students’ small group read-aloud discussions. The children put their thumbs up as they had the week before. During both readings, the students were attentive and quiet. For the small group read-aloud discussion, the study group sat in the back of the room. Students chose to be either moderator or recorder. The recorder’s job was to catch the students in the group using the art vocabulary and write the words as they were used in context. I left a paper with two questions on the back table for the students. It said: How did the author of *Dave the Potter* use the vocabulary words in the story? What did you learn from this story about art? Each small group responded using a tally checklist (see checklist, Appendix I 3).

*Procedures for Etched in Clay.* After whole class instruction, “The Pottery Lesson” was read aloud during week eight of the art unit. It was introduced as follows: “This book is a collection of poems, some of which may have been written by Dave. Before I read this poem I want you to think about the discussions we had about slavery last week. You mentioned that Dave must have been courageous. As you listen to this poem, I want you to visualize what this might look like. I also want you to pay special attention to how the author uses the words we have been learning.” After whole class instruction during week nine, another poem “That’s My Jar” was read. These readings occurred during the weeks the students were actively engaged in clay. As a result, no discussions were held.

*Procedures for Ancient Soldiers of Clay.* This lesson took place during week 10 and 11 of the art unit. Procedures for each week will be discussed.

*Procedures for read-aloud, week 10.* The explicit vocabulary instruction and chapter one read-aloud took place as the book was previewed with a KWL chart. Students’ predictions were
put on Post-It Notes. Vocabulary words were explicitly taught as before. At the end of class, the students were each given a copy of the book and Post-It Notes to take back to class. They would independently read the remaining chapters of the book in their classroom and search for art vocabulary. Ms. Green, the classroom teacher, collected the booklets for me when they finished. To be certain I had them ready for the next week’s discussion, I picked up the booklets with Post-It Notes before the next art class. To gather additional data, I arranged to observe the study group two times for 15 minutes while they were reading in their classroom. Both occurred after lunch at a time that was predetermined by their classroom teacher.

*Procedures for read-aloud, week 11.* Each group was assigned a chapter to discuss. Students chose to be either moderator or recorder. The recorder’s role was to keep track of the art words used during the discussion (see transcripts, Appendices I 4 & I 5; see checklist, Appendix I 6).

*Procedures for art discussions.* Art discussions took place during week three and week 14 of the art unit. Data was collected from two small group discussions about the students’ clay sculptures created before and after explicit vocabulary instruction. The following data was collected for each art discussion: audio recordings, observational field notes gathered from video and artifacts. Artifacts included photos of students’ artwork, the classroom environment, student writing and student tally checklists (Blachowicz & Fischer, 2006). Post interviews and member checking were used to triangulate findings. Each small group discussion lasted about 15 minutes. The students responded to the following prompt: “Discuss your art with your group. Tell them how you made it. Use your art words in your response.” This data was collected because I wanted to see how the students discussed their art before and after explicit vocabulary instruction when they were told to use their art words. Moreover, I wanted to see what factors in the art classroom environment supported vocabulary learning for the study group.
Procedures for art discussion before vocabulary instruction, week three. A word wall was set up in the front of the room with the following words: *overlapping, perspective, texture* and *value*. These words were associated with drawing concepts and skills that were taught as part of the art curriculum in a previous unit. The study class did not receive any explicit vocabulary instruction for these drawing words. No attention was brought to the word wall. Other art vocabulary words were set up in pocket charts. The study group took their completed sculptures to a table in the back of the art room (see checklist, Appendix I 7).

Procedures for art discussion after vocabulary instruction, week 14. Developing word consciousness means that the students were interacting with the words (Blachowicz, Fischer, Ogle & Watts-Taffe, 2013). The word wall displayed the 19 art vocabulary words that were explicitly taught. The study group took their completed sculptures to a table in the back of the art room. This discussion took place at the beginning of art class and lasted about ten minutes (see art discussion transcript, Appendix I 8). The students’ written museum descriptions were used for triangulation.

**Question 1e: How do children use art vocabulary when they write about their art before, during and after use of evidence-based vocabulary strategies in the art unit?**

Procedures for writing about art. Written artifacts were collected from the students before, during, and after vocabulary instruction to provide insight as to how their use of art vocabulary developed during the study. Artifacts included responses to prompts, process logs, and final written museum description of their artwork. To further my understanding of their written responses and how they used art vocabulary, I asked the students to describe their art process during post interviews. These responses and field note observations were used to triangulate findings (see writing and sculptures, Appendix J).
Procedures for writing before vocabulary instruction. During week three, students responded to the following prompt on paper: ”What have you done with your art and plan to do next?”

Procedures for process logs. During weeks seven, eight, and nine, process logs were used to encourage the students to briefly write and document the steps they used in creating their sculptures. The logs were used for three weeks while the students worked with clay. The students discussed what they did and planned to do next with their group before they wrote. Because of time constraints, the logs were discontinued after week nine.

Procedures for museum descriptions. During week 13, a teacher-directed lesson on museum descriptions was given to the students. The six art room tables were set up with yellow lined paper and sharpened pencils. A projector, connected to the one computer in the art room, was set up in the middle of the room. Google Cultural Institute website was accessed and on a webpage that showed an ancient Egyptian gold amulet from the Riksmuseum:

http://www.google.com/culturalinstitute/asset-viewer/amulet/dgEi6KV11a5Mwg

The students were directed to go to their assigned seats. Two questions were posted on the board: What is a museum? and What is an artifact? Following the class discussion, the students were directed to write, pretending that their artifact was going into a museum. They were to create their own museum description for their sculpture. It had to include: Artist’s name, date, size, medium and for what the artifact was used. For this assignment, the students also had to include how it was made. They were directed to use their art vocabulary. The classroom teacher evaluated the children’s writing according to rubric for art criticism (see rubric, Appendix K).

Question1f. How do children use art vocabulary when they are interacting with their peers?
Procedures for social interactions. Audio and video observations were conducted while the study group was working with clay. To triangulate these findings, interviews, field notes and journal notes were collected.

Question 2: Does the explicit vocabulary instruction improve students’ performance on assessments?

Study class word knowledge self-rating scale pre and post. A Word Knowledge Rating Scale (Blachowicz, 2006; Blachowicz, Fisher, Ogle & Watts-Taffe, 2013) was administered to 22 students in the study class in January and May to rate students’ own perception of word knowledge: I don’t know the word, I heard the word but don’t know what it means, I know it well enough to use it (see assessments, Appendix E). Nineteen vocabulary words connected to the processes of the clay unit of study were included in the scale. A pre-test was given to the study class three weeks before the unit of instruction began. A post-test was given two weeks after the unit concluded.

Ceramic pre and posttest. An 11-question multiple-choice quiz was given to the study class two weeks before the unit was to begin. The Oxford Dictionary of Art was consulted for definitions but modified to make it appropriate for third graders. A post-test was given two weeks after the unit concluded (see assessments, Appendix E).

General art vocabulary pre and posttest. An 11-question multiple-choice general art vocabulary test was given to the students in September and May. The Oxford Dictionary of Art was consulted for definitions but modified to make it appropriate for third graders. These art vocabulary words were taken from a drawing unit that was taught prior to the clay unit. In this drawing unit, art vocabulary was not explicitly taught (see assessments, Appendix E).

Validity of the Study
Qualitative research is interpretive research conducted in a natural setting with the researcher as the primary instrument for data collection (Creswell, 2009). This is an advantage because it provides first-hand experiences with the participants. It involves face-to-face interactions that occur over a bounded period of time (Creswell, 2009). It is an inductive process in that it attempts to build meaning (Merriam, 2009). A drawback is that because it is interpretive, the researcher brings his /her own backgrounds and biases into the study. In this study, it was important for me to avoid factors that could compromise the findings. Creswell (2009) suggests actively incorporating a procedural perspective that uses multiple strategies to increase validity. Triangulation, member checking, reflexivity, rich thick descriptions and competing explanations were used in this study.

According to Merriam (2009), a concern to being a participant observer is the extent to which the observer affects what is being observed. Creswell (2009) suggests understanding the researcher’s position or reflexivity. As the student’s art teacher, my role as a participant observer had advantages and limitations. Since these were students that I taught since kindergarten, teacher-student relationships were already established. In addition, I knew most of their parents and siblings. This could also be viewed as a limitation in that, as their teacher, I had power that could influence their behaviors. In an attempt to overcome this, descriptive field notes were taken during observations, noting circumstances in which I thought my presence could have affected the student’s behavior. Another limitation was that because this study was taking place during the students’ weekly art class, I was responsible for teaching and responding to individuals if they had questions or needed help. There were other occasions when the paraprofessional assigned to a special needs student did not arrive to art on time for support.
Participant observation is a multi-faceted activity, where the researcher attempts to stay detached to observe and analyze (Merriam, 2009). To overcome these challenges, I used audio and video for 14 weeks during the unit of instruction. After showing the study group how to operate a digital audio and iPad video recorder, I attempted to involve them as co-researchers by allowing them to control the audio/video tools during the 14-week unit of instruction. Most times the study group would forget it was turned on. I observed that they not only enjoyed this responsibility but also used the recorders jokingly. Other students in the class wanted to be recorded, so I purchased another digital recorder for other groups to use. I observed that they enjoyed listening to their own recordings. I reviewed audio and video nightly, transcribing and making additional field notes of the study group as soon as possible. Because there was no time in my schedule between classes, I used the recorder to document any thoughts during the day if I could not write. Study group field notes were reviewed as they were collected and added to the weekly typed transcriptions. I scheduled and conducted individual observations for each student while they were working. I followed these up with interviews. Member checking sessions were held as often as possible for clarification. However, I quickly realized that pulling the children out of their classroom during instructional time was not acceptable. To overcome this and in an effort to increase reliability, any documents, videos or audio that was collected for the day were crosschecked that evening. This provided me with rich, thick descriptions of each lesson that, according to Creswell (2009), added to the validity of the findings. Moreover, I began the case study database during data collection. This allowed me the opportunity to build descriptive codes and to evaluate the data collected. This strengthened the study because I was able to supplement other sources of data if needed. The hard copies were kept organized in labeled and color-coded file folders for each student in the study group. They were also saved as digital files. I began to
use Dedoose, a qualitative software program. However, I found that I was more in touch with the data when I coded it myself.

Finally, to strengthen the analysis of case study evidence, Yin (2014) suggests discussing competing explanations. Throughout the study I sought alternative reasons for students use of art vocabulary. I discovered through interviews that three children in the study group attended art classes after school. This was explored as a competing explanation for how children used art vocabulary.

**Data Analysis**

Qualitative data analysis is inductive and comparative (Merriam, 2009) A constant comparative method of analysis was used to make sense of the data (Glaser & Strauss, 1967 in Merriam, 2009). I analyzed this study through direct interpretation and categorical aggregation of instances until something could be said about them as a class (Stake, 1995).

First, data was organized and labeled chronologically as it aligned to the unit of instruction. I began open coding with the first set of data collected (Merriam, 2009). Searching through the data, codes were assigned to pieces of data to answer each research questions. Interview data was organized both by question and participant. Data was read and reread to gain a sense of what was collected as a way to modify existing codes. Transcriptions and field notes were broken into numbered line segments and color-coded using highlighters according to student and time of collection: before, during, or after vocabulary instruction. Hand written analytical memos were added to codes. Descriptions were added of what went on during specific scaffolded activities in relation to theoretical constructs of how students socially construct knowledge.

Analytical codes emerged from 14 weeks of data collected through field note observations, interviews, audio and video, which indicated that the students in the study group made use of
vocabulary through scaffolded activities or class tasks (see codes, Appendix L). For example, students used art vocabulary in teacher-directed activities such as word walls, read-alouds, working with clay and writing about art. I also noted that students used art vocabulary in discussions with their study group and other classmates. These became sub codes for Social Interactions with Peers: Student Directed Conversations or talk that was not guided by teacher.

Second, these codes were grouped into categories for analytical or axial coding (Corbin and Strauss, 2007 in Merriam, 2009). I looked for recurring themes that cut across the data. For example, to answer the research question 1: How do children use art vocabulary when it is explicitly taught with evidence-based vocabulary strategies in an art unit on sculpture?

I noted that the visual and social environment contributed to students’ use of the art vocabulary. Visually, the students relied on an interactive word walls, vocabulary cards, picture book illustrations and other visual cues that were posted around the room to stimulate their use of words. Socially, they responded after hearing the words used by their peers or the teacher in guided and non-guided discussions. The group used the words while engaged in different physical activities connected with the words. Some activities included sculpting with clay, illustrating words, vocabulary tallies of word use, and structured word games.

Third, the analysis of this study was conducted through categorical aggregation of instances until something could be said about them as a class (Stake, 1995). Observations, audio, field notes and the final museum descriptions and documents revealed patterns of playful behaviors exhibited by the children in both the study class and the study group. Further analysis indicated that “playful behaviors” emerged throughout the study. These continued after the 14 weeks allocated for the study when the study group asked to continue meeting in the art room to “play
with clay.” The data suggested that the visual and social environment in the art room contributed to these playful behaviors and to how the children used art vocabulary.

Fourth, pre and post-test assessment data was integrated as outcome of the art unit of instruction. These included two 11-question multiple-choice quizzes given as pre and post-tests and a Vocabulary Self-Rating scale (Blachowicz & Fisher, 2006). These tests were more formal assessments used to compare the informal field results. Using both qualitative and quantitative data provided more reliable data and, consequently, offered more insight, which can aid the needs of art teachers seeking methods to teach effectively art vocabulary.
Chapter 4: Results and Discussions

After years of teaching art, I discovered that few students in art class would remember art vocabulary words or use them correctly in context. As noted in Chapter 1, the Common Core Content Standards and new National Visual Art Standards require students to use art vocabulary to communicate effectively. Thus, my need to understand what was impeding students to learn art vocabulary successfully was paramount. Therefore, I created an art unit of instruction that grew out of research on explicit vocabulary instruction in literacy, which was discussed in detail in Chapter 3. This unit was taught to 22 students in the study class. To better understand how these strategies could be implemented in an art room, this research explored how a group of four third-grade students reacted to these strategies and how they used the vocabulary that was explicitly taught. In this study, explicit vocabulary instruction is defined as instruction that is intentional and directly explains the meanings of words. My goal, simply, was to design an art unit that scaffolded the learning of art vocabulary (Vygotsky, 1978). This meant segmenting tasks and ritualizing them (Bruner in J.V. Wertsch, 1985). It also meant that if the unit were to be effective, it should contain different ways of activating children (Bruner, 1966).

Therefore, the purpose of the study was to describe children’s use of art vocabulary when it is explicitly taught with the following evidenced-based vocabulary strategies: interactive word wall activities, vocabulary tally chart, illustrating words, read-aloud and art discussions, writing about art, and unguided social interactions with peers. Social interactions with peers are essentially informal talk that demonstrated how the students used art vocabulary while they were sculpting. This was talk that was not guided by the teacher. Specifically,

**Question 1:** How do children use art vocabulary when it is explicitly taught with evidenced-based vocabulary strategies in an art unit on sculpture?
1a. How do children use art vocabulary when it is explicitly taught to them using interactive word wall activities?

1b. How do children use art vocabulary when they are illustrating words?

1c. How do children use art vocabulary when a vocabulary tally chart is used?

1d. How do children use art vocabulary about sculpture as a result of before, during and after discussions of read-alouds of informational and narrative literature and poems?

1e. How do children use art vocabulary when they write about their art before, during and after use of evidence based vocabulary strategies in the art unit?

1f. How do children use art vocabulary when they are interacting with their peers?

Question 2: Does the explicit vocabulary instruction improve students’ performance on assessments? I created three tools that assessed the learning of the 22 students in the study class. They included two 11-question multiple-choice quizzes given as pre and post-tests and a pre/post Vocabulary Self-Rating scale (Blachowicz & Fisher, 2006). Each will be discussed as they relate to the data collected. From this data emerged two major themes that were prevalent throughout the study: a) the importance of the visual environment and b) the social environment. These themes will be discussed fully later.

Finally, since three students in the study group participated in art experiences after school, the following question will be discussed as competing explanations for how the students used art vocabulary in this study: Could after school art experiences have contributed to how the students used art vocabulary in this study?

Generally, the results in this chapter are organized by question/ sub question or evidenced-based strategy. Each question or sub-question result will be followed by discussion and an analysis of what worked for each evidence-based strategy and what did not. Finally, the results
of the art unit as a whole will be discussed and analyzed. Implications for practice and future
research will be addressed in Chapter 5.

Results and Discussions

Question 1a: How Do Students Use Art Vocabulary when it is Explicitly Taught Using
Interactive Word Wall Activities?

Word wall activities including word sorts and an interactive game, Be a Mind Reader, were
evidence-based strategies used during weeks 8, 9 and 12 of the art unit to describe children’s use
of art vocabulary. These were used in addition to read-alouds and art critiques to explicitly teach
and review art vocabulary. Video/audio observations, interviews and field notes were collected.

Results word wall sorts. The results of word wall sorts suggest that the use of the word wall
in the art room contributed to frequent and varied exposure to art vocabulary by encouraging
students to interact with words (McKeown, Beck, Omanson & Pople, 1985). These results also
suggest that the students used their words as they developed an understanding of semantic
relationships and how the art words related to one another.

As detailed in Chapter three during week eight of the art unit, the study class participated in a
guided lesson on word sorts. Following this lesson, two students who completed their artwork
sorted the vocabulary words from the sculpture unit on the word wall. They explained their sort
to the class: clay, score clay, carve and terracotta are “things you do with clay or types of clay,”
pottery, potter, and potter’s wheel all “had the word potter,” “hollow and hollow out were
similar in meaning.” The following week, Anthony and Philip went to the word wall with four
classmates. Their group agreed to put the words in alphabetical order. Philip and Anthony
appeared unhappy because the group did not listen to their suggestions. Philip stood back away
from the group with Anthony.
The boys remained at the word wall after their group left and discussed the words potter, potter’s wheel and pottery. Anthony and Philip recited the alphabet, and discussed the second and third syllables in each word. Philip stated: “They’re sort is wrong! They’re not listening.” The boys switched the order of the words on the word wall. During our post interview, Philip confirmed my observation saying he was upset with the group because their alphabetical order was wrong. “Yes, but then when we showed it, they put it back the way they had it.” Mackenzie and Francesca did not have time during art class for the word wall. In her post interview, Francesca shared that she “enjoyed that people got to mix the words up.” Mackenzie went into greater detail and told me that if she had time she would have done the following:

I would have put sculpture, statue, and three-dimensional in one. Then I’d probably put pottery. Then I’d do hollow and hollow out because that’s kind of the same thing. Then I would put clay and terracotta together because they are both clay. Maybe I’d put fire and ceramic together because after it’s fired its ceramic. So you can say it was fired and still ceramic. Then I could put bronze with terracotta because they are kind of a substance. Yeah and then I’d put potter and potter’s wheel together and drawing and painting and then yeah that’s it.

During our interview, Mackenzie looked at the words on the wall. Anthony reflected that he too consulted the word wall. Anthony stated: “Whenever I had trouble with my art I’d look up at some of the words and then remember what they meant and then um like I’d be like, ‘Oh, now I can use that in my art!’” Philip shared that he would get annoyed when a classmate would sit in front of the wall because this prevented him from seeing the words.

**Discussion Word Walls and Word Sorts.** The word sort is a classification task designed to help students develop word knowledge that may be used with word walls (Blachowicz & Fischer, 2006). For example, as two students explained their word sort they not only demonstrated their knowledge of art vocabulary but also scaffolded learning of the word sort to the class (Wood, Bruner & Ross, 1976).
Research on word walls indicates that they may be effectively used to scaffold learning by encouraging student choice (Harmon, Wood & Kiser, 2009). For example, open sorting encouraged the children to decide how to sort the art words. While Philip and Anthony agreed with their group to sort in alphabetical order, their disagreements about the order of potter, pottery and potter’s wheel generated conversation about these words. Philip remembered this disagreement weeks later when he remarked in his post interview that the group “put the words back the way they had it.” While sorting the words in alphabetical order was not an indication of deep learning or word meaning, it did create an awareness of words by allowing the children to physically move the words from one place to another. These findings are consistent with the research on word walls that states they provide conversational scaffolds that structure how students study, use and think about words (Brabham & Villaume, 2001).

The results are also consistent with the research on semantic relationships and understanding how these art words relate to each other, an important component to word learning (Blachowicz, Fisher, Ogle & Watts-Taffe, 2013). For example, field notes indicated that Philip questioned the inclusion of the word “drawing” on the word wall, since the art words were associated with the clay unit. He stated in an interview that some new words were “missing on the word wall.” He mentioned the words emperor and warrior, words that were not specifically taught but were in the chapter book Ancient Soldiers of Clay.

Moreover, during a post interview with Mackenzie, observations indicated that she looked up at the word wall to explain how she would have sorted the words if she had time. Her response (noted in the excerpt above) suggested that she was semantically sorting the words. An example is when she mentioned that bronze and terracotta are “kind of a substance.” This is consistent with research that supports semantic analysis as useful when learning vocabulary in content areas.
(Blachowicz & Fisher, 2006; Blachowicz, Fisher, Ogle & Watts-Taffe, 2013) because it helps students understand the distinction among various related concepts and contributes to building conceptual knowledge. A disadvantage was that not every student had the opportunity to participate in word sorting because of time constraints. However, it appeared that semantic analysis could contribute to helping art teachers meet National Core Art Standards for the Visual Arts (2014) that place emphasis on deep learning in the visual arts. Therefore, more opportunities could be built into whole class instruction and made available for students like Francesca who worked slowly.

Finally, the findings from this strategy are consistent with the research that supports the use of an interactive word wall and its use as a visual tool to review art vocabulary words (Harmon, Wood, Hedrick, Vitner & Willeford, 2009). For the study group, Anthony commented about looking at the word wall and remembering the words so he could “put them in his art.” Philip remarked about getting upset when a classmate sat in front of the wall because it prevented him from seeing the words. Mackenzie relied on the word wall for her sort (see word wall, Appendix F.)

**Results from interactive word wall game, Be a Mind Reader.** The interactive game, *Be a Mind Reader* (Cunningham, Hall & Sigmon, 1999; Cunningham, Cunningham, Hall & Moore, 2005; Cunningham, Loman & Arens, 2007; Blachowicz, 2014) was adapted for use on the word wall during week 12 of the art unit. The results suggest that this game encouraged the use of meta-linguistic clues by providing additional opportunities for students to use and review words, since vocabulary learning is incremental (National Institute of Child Health and Human Development, 2000; Blachowicz, Fisher, Ogle & Watts-Taffe, 2013; Blachowicz, 2014). It also
suggested that students became excited when they learned that they would be participating in a game.

As stated in Chapter three, the children were given five clues to guess the word *ceramic*. The first clue directed the class’s attention to the words on the word wall: “I’m thinking of a word on the word wall.” Video observations and field notes indicated that the study group appeared confused. They scanned the room and observed their classmates. Francesca was the only student in the study group that wrote a word on her post-it note. Clue two was given that stated the word had three syllables. Mackenzie, Philip and Francesca looked at the words on the word wall, clapped three times, once for each syllable and wrote a word on their Post It Note. Clue three stated that the word had three vowels. Francesca excitedly raised her hand. Audio indicated that some students in class were whispering the vowels, a, e, i o, and u. Clue four stated that the first and last letters were the same. The final clue was a definition. Almost every child’s hand was raised.

Students together: “CERAMIC!”
Mackenzie: “I thought it was terracotta.”
Philip: “I thought it was potter’s wheel.”
Francesca: “I thought it was score clay, because it had three vowels in it.”

In a post interview, Mackenzie explained that the game *Be a Mind Reader* was fun, because “you kept getting hints.” She added, “You might have one word and then it’s completely wrong.” She recalled another event where the chosen word ended with a silent e. “*Carve* and *bronze* both ended with a silent e. There was more than one word that fit it.”

**Discussion of interactive game, *Be a Mind Reader*.** The findings from this evidenced-based strategy are also consistent with the research that supports the use of an interactive word wall and its use as a visual tool to review words and scaffold vocabulary learning (Brabham & Villaume,
Video observations and field notes indicated that the children focused their attention on the word wall throughout the game. The group’s attention was drawn back to the word wall as classmates guessed the word ceramic.

It also appeared that during the game the group used meta-linguistic clues as they recited vowels and clapped syllables. These behaviors seemed to indicate that the study group was becoming aware of different ways to identify words even though they did not correctly identify the number of syllables or vowels in each word. The study group participants looked at the words they wrote on their Post It Notes and clapped the syllables again. Audio indicated that the group spoke about the words and the numbers of vowels each word had. Additionally, Mackenzie’s recall of the words bronze and carve and the silent e also suggest that using meta-linguistic clues in this game may have helped her remember these words during our post interview.

The findings from this strategy are also consistent with the research on how play should accompany word use and word learning (Beck, McKeown & Kucan, 2002; Blachowicz & Fisher, 2006; Blachowicz, Fisher, Ogle & Watts-Taffe, 2013). This was noted in observations of the class’s excitement and how quickly the children focused to hear directions. Moreover, the findings of interactive word wall activities appeared to reinforce the importance of the visual and social environment of the art room to help students make use of art vocabulary. This suggests an interactive word wall may be effectively used in an art room.

**Question 1b: How Do Children Make Use of Explicitly Taught Vocabulary When Illustrating Words?**

**Results of illustrating words.** Art is a language of thought (Lowenfeld & Brittain, 1987). Children’s drawings communicate these thoughts (Eisner, 2002). As stated in Chapter 3, all
students illustrated words using a graphic organizer picture dictionary during different weeks of the art unit (see word illustrations, Appendix G). Artifacts were used to confirm observations and field notes.

The results of this evidence-based strategy suggest that the students continued to use the words in the visual environment to generate ideas for their illustrations. They also used their art vocabulary to describe their illustrations. One notable observation confirmed by journal and field notes was that the study group frequently gathered by the word wall, easel or word pocket chart. For example, when Philip and Anthony illustrated their words, they moved towards the word wall. In this excerpt, they explained their pictures:

**Philip:** “I did the *sculpture* to make it look like bumpy looking and *clay.*”
He referred to his picture of clay + lines that criss-crossed.
I asked him for clarification. “The lines are *scoring* lines.”
“This is a *sculpture.*” (sic)

“This is *scoring clay.*” Philip pointed to the words *score clay* and showed me a picture of criss-crossed lines again. He pointed to next word *rim.* He explained *rim: “I pointed lines to the top of the pot.”*

Philip referred back to his first illustration and pointed to his picture of *scoring.* He explained that the shape represented clay + lines = a pot.

**Anthony:** “I did *rim* and drew a line to the rim of the pot. For *sculpting,* I drew some clay and the tool to score it. I did a *sculpture.* Then I showed a line to the *shoulder* of the pot.”

During our post interview, Philip shared that he enjoyed drawing and asked about using the artist’s wooden mannequins to help him draw words. Philip repeated that not all of the words he learned were on the word wall. Anthony stated, “I thought it (drawing words) was cool because you get to choose the words and like I didn’t get to think about what they meant, I get to draw what they mean not just hear it.”
Mackenzie and Francesca finished their drawings at a later time during the unit. In a post interview, Mackenzie similarly stated, “I liked when we drew the words and because I got to draw without having to think of something.” Francesca explained: “You get to literally write, no draw pictures. I’m a real big artist with drawing… It made my imagination go wild.”

Artifacts showed that all four students chose to illustrate the words “score clay.” They depicted it symbolically as lines that criss-crossed. Ms. Green, their third grade teacher indicated to me in an interview that when she taught vocabulary, the “word of the day” was posted on a class chart that was displayed in their classroom. Moreover, she had the students illustrate their new words. This is noteworthy because it shows the same vocabulary learning techniques were stressed across the curriculum.

**Discussion of drawing through an artistic lens.** Some researchers view children’s growth in art as a process of organizing thought. They describe children’s drawing as passing through developmental stages (Lowenfeld & Brittain, 1987; Eisner, 2002). The findings from this task suggest that each child in the group communicated through drawing the idea of *scoring clay* similarly using representations of lines that criss-crossed (see word illustrations, Appendix G). These drawings could be viewed through a developmental lens. For children ages 7-9, the drawing schema signifies simple linear flat representations of objects, thoughts or ideas. Anthony’s drawings, however, reflected schema for ages 10-13, because of his advanced drawing ability. He also depicted the carving tool he used in his illustration. According to Lowenfeld & Brittain (1987) & Eisner (2002), artistic expression changes as the child grows and develops technical ability. While each child’s drawing ability varied, each was able to communicate visually his or her understanding of the words. Additionally, the children created
sketches for words in their journals as visual reminders for word meanings. Therefore, the context of the art room appeared to provide an appropriate setting for the children to draw.

**Discussion of drawing through literacy lens.** In teaching academic vocabulary, Blachowicz, Fisher, Ogle & Watts-Taffe (2013) suggest matching concept terms with visual representations by creating drawings or diagrams. The findings of this study also suggested that the illustrations accompanied by the children’s oral description served as a tool to assess learning. From their drawings and oral explanations, it appeared that Philip and Anthony developed a conceptual understanding of the words. Moreover, Mackenzie, Anthony and Philip used arrows to point to *rim* and *shoulder* in their illustrations (see word illustrations, Appendix G).

Art involves use of the senses that are the basis of a child’s learning (Lowenfeld & Brittain, 1987). Drawing allowed the children to use their senses and may explain why the study group enjoyed this activity. Furthermore, the cross-disciplinary practice of illustrating words in their regular classroom could indicate that the students were comfortable with this practice. This is consistent with research on vocabulary instruction that supports illustrating words as another way to help children make meaning (Beck, Perfetti & McKeown, 1982; Blachowicz, Fischer, 2006; Harmon, Wood, Hedrick, Vittner & Willeford, 2009). However, the gap in the literature lies in its application to the social context of the art room. While graphic organizers and visual mapping may be appropriate for content areas such as science or social studies, the application of these organizers in this art class for this unit was not feasible for this study. Furthermore, no students in the study class had time to illustrate every art word.

**Question 1c: How Do Children Use Art Vocabulary When a Vocabulary Tally Chart is Used?**
While the students continued to rely on the word wall as visual reminder, they also made use of explicitly taught vocabulary through the use of a vocabulary tally chart (Beck, McKeown & Kucan, 2002). The purpose of this evidenced-based strategy was to describe children’s use of art vocabulary as they used a vocabulary tally chart to record use of vocabulary while sculpting in art class (see vocabulary tally chart, Appendix H). The following section describes the playful behaviors that were associated with use of the chart. In this study, playful behaviors were humorous, light-hearted ways in which the children spoke and acted.

**Results of vocabulary tally chart.** An essential component for effective vocabulary instruction provides opportunities for repeated exposure, use and practice (Beck, Perfetti & McKeown, 1982; Blachowicz, Watts-Taffe & Fisher, 2006). The results show that the study group used art vocabulary while they recorded tallies on a chart displayed in the art room under the word wall. This is notable because the students continued to rely on the word wall as visual reminder as they made use of explicitly taught vocabulary through the use of a vocabulary tally chart (Beck, McKeown & Kucan, 2002). These are also consistent with the research on how play should accompany word use and word learning (Beck, McKeown & Kucan, 2002; Blachowicz & Fisher, 2006; Blachowicz, Fisher, Ogle & Watts-Taffe, 2013). For example, children exhibited playful behaviors while using the tally chart. Students in the class competed to record the number of times they heard their classmates say the vocabulary words on the chart. This is exemplified in the following excerpt:

Student 1: “We didn’t say any words today…”
Student 2: “Yeah we did …”
Student 3: “How about ceramic.”
Student 4: “Ceramic.”
Student 3: “Oh yeah! Ceramic. Put on ceramic …put it up three times (referring to the Vocabulary Tally Chart). Yeah we said it a bunch of times. …three times.”
Student 3: “Wait, wait, we said terracotta.”
At times, Philip would get upset that some of his classmates would use the words out of context. He would say they were “cheating.” The following excerpt depicts one example.

Anthony: “I’m making a mud ball. I want this to be like a potter’s wheel.”
Mackenzie: “Potter’s wheel! It looks like a potter’s wheel to me. OH! He said potter’s wheel!”
Philip counted the tallies: “We have over a hundred.”
Mackenzie: “We do?”
Philip: “Try not to go over two hundred.”
Anthony: “I can’t believe we had time to do that!”

Philip was also concerned that a different third grade class accumulated more tallies than his class. The study group sometimes recited words to make tallies. Observations and audio transcripts indicated that while the group was sculpting with clay, they frequently encouraged classmates to run up to the tally chart. At times, these playful behaviors were accompanied by song.

“Clay, clay, clay, terracotta clay
Clay, clay, kiln, kiln, fire, fire
I like clay, I like clay, I like clay.”

Students in class were excited to be working with clay. Many times they stopped sculpting, ran up to the tally chart with dirty clay on their hands to record tallies of vocabulary use. Post-interviews indicated that the study group enjoyed the tally chart. Philip thought the vocabulary tally chart and the word wall helped him learn words.

Philip: “But not the first day because they were just saying clay. ‘Oh I said clay. Let’s just put it on.’”

Anthony: “Well I thought it was kind of cool because if you said an art word like you can go over and tally it. Cause um …Cause using the art words in your writing or what you’re saying could make you be um could make like art, could make people understand if they were interested in art.”

Francesca: “And I liked the tally wall helping you improve what you say in art class and out of the art room because you are learning new words for art.”

Mackenzie: “You know at first I thought it was weird because everyone was going, ‘ceramic, ceramic, ceramic… Then I was like now’… She paused. “I should put about 20 tallies on the
chart because I’ve been saying them a lot. At first I thought we should get our points taken away but then there’s no real point about winning.”

**Discussion of vocabulary tally chart.** From a social learning perspective, students learn first through social situations before they internalize learning (Vygotsky, 1978). The results of the vocabulary tally chart suggest that the social context of the art room contributed to the students’ playful use of art vocabulary. For example, Anthony, who usually focused quietly on his artwork, laughed at Philip and added art words to rhymes or songs. He also laughed as students with hands covered with brown clay, ran up to the tally chart as he chanted the art words. Moreover, the group developed an awareness of when words were used correctly or incorrectly in context. While parameters could be set for when tallies are put on the tally chart, it appeared that in this context for these students this playful strategy was effective.

According to Lowenfeld and Brittan (1987), painting, drawing or constructing is a constant process of assimilation & projection: taking in through the senses a vast amount of information, mixing it up with the psychological self and putting it in a new form. Moreover, within the zone of proximal development for these students, learning had to be matched to each child’s actual developmental level. The tally chart seemed to fit within the zone of proximal development for these students. It appeared to function as a bridge to help students like Philip achieve their level of potential of development in collaboration with more capable peers. The use of the tally chart in the art room was effective in that its use contributed to repeated exposure, use and practice of art of vocabulary. Its placement near the word wall also appeared to encourage the children as they looked toward the wall for words. Additional data was collected from students in the form of read aloud and discussions about art which will be discussed next.
Question 1d: How do Children Use Art Vocabulary about Sculpture as a Result of Before, During and After Discussions of Read-Alouds of Informational and Narrative Literature and Poems?

Blachowicz, Fisher, Ogle & Watts-Taffe (2013) state that effective vocabulary programs should teach individual words, provide rich and varied language experiences, foster word consciousness, and teach word learning strategies. As detailed in Chapter 3, the explicit vocabulary instruction through the use of interactive read-alouds and vocabulary reviews were one evidence-based strategy used to teach individual words and provide rich language experiences. Additionally, four small group discussions were designed for this art unit of study. These included: two read-aloud events, one for *Dave the Potter* and one for *Ancient Soldiers of Clay* and two events where the students spoke about their artwork (see transcripts, Appendices I 4 & I 5).

First, this section will begin with results and discussion of data collected on explicit vocabulary instruction through the use of read-alouds and vocabulary review since they were an integral part of the read-aloud experience. This will be followed by the results of each small group read-aloud event. Read-aloud events will be discussed and analyzed together. This section will conclude with the results of each small group art critique. Art critiques will also be discussed and analyzed together. While two poems were also read aloud to the children, no small group discussions took place during art class because of time constraints.

**Results explicit vocabulary instruction through the use of read-alouds.** Blachowicz, Fisher, Ogle & Watts-Taffe (2013) state that a significant challenge with teaching academic vocabulary is that many of the terms students encounter in content area learning may be new.
Some words may have multiple meanings that can interfere with developing an understanding of important concepts.

The results of this evidence-based strategy suggested that children in the study class and study group had misconceptions about the meanings of some art words. This became evident as the children participated in the class discussion during the explicit vocabulary instruction for *Dave the Potter*. For example, after the words *glaze*, *kiln*, *fire* and *potter* were explicitly taught, one student asked if he had to “use the art glaze definition” in a sentence. This student explained that he wanted to use the word *glaze* to describe a type of donut. After taking out jars of art glazes and discussing the multiple meanings of the word *glaze*, Mackenzie inquired: “Does the word in the sentence have to be *glaze* or could I make it *glazed*?” She created the following sentence: “I glazed my clay pot after it went to the kiln.” In an interview, Mackenzie responded that learning this vocabulary clarified misconceptions she had about word meanings. She gave the following example about the words *ceramic* and *fire* and how they related to a personal experience with ceramics. She stated:

I do *ceramics* in the summer so like but they are already made. I just paint them. So um I figured out that *ceramic* is hardened clay. I thought it was certain kinds of clay I thought it was…. I don’t even know what I thought it was. But I thought it was just something you paint… like a canvas but made out of stone. And then when we learned about it here I found out that it was any clay after it was *fired* was a *ceramic*…

I used to think I knew what the *kiln* was but *firing*, it was like out in the *kiln* and take it out. Done…but *you* have to *fire* it. So it taught me that and helped me understand it more.

Additionally, students in class associated the word *potter* with a popular series of books and movies. To clarify the meaning of *potter* after instruction, Philip shared with the class that his sister “had her birthday party at a *pottery* place.” He explained the difference between *potter* and *pottery*. “*Pottery* is what you make, *potter* is a person.” To corroborate these findings, Philip stated in his post interview that learning new words “made us understand the *Ancient Soldiers of*
Clay or we would have said, “What’s terracotta, what’s this and what’s a coil and stuff like that.” Philip explained further that sometimes, “People hear someone say a word they think it means something else.”

Anthony pointed to an illustration of a potter’s wheel from the book Dave the Potter. He stated that the book “has this thing that makes pots. You spin it around.” In this excerpt from a post interview, Anthony discussed how the book helped him understand “potter’s wheel”:

Anthony: “Well, how they made it interested me because I always wondered what it was like to work with a potter’s wheel. How to make pots that way.”
Mrs. LaBrocca: “Did that book help you understand that?”
Anthony: “Yes…. Cuz, I always wondered how you did it. And the book told me how he did it. I was like, ‘OH, so that’s how you do it!’ Like if potter’s wheels were still around I would want to work with one...”

Anthony examined the vocabulary word cards that were on the easel and stated that potter’s wheel was “connected to the words potter and pottery.”

**Discussion of explicit vocabulary instruction through the use of read-alouds.** Research suggests intentional instruction for Tier Two or Tier Three words (Beck, Perfetti & McKeown, 1982; Baker, Santoro, Chard, Fien, Park & Otterstedt, 2013; Baumann, Ware & Edwards, 2007) and teaching new content (Heisey & Kucan, 2010; Alexander-Shea, 2011). Tier Three words are specialized words that are confined to specific academic areas such as math, social studies, and science (Blachowicz, Fisher, Ogle & Watts-Taffe, 2013). The research focuses on these content areas. However, results of this study indicated that students also had misconceptions of art vocabulary. The strategies used in this study for teaching individual words as outlined by Blachowicz, Fisher, Ogle & Watts-Taffe (2013) and Beck, McKeown & Kucan (2002) appeared effective for this group of children. For example, observations indicated that as children became familiar with the steps that were modeled and used in explicit instruction, they clapped the number of syllables and repeated each new word without being prompted. They enthusiastically
EMBEDDING VOCABULARY INSTRUCTION INTO THE ART EXPERIENCE

raised their hands to create sentences using the new words. This occurred throughout each vocabulary lesson during the art unit.

Moreover, the whole group lesson helped the students to understand that words have multiple meanings. Specifically, it brought their attention to the “art definition” of words. For example, this lesson not only encouraged discussion of the word *potter*, but also gave Philip the opportunity to explain the word to the class by sharing his sister’s personal experience. In addition, Anthony noticed the word *potter* in *pottery* and *potter’s wheel*. These discussions appeared to clarify word meanings. Finally, Anthony stated the illustrations in the book helped him visualize what a pottery’s wheel looked like. This was notable since this art room did not have a potter’s wheel.

Since time in art class is limited, audio and video recorded how many minutes the explicit instruction took for each lesson. Reflective journal and field notes indicated that in some lessons too many words were introduced at one time. A modification could be to limit the numbers of words for each lesson to no more than two or three during one forty-five minute class. Despite this, it appeared that explicit instruction and class discussions contributed to clarifying and making meaning of art words.

**Results of vocabulary review.** Since domain specific terms are found in limited contexts (Blachowicz, Fisher, Ogle & Watts-Taffe, 2013), clarifying misconceptions of word meanings was essential to understanding the concepts in the read-alouds and the art unit. Explicit instruction included vocabulary reviews, since repetition and multiple exposures to words are important (National Reading Panel Report, 1999). During these reviews, student dyads illustrated an assigned word on a blank index card and explained their word to the class (see vocabulary review, Appendix I 2). For example, during one review, Anthony and a partner illustrated the
word *terracotta* on a blank index card. They defined it as “a type of clay that was a certain color… it’s orange brown.” He created the following sentence: “In art class we use *terracotta*.” Philip and his partner were assigned the word *coil*. Philip had difficulty articulating the word’s meaning, so he motioned with his hands and pretended to build a pot with *coils*. During the following week’s vocabulary review, Philip allowed his partner to explain his illustration of the *shoulder* of a pot. Francesca and Mackenzie were assigned the word *rim*. Since Francesca was absent the previous week, she listened as Mackenzie explained the word. Mackenzie explained to the class that “a *rim* is the top of a pot and sometimes you make it round and sometimes you make it thin.” She created the following sentence: “The cup has a *rim* around the top.”

**Discussion of vocabulary review.** As detailed in Chapter 3, dyads of students were assigned words to illustrate as they entered the art room. Handing each group blank index cards and giving directions before they entered the art room was an efficient use of time. Field notes indicated that the students appeared excited and surprised at this change in routine. For example, each group excitedly walked into the art room and searched for its assigned word. Children moved to different areas in the room where words were posted. Each dyad discussed the word’s meaning as the students illustrated the words. From a social learning perspective, it appeared as if partner review of the vocabulary words was effective since it provided support for members of the group. For Philip who had difficulty explaining the word *coil*, having a partner appeared to put him at ease in front of the class. Partnering Francesca with Mackenzie also benefited Francesca who was absent the previous week.

Although some of the sentences created by the students did not indicate they knew the word’s meaning, the students were thinking about the words and using them. Additionally, having the children actively place their illustrations on the word wall appeared effective. While illustrating
every word was not feasible in this time frame, a suggestion for future use would be to limit review words to three or four each art class. Finally, vocabulary reviews appeared to support the research on providing multiple exposures and repetition of words.

**Results of read-aloud event, Dave the Potter.** Blachowicz et al (2013) state rich and varied language experiences are another essential part of an effective vocabulary program. They recommend providing time for read-alouds with rich vocabulary as well as time for discussions. The results from read-aloud discussions determined that these discussions not only encouraged students to use vocabulary playfully but also indicated that they enjoyed this task. For example, to gather information on vocabulary usage, Mackenzie volunteered to be a word monitor (Blachowicz & Fisher, 2006). During the read-aloud discussion for *Dave the Potter*, Mackenzie tallied the number of times she heard the students in the study group use the art vocabulary words in their discussion on a checklist created for this task (see checklist, Appendix I 3). Philip volunteered to be the moderator, in charge of the microphone. He spoke playfully, “Baboom, baboom, baboom, baboom.” The group laughed. In this excerpt from the read aloud (see transcript, Appendix I 4), Philip continued:

> He got the clay from the dirt and he threw the clay up in the air but only he knew where it would land. He would put the clay on his *potter’s wheel*. He would kick the *potter’s wheel* to give it shape. He would put his arms on the *shoulder* and the *rim* to make the pot… I mean jar and then after it was done his arms couldn’t reach around it so he *carved* into the pot.

Philip was an active participant in this discussion. He corrected Francesca when she called Dave, the main character in the story, a “*carver*” stating that he was a “*potter.***” He prompted her as she attempted to recall the words *pottery* and *kiln*. This is noted in the following excerpt:

> Philip: “He was a *potter.*”
> Francesca: “Oh a *potter* and he made all different kinds of clay. He made pots …and he like made a lot of um…
> Philip: “*pottery***”
Francesca: “pottery and he um…”
Philip: “put it in the kiln”
Francesca: “put it in the kiln and he used his potter’s wheel. He used his potter’s wheel to do stuff. He used his potter’s wheel to make all his pottery and when he threw the clay he’d only know where the clay would go. Sometimes he would coil his clay… BYE!!!”

Philip appeared concerned because Mackenzie was having difficulty keeping up with the tallies on the checklist. At times, the group would pause and speak slowly to help her record words. Anthony, who was usually quiet, laughed with the group as he used the words potter, potter’s wheel and glaze in this response:

Anthony: “Hello…Dave was a potter, Dave was a potter and he was a slave...and he made pieces of clay on his potter’s wheel…” (Pause).“ and he made a piece of clay so big that he had to stop his potter’s wheel. When he stopped his potter’s wheel…”

Philip interrupted to add: “he put a snail on his head.”

Anthony took the checklist from Mackenzie as she responded:

Mackenzie: “I know he was a good potter and he made pottery with his potter’s wheel. He loved to use clay but for people they thought it was dirt but for him it was clay ….UM but once it was done he would put glaze on it.”

“And he would mold it into the shape he wanted and make the rim perfect. He carved little poems in it. He made the shoulders beautifully. So his sculpture would be perfect. Sometimes he would put coils. I don’t think he would do it all the time. Eventually he would stop his potter’s wheel if his thing got too big… I don’t think he had a kiln. I don’t know.”

Philip: “He had a kiln. He put it in his coil, he put it in jar, and it was a shoulder on it.”

Mackenzie: “But I think he used terracotta clay. I don’t know. Adios amigos …”

Results of read-aloud event, *Ancient Soldiers of Clay*. The explicit vocabulary lesson for Week 10 coincided with the read-aloud of *Ancient Soldiers of Clay*. Carve, bronze, statue, mold, bronze, terracotta, and three-dimensional were words that were explicitly taught. Groups of students discussed the meaning of the word carve. Each group was given a fired clay terracotta pot and a sharp needle tool used for carving clay. Anthony created this sentence, “I can’t carve it because it’s too hard.” Mackenzie announced that some of the vocabulary words were
“connected.” She gave the following example, "Bronze is a material you make a statue with. You have to mold the bronze to make the statue. The molded bronze statue is three-dimensional.” Francesca added: “A mold is something that is made of wax or something that you put stone, cement or bronze in… You coat it with something.”

In preparation for the second small group read-aloud discussion for the Ancient Soldiers of Clay conducted during Week 11, the study group moved to the back table (see transcript, Appendix I 5). Mackenzie volunteered to be recorder again and Philip the moderator. During this discussion, the study group discussed questions they had about the story. Mackenzie announced that she found “lots of vocabulary.” She created a list of words with tallies on a Post-It Note that indicated how many times she found each word in the text during independent reading. She read:

I found statue five times, I found bronze once, I found statue six times. I found clay three times, I found terracotta fifteen times… Nooooo… (She recounted her tallies.) Eighteen times, no nineteen times. I found potter once…. no twice. I found molds once, and I found kiln once.

Her response seemed to encourage the study group to focus on finding more words. Anthony declared that he underlined the words potter and craftsman. Francesca stated that she found the word mold. Philip playfully held the microphone. He appeared distracted.

Discussion about read-alouds, Dave the Potter and Ancient Soldiers of Clay. Blachowicz, Fisher, Ogle & Watts-Taffe (2013) state that fostering word consciousness is an essential component of an effective vocabulary program. They suggest students engage in playful language activities and explore how different authors use words.

The findings from this strategy suggest that in each read-aloud discussion, the checklist used by the group encouraged the children to use the art words playfully. This checklist seemed to help scaffold their learning by providing a temporary structure to highlight the task of finding
and using words (Wood, Bruner & Ross, 1976). The discussion helped the students explore the way the author of *Dave the Potter* used the words that the students were learning for their clay sculpture unit within the context of the story.

For the first read-aloud, the students seemed to be responding to the story element framework for narrative texts that they learned in their classroom. This facilitated their discussion of *Dave the Potter*. For the second read-aloud discussions, *Ancient Soldiers of Clay*, the students seemed to respond to the story element framework for expository text. There was evidence that the students recognized the characteristics of a non-fiction book. For example, the students were not only reading their Post-It Notes, but were going back into the text to find the vocabulary words. This was notable in that it confirmed to me the importance of using ELA literacy strategies taught in the classroom as an extension of cross-disciplinary learning into the art room (Blachowicz, Fischer, Ogle & Watts-Taffe, 2013).

Researchers define rich extended instruction as having multiple encounters with words (Beck, Perfetti & McKeown 1982; Blachowicz, Fisher, Ogle & Watts-Taffe, 2006). The books and poems for this study were chosen purposefully because the art vocabulary was used in each text. This gave the students the opportunity to hear the words being used in different contexts. During each read-aloud event, video and field note observations indicated that students gave an interactive thumbs-up as they heard the words being used in the story. This strategy allowed them to use their senses during the read-alouds (Blachowicz & Obrochta, 2006). Having students encounter words in various contexts is consistent with findings from a meta-analysis conducted by the National Reading Panel Report on effective vocabulary instruction.

Mackenzie’s statement about finding “lots of vocabulary” (noted in excerpt on p 83) indicated that she recognized that words were being used frequently throughout the text.
Furthermore, when she reported on the number of times she found the word *terracotta* in the text, the group appeared to become more excited about finding words. This appeared to motivate the students to find more words. The children also appeared to find and recognize different forms of the words. Francesca added that in the story, she “found the word *molded*. And the word is *mold*.”

In a post interview, Mackenzie and Francesca both spoke about how the words in the read-alouds connected to the art unit. Mackenzie explained her new understanding of the words *shoulder, rim* and *coil*:

I had no clue what *shoulder* was, so the word *shoulder* helped me understand how to make a pot better. You add a *shoulder* and a *rim* and it’s easier to understand. In first grade, we did these *coils* and in second grade we did these pots, but I didn’t know they were *coils*, so like I did rope pots and now I know they are *coil* pots.”

Francesca stated that the read-alouds put her “in the zone to make our sculptures with *terracotta clay*…” and that the vocabulary helped her “remember the steps.” She specifically mentioned how learning the word *score* helped her understand what to do. In a post interview, Francesca stated that she knew most of these words before. As she spoke, she looked at the word wall and listed the words she knew: “*Mold, bronze, ceramic, clay, coil, fire, painting, glaze, potter, hollow, sculpture, shoulder*…” She added that she “didn’t know *carve, or hollow or potter’s wheel* because I don’t do clay that much.” In direct contrast to her statement, Francesca’s pretest scores on the two quizzes indicated that she did not know all of these words. Moreover, Francesca’s Pre-Word Knowledge Self-Rating Scale was also not consistent with this remark.

According to Blachowicz, Fisher, Ogle & Watts-Taffe (2013), a student may understand a word they hear (listening vocabulary) and not be able to use it in speech, writing or decode it in text. Francesca’s statement supports the research that is basic to understanding that effective vocabulary instruction means knowing that students have different types of vocabulary.
Developing word consciousness requires both engagement and motivation (Blachowicz, 2014). Philip seemed distracted during the second read-aloud discussion. However, he became more motivated and engaged as his group competed with other groups to discover more words in the text. His interest in the audio recorder also appeared to encourage his participation. While Philip sometimes exhibited behaviors that appeared off task, in his post interview, he too stated that learning new words “is really important cause you don’t want to say the same thing over and over again.” On the basis of these findings, it appeared that these read-aloud discussions fostered word consciousness for these students (Blachowitz & Fisher, 2006; Blachowicz, 2014).

Since Vocabulary Visit (Blachowicz & Obrochta, 2006) supports the use of a thematic series of texts, the three different genres of books selected as read-alouds for the study appeared to be effective. The students were able to identify how the authors of the books used the art words they learned in context. The findings also suggest that the three read-aloud books were suitable for the vocabulary instruction within the zone of proximal development for these children. The first book, a narrative *Dave the Potter*, was short enough to be previewed, read aloud and discussed during one art class. Although two poems “Pottery Lesson” and “That’s My Jar” from *Etched in Clay* by Andrea Cheng were read aloud but not discussed during art, they appeared to interest Mackenzie. Mackenzie speaks of how she enjoyed hearing the poems in this excerpt from her post interview.

I liked that it told us what was going on in his life. Not weird things like roses are red, violets are blue. It was kind of like, he kicked the wheel, kicked the wheel, kicked the wheel. He wasn’t really focused on rhyming. But it was still a poem. I actually liked that…Oh yeah it was really long…and most poems I write in school are short because I try to make them rhyme and it’s hard to rhyme a lot of words with it especially if I want them to be real words.
Overall, Mackenzie’s reasoning, creative and oral ability throughout the study indicated that she was performing at a much higher level than the others in the art room. Her NJASK scores indicated Advanced Proficiency in Literacy and corroborated this observation. As a result, it appeared that reading these poems might have reached the upper boundaries of her zone of proximal development. Furthermore, this data suggested that reading poetry aloud could be used to efficiently enrich the language environment in the art room.

The third book, an expository, *The Ancient Soldiers of Clay* was five chapters and could not be read during art class. While the students were interested in its content, they were more interested in working with clay. However, in collaboration with the classroom teacher, it was suggested that the art vocabulary and Chapter One be introduced during art class. The children would also be directed during this instruction to search for the art vocabulary while they were independently reading in their classroom. Audio and video of this lesson indicated that the children seemed puzzled about this strategy, yet it appeared to interest and motivate them. This suggested that the children may not have been accustomed to extending their learning in art to their general classroom. While the study group independently read the remainder of the book in their classroom, field notes indicated they took this task seriously. For example, the classroom was quiet and each child in the study group remained focused while they took notes. This strategy appeared to be an efficient and effective way to prepare for the read-aloud discussion that was planned for the next art class. Therefore, it appeared that the results of explicit vocabulary instruction, vocabulary review and discussions were consistent with Vygotsky’s interpretation of the ZPD that speaks to the manner in which the environment is arranged to help the children reach abstract ground (Vygotsky, 1978).
Moreover, individual post interviews with the children indicated that while they enjoyed both read-aloud books, they preferred the picture book, *Dave the Potter* to *The Ancient Soldiers of Clay*. They mentioned the importance of the illustrations saying that the pictures helped them understand not only the vocabulary but also the processes of making a clay pot. Mackenzie and Francesca recognized that the books were connected to the art unit. Francesca indicated it “put her in the zone” to make her pot. Mackenzie and Philip indicated that because the photos for the *Ancient Soldiers of Clay* were black and white, they couldn’t tell “that the terracotta soldiers were bright colors.” Philip commented on the quality of the paper used to make copies of the booklets, saying if they became wet they could “get gross.” These comments indicated the importance of the book’s illustrations for understanding new concepts. This finding was in direct contrast to Text Talk where illustrations were covered and read-aloud books were chosen so that students did not rely on illustrations to create meaning (Beck & McKeown, 2001). Text Talk differed from this art unit in that children were to create meaning based on the linguistic content of the books. This is notable because it distinguishes the differences between choosing read-alouds for general classroom instruction and for this art unit. It appeared that for this group and this unit, visually stimulating images contributed to their understanding of art concepts.

In direct contrast to evidence that supports reading in every classroom was the social context of the art room, which did not seem to provide a suitable environment for these students to want to read independently. Eisner (2002) points out that an art room is not the same as an academic classroom. Students in an art room are given permission to direct their own activities in setups that provide more space for personal initiative than that which is found in an academic or general classroom setting. This was exemplified by observations and post interviews of the study group. Although the open books were judiciously displayed on the counter next to their sketch journals
and introduced as a free-time activity, when given free time, each child chose to draw in his or her sketch journal, either independently or with a friend. This was notable because each child in the group was reading on grade level. Moreover, Mackenzie and Francesca stated during their pre and post interviews how much they loved reading. While this could be attributed to their limited time in art class, in their post interviews, the students all expressed the importance of a quiet reading environment. For example, they each stated that they enjoyed reading their chapter book *Ancient Soldiers of Clay* in their classroom where they were “not distracted.”

Anthony explained: “I had more time to read it and understand it in my classroom. Each week when we come back once a week, it would be less time to do it. So I’d like to just go up to my classroom and have more time to read it.”

Anthony expressed concern about not having time to draw or “do art.” Philip stated: “In art, people are whispering because they are next to their friends.” Mackenzie added: “If teachers read books, I like the books a little better.” This was supported by observations of the students as they read independently in their classroom.

These results are consistent with research that states the arts demand different approaches to instruction and assessment (Ellis & Lawrence, 2007). Addressing interdisciplinary literacy in art means recognizing structural difference when designing and integrating curriculum in the arts (Efland, 2002). For these students, choosing to draw rather than read constituted an alternate form of communication, one that is developmentally appropriate and aligned with National and State Standards in the Visual Arts. This is notable in that planning vocabulary instruction or any literacy in the arts must “fit” within what the arts are meant to do.

**Small group art critiques.** As previously stated, two small group art critiques or events were conducted to describe children’s use of vocabulary. One took place before vocabulary instruction. Students responded to the prompt: “Discuss your art with your group. Use your art
words.” For triangulation purposes, oral responses from the first art critique were compared to a checklist where Mackenzie, as recorder, kept track of the group’s use of art words (see art discussion checklist, Appendix I 7). Oral responses were compared to written responses. No other art vocabulary words were used. The other took place after vocabulary instruction. For the second art discussion, oral responses were compared to written museum descriptions (see art discussion transcript, Appendix I 8). This section will begin with the results of each critique. This will be followed by a discussion and analysis of both.

**Results small group art critique, before vocabulary instruction.** From a social learning perspective, art critiques are social processes that offer opportunities to hear how others interpret artwork (Hetland, Winner, Veneema & Sheridan, 2007). The results of these discussions suggest that the visual environment of the art room contributed to how the students used their art vocabulary during their art discussions. For this study, visual environment is defined as how the art room was visually set up for the art unit. Art words were in a pocket chart, on a word wall and an easel where they were visible to students during art. One notable observation was that as each child spoke, he or she looked around the room for vocabulary words. *Overlapping, texture, three dimensional, perspective* were words that were posted on the board, but not explicitly taught. During these art discussions, the study group used these words from a previous drawing unit as they talked about their first clay sculptures. For example,

Philip: “Mine is a lizard because when a couple years ago I used to have a lizard it had a lot of babies. I had to give it away and ever since then I’ve been drawing a lot of them and making clay about it. It has like *texture* on it. It has some color on the bottom ……. There are some spots that got color like red and yellow smooched on it. When I make the other one that you put in the oven, I’m going to make it a lot bigger and a little smoother ….I’m going to try and add *perspective* to it.”
Mackenzie questioned Philip about using the word *perspective*. Philip thoughtfully looked at the board and added, “I may put carvings in it.” Mackenzie described the colors she used on her sculpture of a paintbrush, paint can and canvas. She pointed to her art work and added,

“I did *overlapping* like there. I tried to put *texture* on this one (pointing to the bristles) because it’s all bumpy. I tried to make this *three dimensional* right here popping it out by carving it in...”

Francesca: “So far I’m trying to make it *three dimensional* because I’m having my eyes pop out. I want to be able to make the body today but I keep messing up so I’m going to try working really hard and make it today. I just need to add more green and then I’m done.”

Anthony: “My name is Anthony and I’m making a lizard. What I’m going to do is try and smooth it out a little better because all the pieces are falling off. I’m going to put a little *texture* on it for the scales then I’m going to put some spikes in it and going to put more color in the eyes.”

Recorded field notes and journal suggest that the children appeared to be taking this discussion seriously. For example, each student’s response was brief, as each took turns holding the microphone. They quickly passed the microphone and appeared concerned about finding art words to use in their discussions. Journal and field notes indicated that the children appeared apprehensive during this critique.

**Results small group art critique, after vocabulary instruction.** According to Eliot Eisner (2002), the use of the technical language of art processes provides an indication as to the depth of student’s understanding of a work. It gives educators insight into what the students have learned. After vocabulary instruction, the study group discussed its second sculptures in the following excerpts (see art discussion transcript, Appendix I 8).

Philip: “So my piece is like a pottish kind of piece and it has *glaze* on the inside. So you could put stuff in there. I call it the Spirit Keeper and it’s been *carved*. I *carved* it. It’s *hollow*, it’s round. It has some bumps on it that I made on purpose. It has spikes around the top. And it has a couple layers of *glaze* in the middle.”
Mackenzie: “It has cross marks. I scored it on the front and I made a pinch pot on the top. I didn’t necessarily use the potter’s wheel for my sculpture. I used my hands.”

Francesca: “How I made the head is….” (pauses) “I made a hollow head. I scored it and I connected it to the body …Um I made my legs by scoring them and I made my eyes by scoring them too. I used a pink glaze because you know pigs are always pink.”

Anthony: “I just made my voodoo creature head by starting out with a pinch pot and scoring it and putting on eyebrows and stitched eyes and a big horn on its head. Then I put a bunch of glaze colors to mix it around to make it one cool color.”

While most of these discussions were descriptive, each student attached personal meaning to his or her art. Field note observations and journals recorded playful behaviors. Laughter accompanied these discussions. The children held on to the microphones, spoke for longer amounts of time, while making playful noises and gestures. These behaviors were in direct contrast to those in exhibited in the first critique.

**Discussion of both small group art critiques.** The findings from this evidenced-based strategy are consistent with the research that suggests student discussions provide rich and varied language experiences for vocabulary instruction (Beck, Perfetti & McKeown, 1982; McKeown, Beck, Omanson & Pople 1985, Maynard, Pullen & Coyne, 2010). It differs from this research in that the students used explicitly taught vocabulary in discussions about their art. In the first art critique, students used some of the words correctly in context. For example, Mackenzie and Francesca spoke about their art being three dimensional, while Anthony and Francesca referred to texture. How they used these words might be attributed to incidental or environmental learning, learning that takes place without direct instruction (Blachowicz, et al 2013).

What is unclear is how their responses might have changed if these words were not a part of the visual environment of the art room or if they were not directed to use their words. This is consistent with Beck, McKeown & Kucan’s (2002) references to qualitative dimensions of word knowledge; what it means to know a word is a complicated and multifaceted matter. For
example, while Philip may have heard the word *perspective* in a previous art unit, he was neither secure in knowing what it meant nor how to use it. Additionally his use of the word *oven* indicated that while he was aware of the process of heating or firing clay, he did not appear to know the words *kiln* or *fire*. Moreover, these words were not a part of the visual environment during this discussion, which took place during week three of the art unit. Students appeared to use more vocabulary in their second discussions than their first. The following factors could have affected these responses: a) the children spent more time creating their second sculptures than they did on their first sculptures or, b) the processes for working with ceramic clay are more complex than those used with modeling clay.

Observations and journal notes indicated that the study group scanned the room for art vocabulary words during both discussions. It is notable, however, that while they continued to rely on the words in the room and on the word wall as visual cues, they were not looking for these words as frequently during the second discussion (see transcripts, Appendix I 8). While the students spoke during the second art discussions, they closely examined their sculptures. Philip touched his pot and rolled it on the table and used the word *glaze*. Mackenzie gestured and pointed to the *terracotta* on Philip’s pot. She held her own sculpture up to her mouth and attempted to blow on it. Francesca repeated the words *scoring* and *hollow*.

Their actions as they spoke suggested to me that they were creating meaning while using the words correctly in context. Field note observations indicated that each child relied on the art words that were posted on the board, the pocket chart, and word walls throughout the unit. This was also evident during individual post interviews. These observations are consistent with the research on creating a rich verbal environment as an additional goal of vocabulary instruction.
(Beck, McKeown & Kucan, 2002) and the use of word walls to support student’s vocabulary learning (Blachowitz & Obrochta 2006).

**Question 1e: How Do Children Use Art Vocabulary When They Write about Art Before, During and After Use of Evidence-Based Vocabulary Strategies in the Art Unit?**

The purpose of this evidence-based strategy was to describe children’s use of art vocabulary in their writing. Written artifacts were collected from each child in the study group for evidence of art vocabulary use before, during (see process logs, Appendix J) and after vocabulary instruction (see museum descriptions, Appendix J). For triangulation purposes, each student gave an oral description of his or her art-making process during individual post interviews. The students were asked to share their feelings about writing in art. The challenges of being a teacher researcher meant recognizing that as their teacher their responses could be influenced. Throughout the study and in each interview, each child was specifically asked to be honest when responding. They were told that their honesty would only strengthen this study. Results of each student’s responses will be followed by a discussion.

**Results of writing about art.** For students to gain control of vocabulary, they need different types of experiences to use words. According to Blachowicz & Fisher (2006), using words in writing is one way to create durable learning. The results of this evidence-based strategy suggest that students’ writing reflected art vocabulary use when they were prompted to use the words to describe their process. Moreover, some students’ oral descriptions were more detailed when they were explicitly encouraged to use vocabulary words.

**Philip.** Preceding vocabulary instruction, Philip’s written response was descriptive and limited to colors he used in his artwork. He described the red spots, bumps and eyes on his lizard and its green body. He explained that the “bumps” on his lizard were scales. During
vocabulary instruction in his process log, Philip wrote, “I will squish the clay and score so I can (sic) it to my clay.” He listed the following: “carving the basketball, glazing my clay and Mrs. LaBrocca will (be) firing clay.” In his final museum description, he described his process: “I made it by making two pinch pots and then scoring them together then glazed it.” In his post interview, Philip was asked to tell how he made his sculpture. He explained: “I started out making two pinch pots, then I scored the pinch pots.” He explained further saying that “he scored the pinch pots and put water on the scoring. Then you put it in the oven…” Philip paused, laughed and corrected himself. “Kiln, then fired it. Then I glazed it, then you put it on the kiln again I think …” Philip stated that he made his piece hollow and explained that hollow meant it had nothing inside. Philip described terracotta as a type of clay they used. When he took his sculpture home, he told his mom how many layers of glaze he used. He explained to her, “it got to be so shiny because I put lots of layers of glaze on it.” In his post interview about writing in art, Philip felt good because, he said, “we were writing about art that I did and I got to feel it a lot more and I got to make it, so it was easier to tell how I made it. It’s not like looking at a picture.” This is consistent with the research that states journal writing makes passive learners into active learners (Calkins, 1986).

**Anthony.** Before vocabulary instruction, Anthony explained how he made his lizard step by step. In his last sentence, he wrote, “The next thing I will do is put some spikes on it and add texture.” In his process log for week one, Anthony wrote that he “will work on sculpting his clay.” For week two, he wrote about how he “sculpted the right shape last week.” For week three, he wrote: “I will wait for my sculpture to dry.” Anthony planned to “put more detail and texture.” In his museum description, he described his “sculpture of a vodo monster” (sic) and
how “he carved a horn for his head.” He told how “it also has lots of glaze layers.” He explained his process in the following written excerpt:

I made it first by making a hollow pinch pot, and then I got the shape I wanted. Second, I scored my piece and put eyebrows stitched eyes and a horn. Next I put glaze on it and put it in the kiln. Then I was finished.

In his post interview, Anthony told how he made his sculpture. He made two pinch pots and scored them so they could stick together. Anthony mentioned that the newspaper must come out before it goes in the kiln. He continued to say that he sculpted the eyes so they looked stitched shut. He added that he “scored the piece to put on two eyebrows.” He spoke about using “different colors of glaze” and concluded “we put it in the kiln and it was finished.” In his post interview, Anthony said he “felt good about writing because he got to describe his art” and “put a back story about some monsters.”

**Francesca.** Prior to vocabulary instruction, Francesca wrote about making the body for her stuffed animal: “Today I’m going to make (sic) the body with my hands to carve it and green clay.” In her process log, Francesca wrote that she was “sculpting a piggy bank” and was going to “sculpt details.” In her museum description, she wrote “My piece is made of terracotta and glaze ... I made it by making (sic) the hollow body, then a hollow head and scored them together.” Francesca orally described her process in the following excerpt during one interview: “We worked with terracotta clay and the terracotta clay is a special kind of clay that dries very quickly.” Francesca described scoring the clay and molding it together to make sure there were no cracks. In her post interview, Francesca explained:

First I got two little, I got a piece of clay and I took the two pieces of clay apart. I made it into two pieces. And I made them like cups and I put the newspaper in and then I. How I scored the outside the rim part and then I put water on both of the tops and I connected them together and then I made it a kind of oval shape and then I made it all smooth with water and then I started making the head so I did the same thing I did first. I put the two pieces together. This piece had to be smaller because it’s the head and you don’t want it
looking like the same size so… I put I had to \textit{score} the outside \textit{score} the sides to connect the head and body with some water I put them together. And then I made the ears, the nose and I made the spots for the eyes, so I got a little tiny piece of clay, I rolled it in my hand and made it small. I put in the eye and then I did the same thing with the other eye. And then I made the feet so you had to get a really kind of thick piece and roll it a little. Put it on the body and I had to \textit{score} it to get it on and then Mrs. LaBrocca put it in the \textit{kiln} and I when it came out I \textit{glazed it} with pink um \textit{glaze} and I put four layers on then I made a different color for the eyes and that’s how I made my piece.

In her post interview about writing in art, Francesca stated that she “felt confident because she knew about her artwork.”

\textit{Mackenzie.} Before vocabulary instruction, Mackenzie wrote about how a paintbrush, canvas and can of paint would show someone 100 years from now that she loved art. She used descriptive adjectives such as red, yellow, blue and green and explained, “I would take red clay for the paint can, yellow for the label, and canvas and bristles on the paintbrush.” Mackenzie stated in an interview that she did not know what shoulder, terracotta or hollowing out clay meant. In her process log, Mackenzie wrote that she made a \textit{sculpture} and that she was “going to add lots of \textit{texture}.” She was going “to \textit{carve} it into my clay to make it perfect (sic).” In her museum description, Mackenzie pretended that her artwork was an ancient horn and that there was a rubber ball on the end that could be squeezed, and explained, “but this is terracotta.” She described the “\textit{scored engraving}” (sic) on the front. She wrote about her process:

\begin{quote}
It started as a ball of \textit{terracotta (sic) clay}, then it was a pinch pot I (sic) \textit{scored} the edges (sic) of two (sic) pinch (sic) pots then watered the \textit{rims}. I (sic) stuck the two (sic) together then I (sic) put that aside and put two (sic) more together and \textit{molded} (sic) it into a cone then I \textit{scored} them together \textit{fired} (sic) them, \textit{glazed} (sic) them and \textit{fired} (sic) it again.
\end{quote}

Mackenzie’s oral description of her process is in this excerpt:

\begin{quote}
So I took a blob of clay that you gave me and I stuck my thumb in it and squeezed it until I made a pot. Then I did the same thing. Then I \textit{scored} the outside and then put water on the \textit{rim} and stuck then together and then blended the two sides together to make a ball. It wasn’t really ballish so I rolled it a little bit to make it more like a ball. And then I did the same thing but bigger. I rolled it into a cone. And there was newspaper and it supported it. And then after it kind of dried out I stuck it together and took the stuff, the newspaper
out of it. And then I fired it and painted the outside and when it came out I glazed the ball part brown, even though it looked kind of purple. I glazed the other one pale yellow.

In the following excerpt, Mackenzie reflected on writing in art:

Sometimes I didn’t enjoy writing in art. Because I felt like I could be doing some fun drawing and stuff. But I mean in a different way I kind of like writing in art because I mean I get to explore my thing my piece of art and maybe notice things that I did not notice before.

She spoke about her sculpture saying that while she was writing she “explored her art and realized that if it was a horn there was a little gap so if you squeezed it the air would be out.” The children’s statements are consistent with the research on using journals across disciplines since the act of silent writing generates emotions, ideas and observations (Fulwiler, 1980).

**Discussion of writing in art.** Writing helps children develop conceptual understandings because the process of writing requires deliberate analytical action from a child (Vygotsky, 1962). When writing in art, the students were thoughtful and seemed to prefer to work quietly. Observations indicated that the group continued to rely on the word wall for their writing. For this group, the writing preceding vocabulary instruction was primarily descriptive. While Mackenzie, Philip and Francesca used adjectives about color to talk about their art, Anthony referred to texture. This led me to believe that the prompt elicited descriptive responses. However, when the children responded to the same prompt during vocabulary instruction, Mackenzie used the words carve, Philip used score, carving, glazing and firing. Francesca and Anthony used sculpting and sculpt. Vocabulary words written during vocabulary instruction depicted the processes or actions in which the children were actively engaged.

**Museum descriptions.** Writing in any content area should be meaningful and relevant to a child (Vygotsky, 1978). The guided lesson on museum descriptions seemed to open up the zone of proximal development for Philip and Mackenzie. The museum prompt was framed so that it
allowed students the opportunity to use their ideas about art and words in a more creative way. Embedded within their museum descriptions were the words *scoring, glazing, hollow, terracotta, molding, firing, sculpture.* While their individual written responses were not comprehensive in describing the complete process, the students were able to articulate orally how they made their art using their art words. This indicated that oral ability to use their words at this time was more advanced than their written ability. Moreover, the students appeared comfortable with this type of writing, since it appeared to align with this district’s process writing curriculum. This may explain why the study group stated they enjoyed writing “about their art,” but not “writing in art.” This is notable because it reinforces the importance of cross-disciplinary practices and can suggest ways to extend children’s interests for writing into the general education classroom.

**Process logs.** The students relied on my feedback for their process logs (Fulwiler, 1980). Field notes indicated that the study group and the class needed additional prompting to use art words in their writing. Because of time constraints, I decided to discontinue the logs after three weeks and implement other ways for students to practice using art vocabulary. The children also expressed concern about having time to do art. However, this writing was useful in gathering assessment information through the use of prompts or probes (Marzano, Pickering, McTighe, 1993).

Moreover, Philip’s use of art vocabulary evolved throughout this study. His post interview (see p 34) was notable. In his art discussion before vocabulary instruction, Philip used the word *oven* to talk about what he was going to do with clay. In his post interview, he repeated the word *oven* but paused, laughed and corrected himself saying the word *kiln.* It appeared that Philip didn’t know the word *kiln* well enough to use it. This supports the research that word knowledge
falls along a continuum (Beck, McKeown & Kucan, 2002; Blachowicz, 2006; Blachowicz, Fisher, Ogle Watts-Taffe, 2013).

Developing concepts is the result of a series of complex activities designed to challenge the students within their zone of proximal development (Vygotsky, 1978). In this rich, social, and creative environment where success is not based on what is right or wrong, the data collected suggested that the students were beginning to develop conceptual understandings of words while engaged in art.

**Question 1f: How do Children use Art Vocabulary When They are Interacting with Their Peers?**

Children in art class were encouraged to talk. They used explicitly taught art vocabulary as they interacted socially with their peers. As previously stated, this was essentially informal talk that demonstrated how the students used art vocabulary while they were sculpting. This talk was unguided by the teacher.

**Results of working with clay through unguided social interactions with peers.** The results of observations, audio and field notes while students sculpted with clay are consistent with social learning perspective in that social interactions develop knowledge (Vygotsky, 1978). For example, in their conversations while sculpting, the study group mostly made spontaneous and enthusiastic connections to personal experiences outside of school and popular media. They discussed movies, video games, sporting events and birthday parties. Occasionally these conversations would be interrupted by accidental events like water spills, school fire drills or questions and comments about a classmate’s work.

This social learning is exemplified in the following vignettes. Philip continued playful behaviors as he sculpted. As previously stated, playful behaviors were humorous, light-hearted
ways in which the children spoke and acted. He enjoyed using the vocabulary tally chart. Philip announced, “time to score clay” and repeated, “I’m scoring my clay.” Students created rhymes and songs using the art words while they sculpted. In the following excerpt, Anthony and Philip sang:

Philip: “roll it up, roll it up, roll it up, clay, clay, clay, terracotta clay.”
Anthony: “clay, clay, kiln, kiln, fire, fire.”
Philip: “I like clay, I like clay.”

Francesca participated in these enthusiastic conversations. While she rarely stopped working on her sculpture, she sometimes forgot what to do. During one class, she could not understand why her clay pieces kept falling off. She was asked to think about what she had to do to make her pieces stay together. Mackenzie and Philip responded telling Francesca she had to “score” her clay. Francesca repeated the word score and “I forgot to score it.” She ran up to the tally chart. In a later interview, she explained, “remembering the words helped her remember the steps easier.”

Students in art class work at their own pace. Mackenzie and Philip’s sculptures were fired; therefore, they discussed the “glazes” they planned to use. Philip explained to a classmate “glaze doesn’t look shiny when you’re using it, but it gets shiny when you fire it.” Mackenzie exclaimed to the group that she was “happy her clay was fired.” Mackenzie encouraged Francesca, stating, “You will be too.” During another conversation, Mackenzie was asked if learning this vocabulary helped her. She reflected that as she sculpted she tried “to think of words that could fit it (sculpture).”

The study group used art vocabulary to teach a classmate who missed art class how to create a hollow sculpture. Anthony invited this student to join the study group and modeled the art making process. He explained that this was different from what they did in the past because this
sculpture needed to be “hollow.” He demonstrated how to put two pots together. When the classmate used the words finger pots to describe what he made, Anthony stated, “pinch pots you mean…” He continued: “On these sides you score them. You wet them and blend them together.” Francesca explained, “Terracotta clay dries out really fast. Now it’s sticking to my hands. It feels different than normal clay.” Philip asked about terracotta clay and explained to the classmate that his next step was to “carve” it.

Through the theoretical lens of Social Constructivism, learning occurs first on a social plane. Social interaction and language play key roles. These shared activities turn into internalized processes (Vygotsky, 1978). This concept is also exemplified in the following:

The study group asked to meet in the art room one more time to play with modeling clay before the last day of school. Mackenzie took on the role of the teacher. She gave Francesca, Philip and Anthony three pieces of clay to create a sculpture. Philip had difficulty attaching his pieces of clay. He stated: “I think I need to score my clay.” Philip took a stick and water and scored the clay. While modeling clay did not need to be scored, it appeared that Philip understood the word score and may have begun to develop a conceptual knowledge of the process. During the last meeting, the group was asked how they felt about working together. They spent a significant amount of time talking about how they helped each other when someone was absent. The students concurred that “working together helped them when they needed to come up with ideas for their art.” For learning vocabulary, working together “helped if you thought you knew what a word meant and if someone else had a different idea you could meet together and think what real answer was.”

**Discussion of working with clay through unguided social interactions.** These vignettes are consistent with research by Heath, Soep & Roach (1998) that states art participation promotes
cognitive, linguistic, socio-relational and managerial capacities. From a social learning perspective, these vignettes also indicate that art classrooms function as a community of practice where students are expected to help one another (Eisner, 2002). During these interactions, the students relied on each other for advice as they began to articulate the processes of working with clay. These vignettes are also consistent with the findings (Blachowicz, 2006; Blachowicz, Fisher, Ogle Watts-Taffe, 2013) that word knowledge falls along a continuum. The children showed evidence of knowing words from this unit well enough to use them. This suggests that providing children with different ways to interact with words in the social environment of the art room was effective in helping this group use the terminology of art to communicate with one another. It also suggests that children should be encouraged to have these conversations.

**Question 2: Does the Explicit Vocabulary Instruction Improve Student’s Performance on Assessments?**

As previously stated, three tools were created that assessed the learning of the 22 students in the study class. They included a pre and post Vocabulary Self-Rating scale (Blachowicz, 2006; Blachowicz et al, 2013) and two 11-question multiple-choice quizzes given as pre and post-tests. Results will be followed by a brief discussion.

**Results of study class pre/post Word Knowledge Self-Rating scale.** The study class was asked to self-rate their knowledge of 19 art vocabulary words before and after vocabulary instruction (see self-rating scale, Appendix E). The Vocabulary Knowledge Rating Scales were used as a technique for activating student’s prior knowledge about the words in the art unit (Blachowicz, 1986). The 21 students rated their knowledge of 18 words “knowing words well enough to use them” higher in the post scale than the pre scale (see Figure 1, p 105). The exception was the word *clay* which 21 students knew pre and post.
Discussion of study class pre/post Word Knowledge Self-Rating scale. The highest gains were reflected in the words: *potter, potter’s wheel, kiln, glaze, rim, score clay and terracotta*. Seven and eight students respectively felt they knew the words *ceramic* and *hollow out* well enough to use them (based on 21 responses). One response was invalid. Based on these self-ratings, most students rated their own knowledge of words higher in the posttest than the pretest. Limitations are that these scales are subjective since the children rated their own knowledge of the words. Modeling this checklist with a different set of words before the students completed it on their own was successful.
Results of study class ceramic pre/posttest (art vocabulary words explicitly taught). An 11-question multiple-choice pre and post-test was given to 22 students (see ceramic quiz, Appendix E). This test was created specifically for the art unit as part of school district’s student growth objective for the school year 2013-14. It assessed student’s knowledge of art vocabulary that was explicitly taught to the students during unit of study. Scores ranged from .28 to 1.00. The class scores were grouped into three categories: low, medium and high (see Table 1).
Table 1

*Study Class Ceramic Vocabulary Pre and Post Test*

<table>
<thead>
<tr>
<th>Ranges</th>
<th>Low (.28-.45)</th>
<th>Medium (.55-.73)</th>
<th>High (.82-1.00)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PreTest:</strong> Percentage of students in study class who scored in each range (followed by number)</td>
<td>23% 5 students</td>
<td>45% 10 students</td>
<td>32% 7 students</td>
</tr>
<tr>
<td><strong>Post Test:</strong> Percentage of students in study class who scored in each range.</td>
<td>0 1 student</td>
<td>5% 1 student</td>
<td>95% 21 students</td>
</tr>
</tbody>
</table>

Numbers of students who scored in each range were tallied. It appears that as a result of this test that the vocabulary instruction may have been effective for this class. Notable limitations include that the assessment was given three weeks after the art unit was completed. There was no time to administer at a later date to see if retention of vocabulary was long term (see Figure 2, p 106).

**Figure 2**  Results of Study Class Ceramic Pre and Post Test (Words Explicitly Taught)

*Figure 2*. Based on twenty-two students responses. S1, S2, S3, S4 students in study group.
Results of study class general art vocabulary pre/post test (words not explicitly taught). A similar 11-question multiple-choice pre/ post-test was given to 22 students (see general art quiz, Appendix E). General art vocabulary quiz was created specifically for this unit as part of school district’s student growth objective for the school year 2013-14. It included general art concepts that were taught to the students in a previous drawing unit. Examples of these art concepts included overlapping, perspective. This differed from the Ceramic Pre/Post Test in that the drawing concepts were taught without explicitly teaching the art vocabulary. Scores ranged from .28 to 1.00 (see Table 2). The class scores were grouped into three categories: low, medium and high. Numbers of students who scored in each range were tallied.

Table 2

<table>
<thead>
<tr>
<th>Ranges</th>
<th>Low (.28 -.45)</th>
<th>Medium (.55-.73)</th>
<th>High (.82-1.00)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test: Percentage of students in study class that scored in each range (followed by number of students)</td>
<td>18% (4 students)</td>
<td>64% (14 students)</td>
<td>18% (4 students)</td>
</tr>
<tr>
<td>Post Test: Percentage of students in study class that scored in each range (followed by number of students)</td>
<td>14% (3 students)</td>
<td>68% (15 students)</td>
<td>18% (4 students)</td>
</tr>
</tbody>
</table>

Of the 22 students in the study class, 8 students’ post-test scores increased, 8 students’ post-test scores decreased and 6 students’ post-test scores remained the same. It appears that the study class scores remained the same and did not increase because words were not explicitly taught. As in the previous test, limitations included that it was given at the end of the school year, with no time to administer at a later date to see if retention of vocabulary was long term (see Figure 3, p 108).
Results of the study group’s ceramic/post test scores. Three children in the study group ceramic post-test that increased. One stayed the same. The greatest increase is noted in Francesca’s score. This is notable since she stated in a post interview that she knew most of these words before the unit (see Table 3).

Table 3

*Ceramic Pre and Post Test Scores Study Group (words explicitly taught)*

<table>
<thead>
<tr>
<th>Study Group</th>
<th>Pre Test</th>
<th>Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philip</td>
<td>.73</td>
<td>.91</td>
</tr>
<tr>
<td>Anthony</td>
<td>.91</td>
<td>.91</td>
</tr>
<tr>
<td>Francesca</td>
<td>.54</td>
<td>1.0</td>
</tr>
<tr>
<td>Mackenzie</td>
<td>.91</td>
<td>1.0</td>
</tr>
</tbody>
</table>
The scores on the ceramic assessments for the study group suggest that the explicit vocabulary instruction improved students’ performance.

**Results of study group’s general art pre/post test scores.** When the words were not explicitly taught, the results showed less improvement: Philip and Francesca’s scores increased, one decreased, and one remained the same (see Table 4). This might suggest also that for the study group some learning of the drawing vocabulary could be attributed to incidental or environmental learning.

Table 4

*General Art Vocabulary Pre and Post Test Scores Study Group (words not explicitly taught)*

<table>
<thead>
<tr>
<th>Study Group</th>
<th>Pre Test</th>
<th>Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philip</td>
<td>.64</td>
<td>.82</td>
</tr>
<tr>
<td>Anthony</td>
<td>.54</td>
<td>.54</td>
</tr>
<tr>
<td>Francesca</td>
<td>.64</td>
<td>.82</td>
</tr>
<tr>
<td>Mackenzie</td>
<td>1.0</td>
<td>.82</td>
</tr>
</tbody>
</table>

This supports the research on vocabulary assessment that states vocabulary learning is difficult to capture on a single assessment, because of the multifaceted nature of what it means to know a word (Blachowicz, Fisher, Ogle & Watts-Taffe, 2013). However, this data supports the findings from question one on how using explicit vocabulary instruction increased students’ use and understanding of art words.

**Competing Explanations**

**Could After-School Art Experiences Have Contributed to how Students Used Art Vocabulary in this Study?**
The data collected strongly suggests that the explicit teaching strategies helped these students make use of art vocabulary. However, to strengthen the analysis of case study evidence, Yin (2014) suggests discussing competing explanations. Competing explanations are defined as interventions other than the target intervention or practice that might account for the results. Since most of the students in the study group participated in art experiences after school, the following question will be discussed as a rival explanation for how the students used art vocabulary in this study: Could these after school art experiences have contributed to how the study group used their art words in this study? Each student was interviewed two times, before and after the study, to discuss his or her art experiences after school. Specifically, it was to see if, when describing these experiences, the students used any art vocabulary. Audio recordings and field notes were used for data collection. The following question was asked: Can you tell me about a more recent time you made art outside the school art room? The results will be followed by a discussion.

**Results.** The results of these interviews suggest that despite these experiences, most of the students did not use art vocabulary other than what was taught in this unit to discuss artwork they completed after school.

**Philip.** In both his pre and post interview, Philip spoke of a sea creature project that he made in second grade out of clay. In his post interview, Philip spoke about using an arts and crafts book with his sister and coloring in a coloring book. He repeated in both interviews that he went to a friend’s house to build a catapult with Popsicle sticks. With regard to talking about art, he mentioned that he and his friend spoke about problems they had when they made the catapult. He stated: “he had something missing and the rubber band would snap because he put glue on it.” Philip repeated the same out-of-school experiences in both interviews.
Anthony. Anthony spoke of how he enjoyed drawing dragons. He talked about a book titled *How to Draw Dragons* that he used for ideas. Anthony shared that he sketched outside in the park one day in his drawing pad. Sometimes, he and his dad sketched together. Anthony attended art classes after school. He described a painting he completed of *Starry, Starry Night* on canvas paper with dashes and dots during this class. In his post interview, he spoke of a different art experience in the same after school art class:

I made this art piece in my after school art class. I made this *carving* out of this squishy foam. I used this tool to scrape it and form a crab. And now what I’m working on, I take this paint and I put it on a roller, put it on the crab I made and then put it on paper to make cool designs in it.

Mrs. LaBrocca: “What do you call what you are doing?”
Anthony: “I call it a stamp… Like my own stamp I’m working on…”

Field notes indicated that Anthony was referring to the art process of printmaking or printing. For children this age, a Styrofoam plate is carved with a pointed stick or sharp tool. Tools include brayers, ink, plate, and rollers. Anthony used the word *carving* from the art unit to describe what he did to the foam. He used the word *stamp* to describe the art process.

Francesca. During a pre interview, Francesca told me that she “did a lot of stuff” at home. She drew two elves on a shelf, a boy and a girl, and described the colors she used on each. She spoke about a drawing she did of a tree and a dinosaur. Francesca mentioned that she went to the Metropolitan Museum of Art with her mom and then discussed a painting they saw. “It was really cool because the colors blended and they were like splashed on.” Additionally, Francesca’s mother attended college and majored in art. She discussed a picture that her mother painted.

…It was really interesting because it was not really a mixture like a picture of a playground with a dinosaur and stuff. It was like a picture of random things just on the paper. Not like a flower, a flower pot, just like different colors, squares of colors, rectangles of colors, triangles and I thought it was really cool how she did all that … and it was really hard to see her pencil... and I think that was really interesting.
Field notes indicated that she could have been making references to *Abstract Art*.

Francesca referred to a picture of a flag her brother made:

> And I liked how it had a really cool star. It had all different colored polka dots on it like red, blue, green and rainbow polka dots and then he put little dots in the back cause he used like I forget what it’s called but he used something… I forget what it’s called, something in the *background*. He used *background* but he didn’t really make it as big. He made it better.

Field notes also indicated that Francesca was referring to the word *perspective*. “*Background*” and “*perspective*” were words mentioned in the drawing unit but not explicitly taught. In her post interview, Francesca spoke about the artwork she completed in this unit of study to her brother.

> My brother had a *hollow sculpture* too. So we took them out of our *sculpture* cabinet and we looked at them and we said what we liked about them. ….

**Mackenzie.** In her pre-interview, Mackenzie spoke about an art class she attended after school with Miss Caroline and Mr. Woodrow. She stated that when working with Mr. Woodrow, they made whistles and ornaments. She described a bumblebee ornament that she made for her uncle who “makes honey cause he has bees in his backyard like in those honeycomb.”

> With Miss Caroline, every week or two weeks cause some of the paintings took long, we would choose something out of her things and she would help us paint it. I made dogs and cats because they are easy to make and they are fun. I made a big flower and put it in my room. I made a lot of stuff cause I did it like for two years.

Field notes indicated that other students in town attended these after school classes. Students occasionally brought this after school artwork into art class to share. It was noted that sometimes children attending these classes created works that were similar.

> I went to Miss Caroline for years so I made… I know I made an elf on the shelf. We were allowed to make it a girl or a boy. I made mine a boy and she wanted us to put puffballs on the end of the hat but they don’t have puffballs so I didn’t do it.

Mackenzie chuckled.

> Then we had to make like a window so to make the window perfect so we stuck tape on the canvas and painted around it on certain spots and peeled the tape off. It was fun.
Mackenzie was asked about some of the things she talked about when she talked about art.

There was these paintings of flowers and um... I talked about how the vase looked a certain way. Because you know that painting you always showed in class about the cups and stuff. It had something like that but it was more like of a vase shape on it. I talked about the cool designs. I talked a lot about.

Field notes indicated that the painting to which Mackenzie referred was a *still life*, a word from the previous unit that was not explicitly taught. In her post interview, Mackenzie talked about how she painted a beach, water and a surfboard for her room. She told me that her uncle cut the surfboard out of wood. She talked about the colors: “one side is orange, the other side is orange, and the middle side is blue.” She stated that she was “going to make a white beach.” Mackenzie explained, “I just like the idea of the beach for my room because I love New Jersey and that’s a lot of things my family does.”

**Discussion of out of school art experiences.** For Mackenzie, Anthony and Francesca, the interview data about their art experiences out of school appear to support the research by Melnick that points to how family involvement in the arts encourages students (Melnick et al, 2011). The research implies that families of high socioeconomic status are more likely to participate in these kinds of art activities. Furthermore, these children appeared in art class to maintain higher levels of focus and engagement (Catterall & Peppler, 2007) and have positive attitudes and dispositions (Heath, Soep & Roach, 1998). This observation supports the findings from these studies. However, students in these studies were from a low SES that was in direct contrast to students in this study group who were from a high SES. It appeared for this group that opportunities for after-school art experiences were readily accessible.

Although they attended art classes after school, there was little evidence from these interviews that demonstrated that the children were using art vocabulary other than what was
explicitly taught in the unit at school. For example, Anthony referred to the process of printmaking as “using a stamp.” While this is an acceptable way of describing what he did, it appeared from this statement that he did not know or use the words to explain this process as printing or printmaking. This is notable since the art definition of printing is rooted in a process that dates back thousands of years. This is a distinction that warrants clarification since most children associate the word printing with something that is done from a computer.

Additionally, Francesca mentioned the word background but did not appear to remember the word perspective as she spoke about her brother’s artwork. This could be attributed to the fact that while this concept was discussed in this art class, the word perspective was not explicitly taught. Moreover, Francesca described her mother’s artwork as “a picture of random things just on the paper. Not like a flower, a flower pot, just like different colors, squares of colors, rectangles of colors, triangles,” indicated that she did not seem to know the word abstract. This was a word discussed in art class but not explicitly taught. However, as exemplified in her interview above, Francesca used the words hollow and sculpture as she spoke to her brother about the art she completed in this unit on sculpture.

There are limitations to this data in that it was not inclusive of every after school art experience in which each student participated. Therefore, no attempt will be made to generalize these findings. However, based on these responses for these students, the after-school art experiences may not have contributed to how they used the art vocabulary in this unit of study.

**Analysis**

As seen with the data collected for this study, the children explored and shared their knowledge of words in a variety of ways. They played with words through song, rhymes, and appeared motivated by the use of the vocabulary tally chart and the interactive game *Be a Mind*
Reader (Cunningham, 1987). They used the words during class tasks and also in unstructured social situations as they took on the role of the teacher. Moreover, the visual environment of the art room appeared to contribute to children’s learning of the art vocabulary. The word wall, word cards in the pocket chart and on the easel were an integral part of the art room environment. The pocket chart was visible to all of the students as they entered the room. The word wall was large, bright yellow and prominently placed on the board in the front of the room.

Furthermore, the placement of the vocabulary tally chart directly beneath the word wall encouraged the children to look at the word wall. Observations indicated that each child glanced at the word wall or scanned the room looking for words during each discussion, game or use of the tally chart. Moreover, the children moved closer to the words as they wrote or illustrated the words. While these were a part of the visual environment of the art room from the beginning of the year, the children did not notice the words in the weeks before the explicit instruction began. This indicated that just having a word wall was not the same as teaching with a word wall. It appeared then that the physical set up and the word wall activities of the room contributed to how the children learned art vocabulary. This is especially relevant in that one challenge for public school visual art specialists is the amount of contact time they have with their students. For example, the study class met once a week for 45 minutes. Moreover, there were weeks that this class did not meet or met for a shorter periods of time because of weather-related issues. Therefore, the word wall, pocket chart and words on easel became visual reminders for the students that permitted them to recall the previous lesson. This is consistent with the research that words on walls serve as visual scaffolds that assist students (Brabham & Villaume, 2001).

Additionally, because the words taught coincided with their art lesson, the children were not only interacting with the words on the word wall but were also experiencing them while they
were sculpting with clay during the art unit. For example, they learned *terra cotta, carve and coil* while they worked with *terracotta* clay, *carved* with tools and *coiled* their clay. Being actively engaged in the art processes appeared to provide the appropriate context for the students to practice using their art words.

Furthermore, vocabulary activities associated with the word wall contributed to discussions. This was evident when the students participated in open word sorting as they disagreed with how the group arranged the words in alphabetical order. While arranging the words in this way may not have resulted in deep learning about word meaning, it did encourage the children to speak about the words. Richer discussions occurred when the children chose to sort the words semantically. The results of this task suggest that encouraging the children to discuss relationships about words before open sorting may be a reasonable modification.

Moreover, children experienced words meta-linguistically as they participated in the Interactive game *Be A Mind Reader*. Their attention was drawn back to the word wall as they listened to clues about the number of syllables, consonants or vowels in a word. Results of this activity indicated that the word wall and word wall activities helped students engage with learning art vocabulary.

**Explicit Instruction**

The data also indicated that the students needed clarification of word meanings. This became clear when the children were asked about the meaning of the word *potter*. The children raised their hands and responded they knew the word from Harry Potter, a popular series of books and movies. The vocabulary instruction, and evidence based strategies used in the unit helped students distinguish Harry Potter from Dave the Potter, the sculptor in the book that was connected to the art unit in this study. This data also indicated that although some of the children
in the study group had art experiences outside of school, explicit vocabulary instruction was necessary to clarify concepts and word meanings. Therefore, the explicit vocabulary instruction in this study accomplished this objective for this group of students.

**Writing in Art**

Observations indicated that when writing in art, the students were thoughtful and preferred to work quietly. My observations also indicated that the group continued to rely on the word wall for writing before, during and after vocabulary instruction. The students also appeared more confident as they wrote and became more familiar with the art words. The prompt for the museum description where the children were asked to think of their sculpture as an artifact appeared to open up the zone of proximal development for two students who creatively changed their artistic intentions. While their individual written responses were not comprehensive in describing the complete process, the group was able to articulate orally how they made their art using their art words. This indicated that oral ability to use their words was more advanced than their written ability. Moreover, the limited amount of time the students had during art class to accomplish this task appeared to affect the children’s written responses. This was notable because three children in the study group were considered by their classroom teacher to be some of the “better writers” in that third grade class.

When asked about writing in art in individual post interviews, all of the children said they enjoyed writing about their art and not someone else’s because they “knew about their art.” However, one student expressed concern about missing time to draw or “do fun stuff” in art. At the same time, this same student said she enjoyed writing in art because she got to explore her art and notice things she did not notice before. This statement is consistent with the findings by Fulwiler (1980) that suggest that the act of silent writing generates emotions, ideas and
EMBEDDING VOCABULARY INSTRUCTION INTO THE ART EXPERIENCE

observations. While writing in art was a past practice in this art class, from this study it appeared that this might be better suited for use in the general classroom. The students could have been comfortable with this type of writing because it aligned with this district’s process writing curriculum. This may explain why the study group stated they enjoyed writing “about their art,” but not “writing in art.” This is notable because it reinforces the importance of cross-disciplinary practices and can suggest ways to extend children’s interests for writing into the general education classroom. An implication that will be discussed in Chapter 5 is for the general classroom teachers to use students’ art as a prompt for their writing.

Books

Another evidenced-based strategy was explicit vocabulary instruction through the use of three read alouds. In addition to the physical environment and set up of the art room, the books that were selected also appeared to inform this study. The children stated that they all preferred *Dave the Potter* to *Ancient Soldiers of Clay*. For example, *Dave the Potter* not only used art vocabulary but also illustrated the process of building a pot. These illustrations were full page, in color and thought provoking. Additionally, it placed the making of pottery in a meaningful historical and cultural context. As a result, the illustrations appeared to engage the children in a class discussion about slavery. The students in the study group all stated that they enjoyed the read aloud experience and preferred the picture book. They each spoke of the illustrations, which again suggested the importance of using the illustrations to make meaning. This was in direct contrast to Text Talk where illustrations were covered so students could make sense of the linguistic content. For this study, the illustrations were important. While this class discussion was not reported in the findings for this study, perhaps this discussion may have impacted the students’ preference for the picture book over the chapter book.
In keeping with what the arts were meant to do, modifications for the read-aloud experiences had to be made. These were dependent on the flexibility of the classroom teachers and their willingness to deviate from the prescribed curriculum. This is notable because interdisciplinary literacy involves flexibility not only on the part of the teachers but also for the administrators. Despite our district’s high socioeconomic status and history of high performance on standardized tests, the administrators at this time did not appear supportive of curriculum integration. New statewide district initiatives included new teacher evaluations, which appeared to be used to foster a culture of fear amongst the teachers. This is relevant because it inhibits teacher flexibility.

This was in direct contrast to the research by Stevenson & Deasey (2002) where school leaders saw the arts as new thinking for teaching and learning or a “third space.” In their study, school leaders and teachers were committed to the arts and integration. Interdisciplinary literacy during current times can continue to be a challenge as test scores and accountability are at the forefront of educational agendas.

**Illustrating Words**

Another evidenced-based strategy that appeared to be effective was having the children choose four new words to illustrate. The children stated that this was an activity they enjoyed. Additionally, drawing fit into the art room environment. Furthermore, students illustrated words as they finished their art, during transition times in the art unit. It did not take time away from their art and was used as a formative assessment.

**Pre/Post Tests, Vocabulary Self-Rating Scales**

Data to answer question two was collected in the form of two 11-question multiple-choice pre and post-test to determine the outcome of the study. Scores on vocabulary quizzes showed that
the children in the study class scored higher on the post-test as compared to their pre-test when words were explicitly taught. Additionally, students rated their knowledge of the art words higher on the Word Knowledge Rating Scale. While this growth could have resulted from using other evidenced-based strategies in the unit, my observations consistently showed that the students relied on the words in the room as they discussed, wrote or created their own art.

The data collected from the pre and post-tests and word knowledge rating scales was used to not only determine the outcome of the study but also as a way to plan instruction for specific words in this unit. Although the self-rating scales were subjective, they provided valuable information on students’ perceptions of words they believed they knew well, as well as those they did not know at all. Along with the data collected during the study, it became clear that students began this art unit with preconceived ideas as to what some words meant. This supported the importance of explicit instruction.

These findings were also consistent with the research that states vocabulary learning is difficult to capture on a single assessment, because of the multifaceted nature of what it means to know a word (Blachowicz, Fisher, Ogle & Watts-Taffe, 2013). However, this data supports the findings from question one on how using explicit vocabulary instruction increased students’ use and understanding of art words.

The Unit

Finally, the design of the vocabulary instruction that was embedded in the art unit appeared consistent with the research on the components of a Comprehensive Vocabulary Program as defined by Blachowicz, Fisher, Ogle, & Watts-Taffe (2013). The unit provided rich and varied language experience through the read-aloud books, poems and discussions, taught individual words through explicit instruction and word wall activities, fostered word consciousness through
the classroom environment and activities such as drawing words. It also briefly taught word learning strategies as evidenced by the students’ recognition of the root word, potter in potter’s wheel, pottery. Moreover, the children experienced these words as they engaged in sculpture. It appeared then that the children in this study solved practical tasks with the help of their speech as well as with their eyes and hands (Vygotsky, 1978). As a result, the evidence-based vocabulary strategies with modifications accompanied by the art experience appeared to help this group of students learn art vocabulary.

Conclusions

Therefore, this data supports the research that suggests more intentional instruction for Tier Two or Tier Three words (Beck, Perfetti & McKeown, 1982; Baker, Santoro, Chard, Fien, Park & Otterstedt, 2013; Baumann, Ware & Edwards, 2007) and teaching new content (Heisey & Kucan, 2010; Alexander-Shea, 2011). For students, the effects of explicit vocabulary instruction are significant (McKeown, Beck, Omanson & Pople, 1985; Beck, Perfetti & McKeown, 1982; Maynard, Pullen & Coyne, 2010; Coyne, McCoach and Kapp, 2007; Baumann, Ware & Edwards, 2007). The results of this study suggest that the research on teaching academic content vocabulary may also be applicable to the Visual Arts. The art unit scaffolded the learning of art vocabulary (Vygotsky, 1978) by segmenting tasks and ritualizing them (Bruner in J.V Wertsch, 1985). It contained different ways of activating children (Bruner, 1966). In an attempt to fill the gap in the literature on vocabulary instruction, what emerged from this study was the importance of the social and visual environment of the art room and the use of the interactive word wall. However, as the results indicated, some strategies were better suited for the art room than others. Implications for practice and future research will be discussed in detail in Chapter 5.
Chapter 5: From Harry Potter to Dave the Potter

This chapter is written as a summary of the entire study, including rationale, summary of theory and brief review of the literature. A methods section will be followed by results organized by question, sub-question and a brief discussion. Next, a discussion and analysis of the unit of study will specifically address the following: emergence of the interactive word wall accompanied by the words in the visual environment of the art room, and the importance of the social environment. The chapter will conclude with implications for practice, future research and closing remarks.

Rationale

The Arts are an academic subject necessary to prepare students for the 21st century. Art standards created at both the state and national level address the need to create a sequence of art learning from pre school- Grade 12. In addition, New Visual Arts Standards (2014) call for basic and artistic literacy. These standards demand that students know, use and apply appropriate visual and verbal vocabulary for the arts. This aligns with the Common Core English Language Art Standard L.3.6 for Vocabulary Acquisition and Use, which also demands students “Acquire and use accurately grade-level appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships.” The problem is that the state and national standards imply that students will learn this vocabulary mostly through the processes of creating and critiquing art. Research in the field of literacy on vocabulary acquisition, however, states that learning vocabulary is complex and explicit instruction is needed. These findings may be problematic for art teachers who may not be trained in the area of literacy on ways to teach vocabulary.
A key question in this study concerns how literacy strategies might be effectively used in the art room at the K-3 level. This query promoted the following questions: Would students use vocabulary that was explicitly taught in their writing about art? Would they use it in their discussions? How would they respond to learning this vocabulary in art? Therefore, the purpose of my study was to describe children’s use of art vocabulary when it is explicitly taught with the following evidenced-based vocabulary strategies: interactive word wall activities, vocabulary tally chart, read-alouds, art discussions, writing about art, and unguided social interactions with peers. Specifically:

**Question 1:** How do children use art vocabulary when it is explicitly taught with evidenced-based vocabulary strategies in an art unit on sculpture? Each evidenced-based vocabulary strategy will be discussed in the following sub-questions:

1a. How do children use art vocabulary when it is explicitly taught to them using interactive word wall activities?

1b. How do children use art vocabulary when they are illustrating words?

1c. How do children use art vocabulary when a vocabulary tally chart is used?

1d. How do children use art vocabulary about sculpture as a result of before, during and after discussions of read-alouds of informational and narrative literature and poems?

1e. How do children use art vocabulary when they write about their art before, during and after use of evidence based vocabulary strategies in the art unit?

1f. How do children use art vocabulary when they are interacting with their peers?

**Question 2:** Does the explicit vocabulary instruction improve students’ performance on assessments?
Theory

This study was grounded in a social learning perspective within the theoretical framework of Social Constructivism. From this perspective, learning is socially constructed and scaffolded. According to Vygotsky (1978), young children learn first through interpersonal processes on the social level. This view contends that young children learn in social situations between people before they internalize learning.

In defining the relationship between learning and development, Vygotsky argued that for children a zone of proximal development exists. It consists of two developmental levels: 1) Students actual development level as determined by completed developmental cycle, and 2) mental development level what students can do with teacher’s guidance or help. Good learning is in advance of this development and is properly organized. Since each school subject has its own specific relationship to the course of child development, Efland (2002) discusses the implications for art education when he refers to the progressive schools of the 1920s and 1930s. He applies the botanical metaphor used by Vygotsky (1978) to art and explains that while children were allowed to be free they were neither developing skills nor interest in art. A study conducted by Lowenfeld (1952) confirmed that older students who were not taught specific art skills became aware of their limitations and were discouraged from participating in art. Opening up this zone of proximal development in art education means providing adult guidance and assistance through scaffolding. In this very rich, cultural environment of the art room, children do things they may not do in a regular classroom. Since the art environment is not based on what is right or wrong, struggling students try things they may not do in a regular classroom. This is the value of art in school and fits the broader definition of the Zone of Proximal Development.
More recent theorists like Bruner took Vygotsky’s theory and applied it to a theory of instruction to develop curriculum that scaffolds and spirals. It appeared that teaching art vocabulary could fit within the rich social context of the art experience. It is on these theories that this study is grounded.

**Literature Review**

The review of the literature for this study explored embedding literacy strategies with a specific emphasis on vocabulary into the art curriculum. It is grounded in the idea that Art can provide rich contexts and experiences for developing art vocabulary. Since this study spans two areas in the curriculum, the review of the literature for this study drew on both art and literacy.

**Art**

**Value of arts in the life of a child.** The arts are experiential multisensory and developmental appropriate for children while addressing social, emotional and cognitive domains. Experts in the field of art and art education agree on the value of the arts in the life of a child (Greene, 1995; Eisner, E., 2002; Efland, 2002; Gardener, 1973; 2005; Catterall, 2007; Winner & Hetland, 2007). Some studies support the value of the arts for cognitive attitudinal dispositions or Habits of Mind that students develop as a result of art participation (Hetland, Winner, Veenema & Sheridan, 2007). Others support the arts for the level of engagement they produce in students (Stevenson & Deasey, 2002). Still others speak to how participating in art changes students (Catterall & Peppler, 2007) and how students develop positive attitudes and dispositions (Heath Soep & Roach, 1998).

**Case for arts integration.** Reasons for integrating art have changed over the years (Eisner, 1997). The 20th century saw conflict in the field of art education because there were those who believed in teaching the content of art and those who believed art to be only for self-expression.
This created the myth that art is only for a talented few, or that it is an easy non-academic subject (Efland, 1990).

There are growing challenges to art curriculum integration, one of which is the emphasis on high stakes testing (Brand & Tripett, 2012). The National Center for Education Statistics (Parsad & Spiegelman, 2009) reported that only 59% of elementary schools offered any professional development to visual art teachers. Sixty-nine percent of art teachers participated in integrating art into other content areas. Instructional time for special subject areas such as art decreased 35% from 154 minutes a week in 1999-2000 to 100 minutes in 2009-2010. For visual art teachers, no statistics were available on their training in literacy. Despite these statistics, there is a growing body of research that points to the social, emotional and cognitive value of the arts and their importance in the development of literacy (Flood, Heath & Lapp, p xvi, 2007). Additionally, the President’s Council on the Arts and Humanities report titled Reinvesting in America: Winning America’s Future through Creative School supports art integration. The report admits that budget constraints and the emphasis on high stakes testing are contributing to a downward trend in arts education. They make recommendations to further develop the field of arts integration through better teacher preparation and professional development (PCAH, p vii).

**Interdisciplinary literacy.** Studies support interdisciplinary curriculum that integrates literacy into content areas like science or social studies (Morrow, Pressley, Smith & Smith, 1997; Romance & Vitale, 2012, Osbourn, 2009; Connor, Rice, Canto, Sutherland, Underwood et al, 2012; Guthrie, Wigfield, & You, 2012 in Christenson, Wiley & Reschly, 2012 eds.). Scholars who conducted research with other experts in other content areas such as math, history and science agree that these subject areas have their own disciplinary literacy that must be understood in order to understand its content (Shanahan & Misischia, 2011; Shanahan &
Shananhan, 2012). As a discipline, art has its own vocabulary, one that is interconnected with hands-on engagement and the processes of art making. Art, like science, social studies and math, places an emphasis on the unique tools that experts use to engage in the work of that discipline (Shanahan & Shanahan, 2012).

State and National Standards now require students to understand and use appropriate art vocabulary, yet visual art specialists face challenges to meet standards that demand an integrated literacy model. Since domains of knowledge in the arts are structurally different, they demand different approaches to instruction and assessment (Ellis & Lawrence, 2007). Moreover, these differences must be addressed when designing and integrating curriculum in the arts (Efland, 2002). Some literacy strategies are beyond the scope of what could or should take place in an art room. In direct contrast to the studies that used the arts integration to support literacy (Stevenson & Deasey, 2002), this study was not intended to have the arts be instrumental to learning in literacy. Nor was it intended to jeopardize the integrity of the arts (Miller, 2013). It did attempt to fill a gap that states the connections between art and literacy were not fully explored (Thompson in Bresler, 2002).

Literacy

**Vocabulary development and read-alouds**. Research supports the use of read-alouds for vocabulary acquisition asserting that children can acquire vocabulary through incidental and explicit instruction (Elley, 1989; Duke & Kays, 1996; Coyne, McCoach and Kapp, 2007; Maynard, Pullen & Coyne, 2010). However, the research suggests more intentional instruction for Tier Two and Tier Three words (Beck, Perfetti & McKeown, 1982; Baker, Santoro, Chard, Fien, Park & Otterstedt, 2103; Baumann, Ware & Edwards, 2007) and teaching new content (Heisey & Kucan, 2010; Alexander-Shea, 2011). Tier Three words are specialized words that are
confined to specific subject areas such as math, science and social studies (Blachowicz, Fisher, Ogle & Watts-Taffe, 2013). Research also supports rich vocabulary instruction (McKeown, Beck, Omanson & Pople, 1985; Beck, Perfetti & McKeown, 1982; Maynard, Pullen & Coyne, 2010; Coyne, McCoach & Kapp, 2007). Since domain-specific terms are found in limited contexts (Blachowicz, Fischer, Ogle & Watts-Taffe, 2013) word meanings need clarification through explicit instruction.

Explicit vocabulary instruction. Blachowicz, Fisher, Ogle & Watts-Taffe (2013) state effective vocabulary programs should teach individual words, provide rich and varied language experiences, foster word consciousness, and teach word learning strategies. These components guided the art vocabulary instruction within the art unit.

Text Talk (Beck, McKeown & Kucan, 2002) and Vocabulary Visit (Blachowicz & Obrochta, 2006) are evidence-based read aloud strategies used to explicitly teach vocabulary. Vocabulary Visit was designed for teachers who had limited time to teach content to their students and actively engaged students in learning vocabulary. Vocabulary Visit used a thematic series of texts and previewed words across the series. Students used an interactive “thumbs up” when vocabulary was heard in the story, words were taught and discussed. Additionally the books illustrations were used to generate meaning. In Text Talk (Beck McKeown & Kucan, 2002), students repeated the word to create phonological representation, the words meaning was explained. Students used the words in different contexts; words were recorded in books or cards. To make meaning of text, the illustrations were covered.

Word Knowledge Rating Scale. Word knowledge is complicated and multifaceted. Beck, McKeown & Kucan’s (2002) refer to the qualitative dimensions of word knowledge that state what it means to know a word is a complicated and multifaceted matter. Since knowing the
meaning of a word falls along a continuum (Blachowicz, 2006), a pre and post Vocabulary Self-Rating Knowledge Scale was used as a technique for activating student’s prior knowledge about the words in the art unit (Blachowicz, 1986).

**Word Walls.** Studies by Blachowicz & Obrochta (2006) concluded that word walls supported student’s vocabulary learning. Word walls provide conversational scaffolds that structure how students study, use and think about words (Brabham & Villaume, 2001). Word walls contribute to making a classroom a print rich environment by fostering word consciousness (Graves & Watts-Taffe, 2008). Teacher’s perceptions of word walls affect how they are used (Walton, 2000). For word walls to be effective, they should be interactive (Yates, Cuthrell & Rose, 2011; Harmon, Wood, Hedrick, Vittner & Willeford, 2009) and encourage student choice (Harmon, Wood & Kiser, 2009). Some interactive strategies include open sorting which encourages students to talk about words (Blachowicz, Fisher, Ogle & Watts-Taffe, 2013) and word games (Cunningham, 1987). Interactive word walls should be integrated into class instruction (Brabham & Villaune, 2001; Yates, Cuthrell & Rose, 2011; Harmon, Wood, Hedrick, Vittner & Willeford, 2009; Jackson & Naervaez, 2013).

**Journals.** Journals are used across disciplines since the act of silent writing generates emotions, ideas and observations (Fulwiler, 1980). In art, sketch journals are used for teaching and assessment (Dorn, Madeja & Sabol, 2004; Beattie, 1997; Hetland, Winner, Veenema, & Sheridan, 2007) and to explore ideas, processes or techniques. In literacy, journal writing in Writer’s Workshop makes passive learners into active learners (Calkins, 1986). Writing helps children develop conceptual understandings because the process of writing requires deliberate analytical action from the child. However, writing in any content area should be meaningful to the child. (Vygotsky, 1978).
Discussions. Through the lens of Social Constructivism, learning is socially based. Children’s speech frees them from the constraints of their environment. Children learn by interacting with their peers (Vygotsky, 1978). Art critiques are discussions that offer opportunities to hear how others interpret artwork and to apply art vocabulary (Hetland, Winner, Veneema & Sheridan, 2007). Eisner (2002) asserts that talking about art is a linguistic achievement requiring the use of similes and metaphors. In art classrooms, peer to peer dialogue discussions and interactions play an important role in the development of reasoning and critical thinking (Efland, 2002; Eisner, 2002; Hetland & Winner, 2007; Krechevsky, M., Mardell, B. Rivard, M. & Wilson. D., 2013).

Methods

Research Design Overview

In order to fill the gap in the existing research regarding how third grade students learn vocabulary in art class, I conducted an instrumental case study as action research over the course of five months. An instrumental case study is defined as one that provides insight into an issue (Stake, in Denzin & Lincoln, 2000). Instrumental case studies also require the researcher to choose cases that offer opportunities to learn (Denzin & Lincoln, 2000). This design provided a rich description and understanding of how using evidence-based practices for vocabulary instruction in art class built art vocabulary for third grade students. This unit was taught to 22 students in the study class. Their classroom teacher selected four students who were reading and performing on grade level as the study group. This study group played a supportive role to the art unit. This type of case study is instrumental because its lens is wider than understanding a particular person (Stake, 1995). In particular, this wider lens is imperative because it is key to understanding how different children learn.

Action Research
Educational action research is used to describe activities in curriculum development. Strategies of planned action are implemented, observed, reflected upon and subsequently changed. According to Lewin (in Carr & Kemmis, 1986), this spiraling makes action research a social process. Its aims are to improve a practice, to improve the understanding of the practice, and to improve the situation in which the practice takes place.

Therefore, I designed and taught a 14-week unit of art study on sculpture. The goals of the art unit were: (a) to develop coiling and pinching skills in working with clay, (b) to demonstrate appropriate use of materials and tools and apply to both additive and subtractive sculpture, (c) to develop an appreciation of how sculpture is used in different cultures, (d) to develop creative solutions to the prompt “If someone saw my art in the year 2113, 100 years from now, what could they learn about me?” and (e) to apply use of art vocabulary in conversations about art.

The unit met the following New Jersey Visual Arts Content Standards and Cumulative Progress Indicators: (NJCCCS, 1.3; NJCCCS CPI 1.3.5.D.2.; NJCCCS CPI 1.3.5.4; NJCCCS CPI 1.4.5.)

In addition, the art history & cultural significance of African American and Ancient Chinese sculptures were addressed through the following three books that were read-aloud to the students: (a) Dave the Potter, by Laban Carrick Hill, (b) Etched in Clay by Andrea Cheng and, (c) Ancient Soldiers of Clay by Susan Markowitz Meredith.

Nineteen words were taught in this unit. They were: clay, coil, potter, potter’s wheel, pottery, rim, mold, ceramic, rim, carve, hollow, hollow out, score clay, kiln, bronze, sculpture, statue, glaze, three-dimensional. The words fire and shoulder while not tested were also taught.

The vocabulary instruction unit was constructed to support a scaffold theory of instruction as defined by Bruner (1966). It was grounded in the research by Blachowicz, Fisher, Ogle & Watts-Taffe (2013) which states effective vocabulary programs should teach individual words, provide
rich and varied language experiences, foster word consciousness, and teach word learning strategies. Evidenced-based vocabulary strategies were embedded in the art unit. A timeline for vocabulary instruction during the 14-week unit of instruction was followed (see timeline, Appendix A and lesson plans, Appendix M).

**Data Collection Procedures**

**Pilot Study.** Before the study began, I conducted a pilot study with a different third grade class and collected data on four students who were similar to those in the study group. The students in the pilot group were also reading and performing on grade level as determined by their classroom teacher. Throughout the pilot, I made systematic observations and reflected on what did and did not work in the unit. Lessons for the pilot were purposefully planned to occur three weeks before implementing them with the study class. This time frame allowed me ample time to conduct additional research and make modifications before the study began. I consulted with the classroom teachers of both the study and pilot classes to develop similar strategies for classroom instruction to be used in art for previewing the read aloud and for read-aloud discussions. No pilot data collected was used in this study.

**Methodologies Used.** Interviews, observations, documents and artifacts were collected. The art unit included read-alouds with discussions and small group discussions about art, as well as explicit vocabulary instruction, interactive word wall activities, and journal writing for all third grade students during their weekly art class. To see how students performed on assessments before and after instruction, a Word Knowledge Self-Rating Scale was given both pre and post. Additionally, two 11-question multiple-choice quizzes were given to 21 students in one third grade class. One was a general art vocabulary quiz which included art vocabulary that was not explicitly taught. Some examples of the words include: *overlapping, perspective* and *value.*
While the concepts were taught, the words were only mentioned during the drawing unit. The second quiz included the explicitly taught words used in the sculpture unit of instruction. Some examples of these words include: terracotta, scoring clay, kiln, fire and hollow. Data collection consisted of audio recorded interviews and observations for four students while they were engaged in art during the fourteen weeks. To overcome the challenges of being a teacher researcher and participant observer, each lesson was videotaped. After showing the study group how to operate a digital audio and i Pad video recorder, the students became involved as co-researchers controlling the audio/video tools during the 14-week unit of instruction. Most times, the study group forgot the audio recorder was turned on. Observations indicated that the children enjoyed this responsibility and used the recorders jokingly. Other students in the class asked to be recorded too, so another digital recorder was purchased for other groups to use. The students enjoyed listening to their own recordings. Audio and video was reviewed nightly and transcribed. Additional field notes of the study group were added as soon as possible. Because there was no time in the teaching schedule between classes, the recorder was used to document any thoughts during the day. Study group field notes were reviewed as they were collected and added to the weekly transcripts. Artifacts were also collected to triangulate findings throughout the unit. Documents included students’ checklists that were used during discussions, journal responses and museum descriptions, photos of student work and the classroom environment.

In an effort to increase reliability, any documents collected for the day were crosschecked. The case study database was created during data collection. Data was organized and labeled by student chronologically before, during and after vocabulary instruction. This created opportunities to build descriptive codes. The hard copies were kept organized in labeled and color-coded file folders for each student in the study group. They were also saved as digital
files. Data was hand coded since I found that I was more in touch with the data when I coded it myself. Procedures for each week of the unit followed a timeline that was modified because of delayed openings and weather-related delays in school schedule.

**Limitations**

According to Merriam (2009), a concern to being a participant observer is the extent to which the observer affects what is being observed. As the student’s art teacher, my role as a participant observer had advantages and limitations. Since these were students that I taught since kindergarten, teacher-student relationships were already established. In addition, I knew most of their parents and siblings. This could also be viewed as a limitation in that, as their teacher, I had power that could influence their behaviors. I attempted to overcome this by taking descriptive field notes during observations, noting circumstances in which I thought my presence could have affected the student’s behavior. Another limitation was that because this study was taking place during the students’ weekly art class, I was responsible for teaching and responding to individuals if they had questions or needed help. Video and audio was used to overcome this limitation.

**Results**

The results of each question will be followed by a discussion of what worked and did not for each strategy.

**1a. How do children use art vocabulary when it is explicitly taught to them using interactive word wall activities?**

The results of this task suggest that the use of the word wall as a means of explicit instruction in art contributed to frequent and varied exposure to art vocabulary by encouraging students to interact with words (McKeown, Beck, Omanson & Pople, 1985). These results also suggest that
the students used their words as they developed an understanding of semantic relationships and how the art words related to one another.

Open sorting was one of the activities in which the children participated. Students chose how to sort words that were explicitly taught. Some groups chose alphabetical order, others discussed semantic relationships between words. While arranging the words in alphabetical was not an indication of deep learning of word meaning, the students engaged in conversation about the art words and thus heightened their awareness of using words. It also brought their attention to the word wall as they physically moved toward it. Because of time constraints, not all the students had an opportunity to open sort words on the word wall. In the following excerpt during a post interview, a student in the group explained how she would have sorted the words if she had time.

I would have put sculpture, statue, and three dimensional in one. Then I’d probably put pottery. Then I’d do hollow and hollow out because that’s kind of the same thing. Then I would put clay and terracotta together because they are both clay. Maybe I’d put fire and ceramic together because after it’s fired its ceramic. So you can say it was fired and still ceramic. Then I could put bronze with terracotta because they are kind of a substance. Yeah and then I’d put potter and potters wheel together and drawing and painting and then yeah that’s it.

The interactive game Be a Mind Reader (Cunningham, Hall & Sigmon, 1999; Cunningham, Cunningham, Hall & Moore, 2005; Cunningham, Loman & Arens, 2007; Blachowicz, 2014) was adapted for use on the word wall. The results suggest that this game encouraged the use of meta-linguistic clues by providing additional opportunities for students to use and review words, since vocabulary learning is incremental (National Institute of Child Health and Human Development, 2000); Blachowicz et al, 2013; Blachowicz, 2014). It also suggested that students became excited when they learned that they would be participating in a game. Observations showed the children clapping the numbers of syllables in the words as the clues were given. What emerged from these activities was the importance of the interactive word wall along with the visual
environment of the art room. The children relied on the word wall throughout the study and also during post-interviews.

1b. How do children use art vocabulary when they are illustrating words?

Art is a language of thought (Lowenfeld & Brittain, 1987). Children’s drawings communicate these thoughts (Eisner, 2002). All students illustrated words using a graphic organizer picture dictionary during different weeks of the art unit.

The results of this strategy suggest that the students continued to use the words in the visual environment to generate ideas for their illustrations. They also used their art vocabulary to describe their illustrations. Each student drew *scoring clay* and depicted this as lines that criss-crossed. One notable observation confirmed by journal and field notes was that the study group frequently gathered by the word wall, easel or word pocket chart. Two students described their illustrations in the following excerpt:

“I did the *sculpture* to make it look like bumpy looking and *clay*."

The student referred to his picture of clay + lines that criss-crossed. When asked for clarification, he stated, “The lines are *scoring* lines.” He pointed to a different picture. “This is a *sculpture*.” (sic)

He pointed to the words *score clay* and picture of criss-crossed lines again. He repeated, “This is *scoring clay*.” Then he pointed to next word *rim* and explained arrows that “pointed lines to the top of the pot.”

He again pointed to his picture of *scoring*. He explained that the shape represented clay + lines = a pot.

Another student explained, “I did *rim* and drew a line to the rim of the pot. For *sculpting*, I drew some clay and the tool to score it. I did a *sculpture*. Then I showed a line to the *shoulder* of the pot.”

When asked, all the students in the group were able to describe their illustrations and articulate the meaning of words. In post interviews, the students all expressed how much they enjoyed drawing their words. This strategy worked in this study and can also be used in an art classroom.
1c. How do children use art vocabulary when a vocabulary tally chart is used?

The results showed that the study group used art vocabulary while they recorded word tallies on a chart displayed in the art room under the word wall. This is notable because the students continued to rely on the word vocabulary tally chart wall as visual reminder as they made use of explicitly taught vocabulary through the use of the vocabulary tally chart (Beck, McKeown & Kucan, 2002).

The children also exhibited playful behaviors while using the tally chart. In this study, playful behaviors were humorous, light-hearted ways in which the children spoke and acted. For example, while they sculpted they would run up to the tally chart with dirty hands to record tallies. Students in the class competed to record the number of times they heard their classmates say the vocabulary words on the chart. At times, these playful behaviors were accompanied by song.

“Clay, clay, clay, terracotta clay
   Clay, clay, kiln, kiln, fire, fire
   I like clay, I like clay, I like clay.”

Moreover, the number of tallies listed on his class’ chart motivated the students in the group. One child frequently kept track of the tallies and became concerned if other third grade classes accumulated more tallies. The results of this task are consistent with the research on how play should accompany word use and word learning (Beck, McKeown & Kucan, 2002; Blachowicz & Fisher, 2006; Blachowicz et al, 2013). While their use of words appeared meaningless, the children were being exposed to these words in multiple ways. Furthermore, the tally chart became another tool that motivated the students to use their art words while they were engaged in sculpting.
1d. How do children use art vocabulary about sculpture as a result of before, during and after discussions of read-alouds of informational and narrative literature and poems?

Talk helps young children plan, order and control behavior. Speech helps with problem solving (Vygotsky, 1978). Since this study was grounded in a social learning perspective, four events were designed to give the students opportunities to use art words: two read aloud discussions and two discussions about the children’s artwork. To further encourage the students’ use of words, checklists were provided during these discussions as scaffolds. The art unit was constructed to support a scaffold theory of instruction as defined by Bruner (1966). The study group chose a recorder and a moderator for these discussions. The moderator was in charge of the audio recorder and made certain every student in the group had a chance to speak. The recorder listened to the discussion and recorded the study group’s use of art vocabulary during each read-aloud and art discussion.

The results from read-aloud discussions determined that these discussions not only encouraged students to use vocabulary playfully but also indicated that they enjoyed this task. The use of an audio recorder appeared to encourage playful behaviors and laughter. Children assumed different roles in their small group. For example, one student in the group volunteered to be a word monitor and gathered information on vocabulary usage (Blachowicz & Fisher, 2006). During the read-aloud discussion for Dave the Potter, she tallied the number of times the students in the study group used art vocabulary words in their discussion on a checklist created for this task. Another student volunteered to be the moderator, in charge of a hand-held digital audio recorder. This made the students accountable for using art vocabulary as they discussed the story. This is exemplified in the following excerpt:

He got the clay from the dirt and he threw the clay up in the air but only he knew where it would land. He would put the clay on his potter’s wheel. He would kick the potter’s
wheel to give it shape. He would put his arms on the shoulder and the rim to make the pot… I mean jar and then after it was done his arms couldn’t reach around it so he carved into the pot.

In a second read aloud event where the students finished reading a book in their classroom that was introduced during art class, a student in the group tallied the number of times she found each art word in context on a Post It Note. This motivated the students in her group during their discussion to search for more art words in the assigned book. While most students recognized that competing to find words was not the objective, for some students including one boy in the study group, finding “more” words became a motivating factor.

When discussing their art, the children were specifically asked to use art words in their responses. Observations and field notes taken during art discussions before vocabulary instruction noted that the children appeared nervous and scanned the room looking for words. They passed the audio recorder to one another quickly. The group used art words that were on the word wall but were not explicitly taught in the wrong context. This is exemplified in the following excerpt by one student:

Mine is a lizard because when a couple years ago I used to have a lizard it had a lot of babies. I had to give it away and ever since then I’ve been drawing a lot of them and making clay about it. It has like texture on it. It has some color on the bottom ….. There are some spots that got color like red and yellow smooshed on it. When I make the other one that you put in the oven, I’m going to make it a lot bigger and a little smoother ….I’m going to try and add perspective to it.”

After vocabulary instruction, this same child used the words discussed his second sculptures in the following excerpt:

So my piece is like a pottish kind of piece and it has glaze on the inside. So you could put stuff in there. I call it the Spirit Keeper and it’s been carved. I carved it. It’s hollow, it’s round. It has some bumps on it that I made on purpose. It has spikes around the top. And it has a couple layers of glaze in the middle.”

The words were used correctly in context.
The findings from these discussions are consistent with the research that suggests student discussions provide rich and varied language experiences for vocabulary instruction (Beck, Perfetti & McKeown, 1982; McKeown, Beck, Omanson & Pople, 1985; Maynard, Pullen & Coyne, 2010). It differs from this research in that the students used explicitly taught vocabulary in discussions about their art.

When interviewed, the children in the study group spoke of how they enjoyed the picture book and the read alouds. They each spoke of how illustrations in the book helped them understand the processes. They also stated that when reading independently they preferred a quiet reading environment. They clarified this by saying that the art room was “too noisy” or that other students sometimes distracted them. This was notable in that these were children who enjoyed reading. This also speaks to how collaborating with a classroom teacher to share the reading and discussions can extend and deepen the learning.

1e. How do children use art vocabulary when they write about their art before, during and after use of evidence based vocabulary strategies in the art unit?

According to Blachowicz & Fisher (2006), using words in writing is one way to create durable learning. Writing makes passive learners into active learners (Calkins, 1986). Therefore, the students wrote about their art before, during, and after vocabulary instruction.

Before vocabulary instruction, students responded to the prompt “Write about your art. Use your art words.” The results of this observation showed that the students appeared nervous while they looked for words around the room. Some of the writing included words that were unrelated to their sculptures, such as overlapping and perspective. These words were on the word wall but not explicitly taught in a previous unit. For this group, the writing preceding vocabulary
instruction was primarily descriptive. Some used adjectives about color to talk about their art, one student referred to texture.

During vocabulary instruction the students kept a process log that explained what they did and what they planned to do next. Observations and field notes indicated that the students needed additional prompting to use the words in their writing. When they responded during vocabulary instruction, one student used the word *carve*, another used *score, carving, glazing* and *firing*. Two students used *sculpting* and *sculpt*. Vocabulary words written during vocabulary instruction depicted the processes or actions in which the children were actively engaged.

After vocabulary instruction the children wrote a Museum Description about their sculpture. Since writing in any content area should be meaningful and relevant to a child (Vygotsky, 1978) the museum prompt was framed so that it allowed students the opportunity to creatively respond to their art. The results of this writing indicated that the students used the words *scoring, glazing, hollow, terracotta, molding, firing, sculpture* embedded within their responses. The following excerpts were from their museum descriptions:

“I made it by making two pinch pots and then scoring them together then glazed it.”

“I made it first by making a hollow pinch pot, then I got the shape I wanted. Second, I scored my piece and put eyebrows stitched eyes and a horn. Next I put glaze on it and put it in the kiln. Then I was finished.”

“My piece is made of terracotta and glaze ... I made it by making (sic) the hollow body, then a hollow head and scored them together.”

“It started as a ball of terracotta (sic) clay, then it was a pinch pot I (sic) scored the edges (sic) of two (sic) pinch (sic) pots then watered the rims. I (sic) stuck the two (sic) together then I (sic) put that aside and put two (sic) more together and molded (sic) it into a cone then I scored them together fired (sic) them, glazed (sic) them and fired (sic) it again.”

One student’s post interview was notable. In his art discussion before vocabulary instruction, this child used the word *oven* to talk about what he was going to do with clay. In his post
interview, he repeated the word *oven* but paused, laughed and corrected himself saying the word *kiln*. He didn’t know the word well enough to use it initially. This supports the research that word knowledge falls along a continuum (Beck, McKeown & Kucan, 2002).

When interviewed, all of these children enjoyed writing about their own art. They did however express concern about not having enough time in art to draw. It appeared that writing about their art was motivating but may be a strategy that could be shared with the classroom teacher.

**1f. How do children use art vocabulary when they are interacting with their peers?**

The results from this task are consistent with social learning perspective in that social interactions develop knowledge (Vygotsky, 1978). Students in art class are encouraged to talk as they work. For example, in their conversations while sculpting, the study group mostly made spontaneous and enthusiastic connections to personal experiences outside of school and popular media. They discussed movies, video games, sporting events and birthday parties. Occasionally these conversations would be interrupted by accidental events like water spills, school fire drills or questions and comments about a classmate’s work.

The following vignettes exemplify social learning. Children continued playful behaviors as they sculpted. These playful behaviors were humorous, light-hearted ways in which the children spoke and acted. One student enjoyed using the vocabulary tally chart and announced, “Time to *score* clay” and repeated, “I’m *scoring* my clay.” Students created rhymes and songs using the art words while they sculpted. In the following excerpt, two boys sang:

“Roll it up, roll it up, roll it up, clay, clay, clay, terracotta clay.”
“Clay, clay, kiln, kiln, fire, fire.”
“I like clay, I like clay.”

They work at their own pace. Two children’s sculptures were fired; therefore, they discussed the “glazes” they planned to use. Another explained to a classmate “glaze doesn’t look shiny
when you’re using it, but it gets shiny when you fire it.” A girl in the group exclaimed that she was “happy her clay was fired.” During one interview, I asked a student if learning this vocabulary helped her. She reflected that as she sculpted she tried “to think of words that could fit it (sculpture)” This was notable in that it indicated the children were developing an understanding of the words.

The study group used art vocabulary to teach a classmate who missed art class how to create a hollow sculpture. One child invited this student to join the study group and modeled the art making process. He explained that this was different from what they did in the past because this sculpture needed to be “hollow.” He demonstrated how to put two pots together. When the classmate used the words *finger pots* to describe what he made, this student stated, “pinch pots you mean…” He continued: “On these sides you score them. You wet them and blend them together.” Another child explained, “Terracotta clay dries out really fast. Now it’s sticking to my hands. It feels different than normal clay.” A different child asked about terracotta clay and explained to the classmate that his next step was to “carve” it.

**Question 2: Does the explicit vocabulary instruction improve students’ performance on assessments?**

The following data was collected from the study class.

**Study Class Pre /Post Word Knowledge Self- Rating Scale**

The study class was asked to self-rate their knowledge of 19 art vocabulary words before and after vocabulary instruction. The Vocabulary Knowledge Rating Scales were used as a technique for activating student’s prior knowledge about the words in the art unit (Blachowicz, 1986) (see assessments, Appendix E). Twenty-one students rated their knowledge of 18 words “knowing words well enough to use them” higher in the post scale than the pre scale The exception was the
word *clay* which 21 students knew pre and post. The highest gains were reflected in the words: *potter, potter’s wheel, kiln, glaze, rim, score clay and terracotta*. Seven and eight students respectively felt they knew the words *ceramic* and *hollow out* well enough to use them (based on 21 responses). One response was invalid. Based on these self-ratings, most students rated their own knowledge of words higher in the posttest than the pretest. Limitations are that these scales are subjective since the children rated their own knowledge of the words (see Figure 1, p 105).

**Study Class Ceramic Pre and Post Test (Art vocabulary words explicitly taught)**

An 11-question multiple-choice pre and post-test was given to 22 students (see assessments, Appendix E). This test was created specifically for the art unit as part of school district’s student growth objective for the school year 2013-14. It assessed student’s knowledge of art vocabulary that was explicitly taught to the students during unit of study. Scores ranged from .28 to 1.00. The class scores were grouped into three categories: low, medium and high (see Table 1).

Table 1

<table>
<thead>
<tr>
<th>Ranges</th>
<th>Low (.28-.45)</th>
<th>Medium (.55-.73)</th>
<th>High (.82-1.00)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre Test:</strong> Percentage of students in study class who scored in each range (followed by number)</td>
<td>23% 5 students</td>
<td>45% 10 students</td>
<td>32% 7 students</td>
</tr>
<tr>
<td><strong>Post Test:</strong> Percentage of students in study class who scored in each range.</td>
<td>0 1 student</td>
<td>5% 21 students</td>
<td>95% 21 students</td>
</tr>
</tbody>
</table>

Numbers of students who scored in each range were tallied (see Figure 2, p 106). It appears that as a result of this test that the vocabulary instruction may have been effective for this class. Notable limitations include that the assessment was given three weeks after the art unit was completed. There was no time to administer at a later date to see if retention of vocabulary was long term.
Study Class General Art Vocabulary Test Pre/ Post (Art vocabulary words *not explicitly taught*)

A similar 11-question multiple-choice pre/post-test was given to 22 students (see assessments, Appendix E). General Art vocabulary quiz was created specifically for this unit as part of school district’s student growth objective for the school year 2013-14. It included general art concepts that were taught to the students in a previous drawing unit. Examples of these art concepts included *overlapping, perspective*. This differed from the Ceramic Pre/Post Test in that the drawing concepts were taught *without* explicitly teaching the art vocabulary. Scores ranged from .28 to 1.00 (see Table 2). The class scores were grouped into three categories: low, medium and high. Numbers of students who scored in each range were tallied.

Table 2

*Study Class General Art Vocabulary Pre and Post Test Scores*

<table>
<thead>
<tr>
<th>Ranges</th>
<th>Pre Test: Percentage of students in study class that scored in each range (followed by number of students)</th>
<th>Post Test: Percentage of students in study class that scored in each range (followed by number of students)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (.28-.45)</td>
<td>18% (4 students)</td>
<td>14% (3 students)</td>
</tr>
<tr>
<td>Medium (.55-.73)</td>
<td>64% (14 students)</td>
<td>68% (15 students)</td>
</tr>
<tr>
<td>High (.82-1.00)</td>
<td>18% (4 students)</td>
<td>18% (4 students)</td>
</tr>
</tbody>
</table>

Of the 22 students in the study class, 8 students’ post-test scores increased, 8 students’ post-test scores decreased and 6 students’ post-test scores remained the same (see Figure 3, p 108). It appears that the study class scores remained the same and did not increase because words were not explicitly taught. As in the previous test, limitations included that it was given at the end of the school year, with no time to administer at a later date to see if retention of vocabulary was long term.

**Discussion and Analysis**
**Word Wall**

As seen with the data collected for this study, the children explored and shared their knowledge of words in a variety of ways. They played with words through song, rhymes, and appeared motivated by the use of the vocabulary tally chart and the interactive game Be a Mind Reader (Cunningham, 1987). They used the words during class tasks and also in unstructured social situations as they took on the role of the teacher. Moreover, the visual environment of the art room appeared to contribute to children’s learning of the art vocabulary. The word wall, word cards in the pocket chart and on the easel were an integral part of the art room environment. The pocket chart was visible to all of the students as they entered the room. The word wall was large, bright yellow and prominently placed on the board in the front of the room. Furthermore, the placement of the vocabulary tally chart directly beneath the word wall encouraged the children to look at the word wall. Observations indicated that each child glanced at the word wall or scanned the room looking for words during each discussion, game or use of the tally chart. Moreover, the children moved closer to the words as they wrote or illustrated the words. While these were a part of the visual environment of the art room from the beginning of the year, the children were not observed noticing the words in the weeks before the explicit instruction began. This indicated that just having a word wall was not the same as teaching with a word wall. It appeared then that the physical set up and the word wall activities of the room contributed to how the children learned art vocabulary. This is especially relevant in that one challenge for public school visual art specialists is the amount of contact time they have with their students. For example, our class met once a week for 45 minutes. Moreover, there were weeks that our class did not meet or met for a shorter periods of time because of weather related issues. Therefore the word wall, pocket chart and words on easel became visual reminders for the
students that permitted them to recall the previous lesson. This is consistent with the research that words on walls serve as visual scaffolds that assist students (Brabham & Villaume, 2001).

Additionally, because the words taught coincided with their art lesson, the children were not only interacting with the words on the word wall but were also experiencing them while they were sculpting with clay during the art unit. For example, they learned terracotta, carve and coil while they worked with terracotta clay, carved with tools and coiled their clay. Being actively engaged in the art processes appeared to provide the appropriate context for the students to practice using their art words.

Furthermore, vocabulary activities associated with the word wall contributed to discussions. This was evident when the students participated in open word sorting as they disagreed with how the group arranged the words in alphabetical order. While arranging the words in this way may not have resulted in deep learning about word meaning, it did encourage the children to speak about the words. Richer discussions occurred when the children chose to semantically sort the words. The results of this task suggest that encouraging the children to discuss relationships about words before open sorting could be an effective strategy.

Moreover, children experienced words meta-linguistically as they participated in the interactive game Be A Mind Reader. Their attention was drawn back to the word wall as they listened to clues about the number of syllables, consonants or vowels in a word. Results of the study indicated that the word wall and word wall activities might be one strategy to help students engage with learning art vocabulary.

**Explicit Instruction**

The data also indicated that the students needed clarification of word meanings. This became clear when the children were asked about the meaning of the word *potter*. The children raised
their hands and responded they knew the word from Harry Potter, a popular series of books and movies. The vocabulary instruction and evidence-based strategies used in the unit helped students distinguish Harry Potter from Dave the Potter, the sculptor in the book that was connected to the art unit in this study. This data also indicated that although some of the children in the study group had art experiences outside of school, explicit vocabulary instruction was necessary to clarify concepts and word meanings. Therefore, the explicit vocabulary instruction in this study accomplished this objective for this group of students.

**Writing in Art**

Observations indicated that when writing in art, the students were thoughtful and preferred to work quietly. My observations also indicated that the group continued to rely on the word wall for their writing before, during and after vocabulary instruction. The students also appeared more confident as they wrote and became more familiar with the art words. The prompt for the museum description where the children were asked to think of their sculpture as an artifact appeared to open up the zone of proximal development for two students who creatively changed their artistic intentions. While their individual written responses were not comprehensive in describing the complete process, the group was able to articulate orally how they made their art using their art words. This indicated that oral ability to use their words was more advanced than their written ability. Moreover, the limited amount of time the students had during art class to accomplish this task appeared to affect the children’s written responses. This was notable because three children in the study group were considered by their classroom teacher to be some of the “better writers” in that third grade class.

When asked about writing in art in individual post interviews, the children said they enjoyed writing about their art and not someone else’s because they “knew about their art.” However, one
student expressed concern about missing time to draw or “do fun stuff” in art. At the same time this same student said she enjoyed writing in art because she got to explore her art and notice things she did not notice before. This statement is consistent with the findings by Fulwiler (1980) that suggest that the act of silent writing generates emotions, ideas and observations. While writing in art was a past practice in this art class, from this study it appeared that it may be better suited for use in the general classroom. An implication that will be discussed later is for the general classroom teachers to use students’ art as a prompt for their writing.

**Books**

Another evidenced-based strategy was explicit vocabulary instruction through the use of three read-alouds. In addition to the physical environment and set up of the art room, the books I selected also appeared to inform this study. The children stated that they all preferred *Dave the Potter* to *Ancient Soldiers of Clay*. For example, *Dave the Potter* not only used art vocabulary but also illustrated the process of building a pot. These illustrations were full page, in color and thought provoking. Additionally, it placed the making of pottery in a meaningful historical and cultural context. As a result, the illustrations appeared to engage the children in a class discussion about slavery. The students in the study group all stated that they enjoyed the read aloud experience and preferred the picture book. They each spoke of the illustrations, which again suggested the importance of using the illustrations to make meaning. This was in direct contrast to Text Talk where illustrations were covered so students could make sense of the linguistic content. For this study, the illustrations were important. While this class discussion was not reported in the findings for this study, I can’t help but wonder whether this discussion may have impacted their preference for the picture book over the chapter book.
In keeping with what the arts were meant to do, modifications for the read aloud experiences had to be made. These were dependent on the flexibility of the classroom teachers and their willingness to deviate from the prescribed curriculum. This is notable because interdisciplinary literacy involves flexibility not only on the part of the teachers but also for the administrators. Despite our district’s high socioeconomic status and history of high performance on standardized tests, the administrators at this time did not appear supportive of curriculum integration. New statewide district initiatives included new teacher evaluations appeared to be used to foster a culture of fear amongst the teachers inhibiting teacher’s flexibility.

This was in direct contrast to the research by Stevenson & Deasey (2002) where school leaders saw the arts as new thinking for teaching and learning or a “third space.” In their study, school leaders and teachers were committed to the arts and integration. Interdisciplinary literacy during current times can continue to be a challenge as test scores and accountability are at the forefront of educational agendas.

**Illustrating Words**

Another evidenced-based strategy that appeared to be effective was having the children choose four new words to illustrate. The children stated that this was an activity they enjoyed. Additionally, drawing fit into the art room environment. Furthermore, students illustrated words as they finished their art, during transition times in the art unit. It did not take time away from their art and was used as a formative assessment.

**Quizzes and Vocabulary Self-Rating Scales**

Data was collected in the form of an 11-question multiple-choice pre and posttest to determine the outcome of the study. Additionally, the students rated their knowledge of the art words higher on the Word Knowledge Rating Scale. While self-rating scales are subjective,
scores on vocabulary quizzes showed that the children in the study class scored higher on the posttest as compared to their pre test. While this growth could have resulted from using other evidenced-based strategies in the unit, observations consistently showed that the students relied on the words in the room as they discussed, wrote or created their own art.

This supports the research on vocabulary assessment that states vocabulary learning is difficult to capture on a single assessment, because of the multifaceted nature of what it means to know a word (Blachowicz, Fisher, Ogle & Watts-Taffe, 2013). However, this data supports the findings from question one on how using explicit vocabulary instruction increased students’ use and understanding of art words. It appeared that the children in this study solved practical tasks with the help of their speech as well as with their eyes and hands (Vygotsky, 1978). As a result, evidence-based vocabulary strategies with modifications accompanied by the art experience appeared to help students learn art vocabulary.

Implications for Practice

Implications for my own teaching

Others can learn from this study that the rich social and visual context of the art room along with the research in vocabulary instruction in literacy supported art vocabulary learning for this group of students. Furthermore, the word wall emerged as a visual tool to help children remember art vocabulary. As the literature suggests, word walls should be interactive. Since action research is a cyclical process, this study currently continues to explore ways to have children build a word wall that is more interactive than it was in the original study. For example, this year, students were given opportunities to add examples of their artwork to the word wall to exemplify the concepts taught. Some placed photos on the word wall alongside the word or concept to make visual connections. Students were encouraged to semantically arrange the words
on the word wall and explain their sorts. Additionally, word walls were expanded to include grades K, 1, 2 and 3. Furthermore, other books were researched that could be used for different units of study. For example, kindergarteners were read the book *Not a Box* by Antoinette Portis in their classroom. In art class, these children built life-size class sculptures with cardboard boxes. The word *sculpture* was explicitly taught and class stories were created. These strategies were shared with administrators and classroom teachers.

**Implications for Visual Art Teachers**

Findings from this research suggest the importance of putting structures into place to address the demands of new National Visual Core Arts Standards that require students to use art vocabulary to create an artist’s statement, and to collaboratively discuss art. Overall, when designing instruction for units, the components of a comprehensive vocabulary program (Graves-Watts-Taffé, 2008; Blachowicz, Ogle, Fischer & Watts-Taffé, 2013) should be considered. The following strategies are described below:

1. Begin to foster word consciousness by determining vocabulary needs. For art teachers or curriculum developers, examine the Model Cornerstone Assessments that address key conceptual vocabulary in the National Standards (see NCCAS, 2014). Develop a list of additional words that align with unit that is being taught. Create a vocabulary card for each word on white tag board. If possible laminate cards. Make learning purposeful by telling students why they will be learning art vocabulary.

   a. Plan instruction that takes into account the social and visual environment of the art room. The children in this study relied on the word wall that was set up in the art room. Engage the children in building the word wall (Jasmine & Schiesl, 2009; Jackson & Narvaez, 2013). In an area that is visible to the children, set up a pocket chart with word
cards from the art unit. The cards may be stored in the pocket chart, so the children can physically move them from the pocket chart to the teaching area and onto the word wall. To encourage students’ use of the art words, a vocabulary tally chart can be set up in close proximity to the word wall. If multiple classes are participating, a chart can be set up for each class. Keep the words they learned on the word wall and add to them every week. Plan interactive games with the word wall (Cunningham, 1978; 1987).

b. Create a Word Knowledge Rating Chart before the unit begins to activate students’ prior knowledge about words. Include the following categories: I don’t know the word, I heard the word but don’t know what it means, I know the word well enough to use it. Administer the same Word Knowledge Rating Chart at the end of the unit to discuss students’ perceptions of what they learned.

c. Provide opportunities for small group discussions. Allow students to choose roles for discussions. Encourage use of words in the discussion by providing a checklist with each student’s name. Consider using a digital audio recorder as way to encourage vocabulary use and for assessment.

d. Provide opportunities for vocabulary review by having groups of students illustrate words on index cards that can be used on the word wall.

e. Since writing in art should be personal and meaningful to the students, partner with classroom teachers to have students write about their art in their general classrooms.

2. Provide rich and varied language experiences through interactive read aloud experiences.

a. Create an art unit that includes evidenced-based vocabulary strategies. When planning the unit, group words to teach that are semantically related. Choose books that relate to the unit which address key vocabulary. Plan to fit vocabulary instruction or review during
each class. This could take a whole class or as little as five minutes. Take advantage of transition times in the unit, when students finish their work. Develop a theme that aligns with new National Visual Arts Standards that include historical, cultural connections to unit. When choosing books and read-alouds if possible partner with classroom teachers. Begin by exploring your school district’s reading program to see if there are books or titles available that fit your unit. Consult with your media specialist.

b. Choose a series of texts of different genres. This could include narrative and non-fiction. If possible, include poetry that uses and repeats vocabulary in context. This can be shared in the beginning or end of class in a short amount of time. When choosing books, consider the quality of the illustrations.

c. Common Core Standards in ELA demand an integrated literacy model. To meet this demand, partner with classroom teachers to share reading and vocabulary instruction. If a book is too long, consider introducing the story in the art room to teach vocabulary. If possible, share vocabulary instruction by focusing on essential art vocabulary. Ask the classroom teacher to have students complete independent reading in the classroom. Confer with classroom teacher about sharing read aloud discussion.

d. Set up a vocabulary tally chart for each class near the word wall.

3. Teach word learning strategies

a. If pertinent, teach multiple meanings.

b. Have students recognize connections between words through semantic sorting on the word wall.

4. Teach individual words
a. When planning words to teach, limit the number of vocabulary words taught in a single class. The words should be related and tied into the art instruction.

b. Beck, McKeown & Kucan (2002) & Blachowicz & Fisher (2006) use the following steps for explicitly teaching vocabulary during a whole class lesson & discussion: Show the word, have the students repeat the word, clap the word, and repeat the word. Ask for the word’s meaning. Clarify misconceptions and have the students orally put the word in a sentence. Give the word card to the student to put on the word wall.

These strategies may be considered for other content areas.

Implications for Administrators, Curriculum Supervisors.

Addressing interdisciplinary literacy in art means recognizing the structural differences when designing and integrating curriculum in art (Efland, 2002). This became evident during the pilot study for the art unit. As in other academic content areas, such as science and social studies, art vocabulary learning can be repeated from one grade to the next resulting in multiple exposures over a child’s school art experience. This vocabulary instruction can be incorporated into a spiral curriculum. For curriculum supervisors, provide time for training art & content area teachers in strategies that classroom teachers use to activate prior knowledge when reading content area books. Provide additional resources to teachers to access read aloud texts.

Implications for National Art Educators Association

The New Visual Arts Standards now recognize connections to literacy and connect to the Common Core. Now is the time to begin the conversation on using evidence-based strategies in literacy to address how students learn art vocabulary. This could be accomplished with the formation of a task force that expands research in this area and forges connections with the
International Reading Association. These organizations could encourage additional research in these areas. Finally, Art Education leaders could provide professional development at national and local Art Education conferences.

**Implications for Literacy Education**

For literacy educators, should recognize that the Arts, as other academic content areas, has its own disciplinary literacy. Literacy educators should continue to encourage members to seek out partnerships with arts organizations and art educators.

**Future research**

This study was not an attempt to make generalizations about vocabulary instruction in art class. It was an attempt to suggest a need for additional studies on the use of interactive word walls and strategies in art class. For future research, this study could be repeated with different or larger populations of students. Other research could be conducted with each evidence-based strategy, for example, read-alouds, tally charts and discussions. Additionally, if art vocabulary spirals and becomes part of a K-12 scope and sequence of art curriculum, administering pre-test assessments on vocabulary learning for the previous year may show if vocabulary growth is long term. This could lead to longitudinal studies with larger populations of students over time.

Additionally, research on art vocabulary instruction could be encouraged for art teachers who do not have art rooms or limited resources. Finally, research could be conducted on how art teachers and classroom teachers might work together to advance an integrated model of the Common Core.

**Ending Remarks**

I began this study with an assumption that the arts could enhance the literacy experience. By the conclusion of this study, this assumption evolved to how specific strategies in literacy, if
modified, can enhance the art experience. The implications for this study reach far beyond simply meeting new Common Core State and National Visual Art Standards. This study became more than simply learning art words. It was a way to illustrate how research in literacy can be used in art to create rich interdisciplinary and cross-disciplinary learning. It was also a way to use the visual and social environment of an art room to create a rich environment for literacy without compromising the essence of the visual arts. While the Common Core Standards demand integration and National Visual Art Standards demand students use art vocabulary, little is currently being done to explore how art teachers who are not trained in literacy can use these strategies and teach vocabulary. With so much emphasis on testing and accountability, true rich interdisciplinary learning is often being compromised. This study will hopefully begin this conversation and provide concrete methods to assist art teachers in teaching relevant literacy skills.

As an elementary art teacher, it is difficult to realize the long-term impacts our teaching has on the hundreds of students we teach. Yet some experiences stand out as reaffirmations that what teachers are doing is grounded not only in good research but also in pedagogy. Therefore, I conclude my study with this vignette. Two months after this study concluded, the study group gathered in the art room. After they titled their final artworks, one child in the study group smiled and proudly came to me. He asked me to hang his work in the front of art room for everyone to see. He wrote: “Art is the heart’s language.” I couldn’t agree more with his statement and evidence of “artistic literacy.”
References


doi: 10.1080/13540602.2012.629847


doi: 10.1111/j.1741-4369.2009.00509.x


doi: 10.1598/RT.59.8.3


www.http://education.state.nj.us/pr/


doi: 10.1080 /09650792.2013.763410


### Timeline for study class 14-week unit of art instruction

<table>
<thead>
<tr>
<th>Week</th>
<th>Before (VI) Preparation</th>
<th>During (VI)</th>
<th>After (VI)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vocabulary</td>
<td>Journal</td>
<td>Read Aloud</td>
</tr>
</tbody>
</table>
| **Before (VI) Preparation** | WKR scale  
Begin student interviews | | | | |
| **Week 1** | No Vocabulary | | Sculpture | | Student 1 Observation |
| **Week 2** | No Vocabulary | | Sculpture | | Observation |
| **Week 3** | No vocabulary | Written response | Sculpture | | SG Discussions |
| **SNOW DAY**  
**Day 1/Day 2** | | | | | |
| **Week 4** | **Voca: (VI)**  
Clay, Coil, Potter  
Shoulder, Rim,  
Kiln, carve,  
pottery, potter’s  
wheel, terracotta,  
glaze. Vocabulary  
lesson | Vocabulary list  
Illustrate favorite  
new word in sketch  
journal | **Dave the Potter** | | |
| **Week 5** | **Voca: (VI)**  
Hollow, hollow  
out, sculpture | Reread Dave the  
Potter  
SG Discussion | Sculpture | | Student 2 Observation |
| **Week 6** | **Voca: (VI) review**  
Voca Tally Chart | Written response | Sculpture | | |
| **Week 7** | **Voca: (VI) review**  
Voca Tally Chart | Process Logs | Sculpture | | SG Discussions |
| **Week 8** | **Voca: (VI) review**  
Word Wall Open  
sort | Process Logs | **The Pottery Lesson**  
Read-aloud poem | Sculpture | |
| **Week 9** | **Voca: (VI) review**  
Picture dictionary  
Word Wall Open  
sort | Process Logs | **That’s my Jar**  
Read-aloud poem | Sculpture | Student 3 Observation |
| **Week 10** | **Voca VI**  
Statue, mold,  
three-dimensional  
bronze, ancient etc  
from glossary | Written response | **Ancient Soldiers of Clay**  
Read Chapter 1  
1. Independently  
read with post it  
notes in classroom  
or in art room. | Sculpture | |
| **Week 11** | **Voca review** | | SG Discussion | Sculpture | Student 4 Observation |
| **Week 12** | | | Sculpture | | SG Discussions |
| **Week 13** | **Begin final interviews**  
**WKR scale (Post)** | **Final Written response after week 13** | | | |

**Appendix A**
Timeline for study class 14-week unit of art instruction
**WKR**: Word Knowledge Rating Scale (Blachowicz, 2006)

**SG Discussions**: Small Group Discussions (Eisner, 1997; 2002)

**Vocabulary Instruction Lesson (VI)**: Direct instruction of targeted words

**Vocabulary Review**: Brief review of words taught.

**Student pre and post interviews**: 4 target students

**Written response**: Process Log Prompt;”What have you done so far with your art and plan to do next?” 10 minutes.

**Final Written response**: Create Museum Description: Include date, materials, how it was made using your art words and why this is important to you.

**Final interview data, WKR (post), final written responses will be collected after 14 weeks.**

**Student Observations**: Field Notes
Appendix B1

Learning Vocabulary in Art

Things to Remember:
• You are being asked to be in a research study or project. Studies or projects are done to find better ways to treat people or to understand things better.
• This form will tell you about the study to help you decide whether or not you want to participate.
• You should ask any questions you have before making up your mind. You can think about it and discuss it with your family or friends before you decide.
• It is okay to say “No” if you don’t want to be in the study. If you say “Yes” you can change your mind and quit being in the study at any time without getting in trouble.
• If you decide you want to be in the study, an adult (usually a parent or a guardian) will also need to give permission for you to be in the study/project.

1. Mrs. LaBrocca is inviting you to take part in her research study or project.

2. You are being asked to take part in a research study/project because I am trying to learn more about art and vocabulary.

3. If you agree to be in this study you will be interviewed about how you feel about art and books on two different days. I will ask you to talk about your artwork with a group of your classmates. I will read books aloud to your class and ask you to talk about what you read with your classmates. I will tape record this. While you are working in art, I will observe you working.

4. There are no foreseeable risks; nothing bad will happen if you choose not to participate. I will do my absolute best to keep all your answers private. Your answers will be locked up. Your name will not appear on the answer sheets: I will use a code number instead.

5. The only direct benefit to you may be the enjoyment of learning new art words.

6. Please talk this over with your parent(s)/guardian before you decide whether or not to participate. We will also ask your parent(s)/guardian to give their permission for you to take part in this study. But even if your parent(s)/guardian say “yes”, you can still say “NO” and decide not to do this study/project.

7. If you don’t want to be in this study, you don’t have to participate. Remember, being in this study is up to you and no one will be upset with you if you don’t want to participate. You can even change your mind later and want to stop at any point.

8. You can ask any questions that you have about the study. If you have a question later that you didn’t think of now, you can get in touch with me here in the art room or at (732) 741-6151, labroccar@fairhavenbe.org or my faculty advisor, Professor, Dr. Lesley Morrow at Rutgers
You may also ask questions or talk about any worries to the Institutional Review Board (a committee that reviews research studies in order to protect those who participate). Please contact the IRB Administrator at Rutgers University either by phone: 848-932-0150 or by email: humansubjects@orsp.rutgers.edu.

By participating in this study/these procedures, you agree to be a participant in this study (project). You and your parent(s)/guardian will be given a copy of this form.

NAME (Print) _____________________________________________________

SIGNATURE ________________________________ DATE __________

PRINCIPAL INVESTIGATOR_________________________ DATE __________
PARENTAL INFORMED CONSENT
For Students in the Study

Your child is invited to participate in a research study that is being conducted by RoseAnn LaBrocca, who is a doctoral student in the Education Department at Rutgers University. The purpose of this research is to determine if vocabulary instruction embedded in art can enhance the student’s art experience. It is also to see how students respond to learning vocabulary during art. I will be teaching vocabulary in their art class.

Approximately 4 children between the ages of 9 and 10 years old will participate in the study. The study will last 13 weeks. Each child’s participation will last approximately 60 minutes.

The study procedures include the following: The students will be interviewed about how they feel about art and books, two times. They will discuss their artwork and books with a group of their classmates six times. I will audiotape their discussions. They will respond in writing to artwork that they complete in the art room. While they are making art, I will observe them. I will collect notes.

Scores from a multiple-choice pre and post art vocabulary test will be collected.

This research is confidential. Your child’s name will not be used. The research records will include some information about your child and this information will be stored in such a manner that some linkage between your child’s identity and the response in the research exists. Some of the information collected about your child will include their journal writing and how they use their art vocabulary. Their names will not be used on the samples. Please note that we will keep this information confidential by limiting individual's access to the research data and keeping it in a secure location. It will be locked in a file cabinet.

The research team and the Institutional Review Board (a committee that reviews research studies in order to protect research participants) at Rutgers University are the only parties that will be allowed to see the data, except as may be required by law. If a report of this study is published, or the results are presented at a professional conference, only group results will be stated. All study data will be kept at least three years).

There are no foreseeable risks to participation in this study.

You/your child have been told that the benefits of taking part in this study may be to help understand how art can help achieve literacy. However, you may receive no direct benefit from taking part in this study.

Participation in this study is voluntary. You may choose for your child not to participate, and you may withdraw your child from participating at any time during the study activities without any penalty to your child. In addition, you/your child may choose not to answer any questions with which you/your child are not comfortable.
If you/your child have any questions about the study or study procedures, you/your child may contact me at Sickles School, 732 741-6151 or labroccar@fairhavenbe.org or my faculty advisor, Professor, Dr. Lesley Morrow at Rutgers Graduate School of Education, Office number (732) 932-7496 ext. 8119 or Lesleymorrow@Gse.rutgers.edu

If you/your child have any questions about your rights as a research subject, you may contact the Institutional Review Board (a committee that reviews research studies in order to protect those who participate). Please contact the IRB Administrator at Rutgers University at:
Rutgers University, the State University of New Jersey
Institutional Review Board for the Protection of Human Subjects
Office of Research and Sponsored Programs
3 Rutgers Plaza
New Brunswick, NJ 08901-8559
Tel: 848-932-0150
Email: humansubjects@orsp.rutgers.edu

Your child will also be asked if they wish to participate in this study. You will be given a copy of this consent form for your records.

Sign below if you agree to allow your child to participate in this research study:

Name of Child (Print) ________________________________________

Name of Parent/Legal Guardian (Print) ________________________________

Parent/Legal Guardian’s Signature ___________________ Date ________________

Principal Investigator Signature ___________________ Date ________________
Appendix B3

PARENTAL INFORMED CONSENT

Class Consent

Your child is invited to participate in a research study that is being conducted by RoseAnn LaBrocca, who is a doctoral student in the Education Department at Rutgers University. The purpose of this research is to determine if vocabulary instruction embedded in art can enhance the student’s art experience. It is also to see how students respond to learning vocabulary during art. I will be teaching vocabulary in their art class.

The only information collected from your child will be pre and post test scores from a multiple choice art vocabulary test.

This research is confidential. Your child’s name will not be used. The research records will include some information about your child and this information will be stored in such a manner that some linkage between your child’s identity and the response in the research exists. Their names will not be used on the samples. Please note that we will keep this information confidential by limiting individual's access to the research data and keeping it in a secure location. It will be locked in a file cabinet.

The research team and the Institutional Review Board (a committee that reviews research studies in order to protect research participants) at Rutgers University are the only parties that will be allowed to see the data, except as may be required by law. If a report of this study is published, or the results are presented at a professional conference, only group results will be stated. All study data will be kept at least three years).

There are no foreseeable risks to participation in this study.

You/your child have been told that the benefits of taking part in this study may be to help understand how art can help achieve literacy. However, you may receive no direct benefit from taking part in this study.

Participation in this study is voluntary. You may choose for your child not to participate, and you may withdraw your child from participating at any time during the study activities without any penalty to your child. In addition, you/your child may choose not to answer any questions with which you/your child are not comfortable.

If you/your child have any questions about the study or study procedures, you/your child may contact me at Sickles School, 732 741-6151 or labroccar@fairhavenbe.org or my faculty advisor, Professor, Dr. Lesley Morrow at Rutgers Graduate School of Education, Office number (732) 932-7496 ext. 8119 or Lesleymorrow@Gse.rutgers.edu

If you/your child have any questions about your rights as a research subject, you may contact the Institutional Review Board (a committee that reviews research studies in order to protect those who participate). Please contact the IRB Administrator at Rutgers University at: Rutgers University, the State University of New Jersey
Your child will also be asked if they wish to participate in this study. You will be given a copy of this consent form for your records.

Sign below if you agree to allow your child to participate in this research study:

Name of Child (Print) ________________________________________

Name of Parent/Legal Guardian (Print) ________________________________________

Parent/Legal Guardian’s Signature ___________________ Date ______________________

Principal Investigator Signature ___________________ Date ______________________
Appendix C
Student Interview Questions

1. Tell me about a time you made art outside the art room.

2. Tell me about a time that you talked about your art or someone else’s art outside of the art room (For example, at home).

3. If someone told you that you would be learning new words in art, what would you say?

4. If someone told you that you would be reading books about art, what would you say?

5. What do you think books and art have to do with each other?

6. How do you feel about writing in art?

7. Did learning this vocabulary help you in any ways? If so, how?
Appendix D
Data Base
Labels for Documents, Transcripts and Interviews

S1-JW: Student 1 Journal writing
S1-RAD: Student 1 Read-aloud discussion
S1-AD: Student 1 Art discussion
S1- INT-PRE- Student Interview Pre
S1-INT-POST- Student Interview Post
S1-VRK-PRE- Student Vocabulary Rating Knowledge Pre
S1-VRK-POST-Student Vocabulary Knowledge Post
S1-OBS

S2-JW: Student 2 Journal writing
S2-RAD: Student 2 Read-aloud discussion
S2-AD: Student 2 Art discussion
S2- INT-PRE- Student Interview Pre
S2-INT-POST- Student Interview Post
S2-VRK-PRE- Student Vocabulary Rating Knowledge Pre
S2-VRK-POST-Student Vocabulary Knowledge Post
S2-OBS

S3-JW: Student 3 Journal writing
S3-RAD: Student 3 Read-aloud discussion
S3-AD: Student 3 Art discussion
S3- INT-PRE- Student Interview Pre
S3-INT-POST- Student Interview Post
S3-VRK-PRE- Student Vocabulary Rating Knowledge Pre
S3-VRK-POST-Student Vocabulary Knowledge Post
S3-OBS

S4-JW: Student 4 Journal writing
S4-RAD: Student 4 Read-aloud discussion
S4-AD: Student 4 Art discussion
S4- INT-PRE- Student Interview Pre
S4-INT-POST- Student Interview Post
S4-VRK-PRE- Student Vocabulary Rating Knowledge Pre
S4-VRK-POST-Student Vocabulary Knowledge Post
S4-OBS
Appendix E
General Art Vocabulary Pre/Post Test

Name______________________________ Class_________________ Date_________

1. This refers to the way something feels, or looks as if it might feel.
   a. Line
   b. Space
   c. Value
   d. Texture

2. When lines meet to form an enclosed area, this is formed.
   a. Space
   b. Shape
   c. Form
   d. Line

3. This is an empty place or surface in or around a work of art. It may be two dimensional, three-dimensional, negative or positive.
   a. Shape
   b. Color
   c. Space
   d. Form

4. This is the most basic element of art. It is used to form many different things in art. It is the path of a dot through space.
   a. Texture
   b. Space
   c. Line
   d. Value

5. This is the lightness or darkness of a color.
   a. Value
   b. Texture
   c. Color
   d. Shape

6. These are three-dimensional, meaning they have height, width and thickness.
   a. Color
   b. Shape
   c. Form
   d. Value

7. A three-dimensional art work that is meant to be viewed from all sides is classified as a
   a. Painting
   b. Sculpture
   c. Object
   d. Design

8. An arrangement of everyday objects is called a
   a. Landscape
   b. Portrait
   c. Still-life
d. Seascape

9. An arrangement or combination of elements in an artwork that is agreeable to the artist is
   a. Overlapping
   b. Perspective
   c. Composition
   d. Middle ground

10. A way of representing distance in a painting or artwork is called
    a. Perspective
    b. Contour
    c. Shading
    d. Landscape

11. A line that is sometimes used to separate a background from the foreground in a drawing
    or painting is called
    a. Vertical line
    b. Diagonal line
    c. Zigzag line
    d. Horizon line
Appendix E
Ceramic Pre and Post Test

Name_________________________ Class____________________ Date______________

1. A hard semi-fired type of waterproof clay used in pottery and building construction. Ceramic wares made of this material are a brownish-orange in color.
   a. Terracotta
   b. Leather hard
   c. Smooth

2. A machine used to shape round ceramic wares
   a. Wedging
   b. Kiln
   c. Wheel

3. An industrial oven: a specialized oven or furnace used for firing clay for pottery, bricks or for drying materials such as hops, or timber.
   a. Cast
   b. Smooth
   c. Kiln

4. The process of baking ceramics: the application of high heat to a ceramic object in a kiln in order to harden it or fix an applied substance such as glaze.
   a. Smoldering
   b. Firing
   c. Luster

5. To make scratches or creases in pieces of clay to be joined together. Applying slip to roughened surfaces creates a bond that holds pieces together.
   a. Hand building
   b. Slip
   c. Scoring

6. Rings or ropes of clay that may be wound one on top of or around the other.
   a. Scores
   b. Coils
   c. Slurries

7. A special paint made of sand that is applied to clay to make it shiny.
   a. Tempera
   b. Watercolor
   c. Glaze

8. A hollow container that gives shape to something pressed or poured into it.
   a. Glass
   b. Mold
   c. Pot

9. I am someone who create three-dimensional works of art.
   a. Painter
   b. Sculptor
   c. Carpenter

10. Draw a line that connects the word rim to the rim of this pot.
11. Draw a line that connects the word shoulder to the shoulder of this pot.
### Appendix E

**Word Knowledge Self Rating Scale Pre and Post**

<table>
<thead>
<tr>
<th>WORD</th>
<th>I do not know word</th>
<th>I heard it but don’t know what it means</th>
<th>I know it well enough to use it.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coil</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clay</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sculpture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pottery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potter’s wheel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ceramic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kiln</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glaze</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rim</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mold</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hollow</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hollow out</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terracotta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bronze</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three-dimensional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carve</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carving</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Score clay</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix F
(Question 1a)
Word Wall

Alphabetical order

Semantic Open Sorting
Appendix G
(Question 1b)
Philip’s Word Illustrations

<table>
<thead>
<tr>
<th>Word:</th>
<th>Clay</th>
<th>Word:</th>
<th>Sculpture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draw:</td>
<td></td>
<td>Draw:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>![Image]</td>
<td>![Image]</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Word: Score clay</th>
<th>Word: Rim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draw:</td>
<td>![Image]</td>
</tr>
<tr>
<td></td>
<td>![Image]</td>
</tr>
</tbody>
</table>
Appendix G
Anthony’s Illustration of Vocabulary Words
Appendix G
Francesca’s Word Illustrations
### Appendix G
Mackenzie’s’ Illustration of Art Words

<table>
<thead>
<tr>
<th>Word: rim</th>
<th>Word: score clay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draw:</td>
<td>Draw:</td>
</tr>
<tr>
<td>![sketch of rim]</td>
<td>![sketch of scored clay]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Word: painting</th>
<th>Word: carve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draw:</td>
<td>Draw:</td>
</tr>
<tr>
<td>![sketch of easel with painting]</td>
<td>![sketch of carving tool]</td>
</tr>
</tbody>
</table>
Appendix H
(Question 1c)
Vocabulary Tally Charts
Appendix I 1
(Question 1d)
Explicit Instruction

Read Aloud 1

Read Aloud 2
Appendix I 2
(Question 1d)
Study Group’s Illustrations for Vocabulary Review
### Read Aloud Checklist

<table>
<thead>
<tr>
<th>WORD</th>
<th>Student 1</th>
<th>Student 2</th>
<th>Student 3</th>
<th>Student 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coil</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clay</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sculpture</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pottery</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potter’s wheel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ceramic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kiln</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glaze</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rim</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mold</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hollow</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hollow out</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terracotta</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bronze</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three-dimensional</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carve</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carving</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Score clay</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoulder</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Philip: “Dave the Potter. He made clay but people called it dirt. He gave it a shape on his potter’s wheel.”

Mackenzie: (is looking over the checklist and trying to tally each vocabulary word). “He’s going way too fast!!” Francesca is laughing. …

Philip: “He got the clay from the dirt and he threw the clay up in the air but only he knew where it would land. He would put the clay on his potters’ wheel. He would kick the potters’ wheel to give it shape. He would put his arms on the shoulder and the rim to make the pot… I mean jar and then after it was done his arms couldn’t reach around it so he carved into the pot.”

Mackenzie: “I don’t see a word.”

Francesca: “What word is it again?”

Audio, video and field notes indicated that Francesca was giddy. She laughed at Mackenzie. The group asked about the vocabulary word “shoulder.” They mentioned that it was not on their checklist. They asked what to do. I responded by telling them to add it to their checklist.

Philip continued: ”He glazed the clay.” (He looked at Mackenzie’s list) “I think you missed a couple of words. Put another tally. He made coil clay whatever. Bye bye…”

Philip retold the story.
Mackenzie tried to keep up with the tallies on her list.

Francesca: “He was a carver”
Philip: “A carver?”

The group laughed. They corrected Francesca.

Philip: “He was a potter.”

Francesca: “Oh a potter and he made all different kinds of clay. He made pots …and he like made a lot of um…”

Philip: “pottery”
Francesca: “pottery and he um… “
Philip: “put it in the kiln.”

Francesca: “put it in the kiln and he used his potter’s wheel. He used his potter’s wheel to do stuff. He used his potter’s wheel to make all his pottery and when he threw the clay he’d only know where the clay would go. Sometimes he would coil his clay… BYE!!!”

The group prompted Francesca and each helped Mackenzie catch up on word tallies.

Anthony: “Hello…Dave was a potter, Dave was a potter and he was a slave. and he made pieces of clay on his potter’s wheel …. Pause. and he made a piece of clay so big that he had to stop his potter’s wheel.”

Philip: “Shhh. Be quiet … keep going” (to Mackenzie who was tallying and trying to catch up.)

Anthony: “and he made a piece of clay so big that he had to stop his potter’s wheel. When he stopped his potter’s wheel.”

Philip interrupts: “He put a snail on his head”

Anthony: “He put glaze on top of his pots to make it shiny but before it totally dried, he wrote little poems on it. Adios!!”

Mackenzie: ”Um I’m Mackenzie and something in the story was I know he was a good potter and he made pottery with his potters wheel. Laughing ….He loved to use clay but for people they thought it was dirt but for him it was clay ….UM but once it was done he would put glaze on it.”

“And he would mold it into the shape he want and make the rim perfect. He carved little poems in it. He made the shoulders beautifully. So his sculpture would be perfect. Sometimes he would put coils I don’t think he would do it all the time. Eventually he would stop his potter’s wheel if his thing got too big… I don’t think he had a kiln. I don’t know.”

Philip: “He had a kiln. He put it in his coil, he put it in jar and it was a shoulder on it.” (Silly using words)

Mackenzie: “But I think he used terracotta clay. I don’t know. Adios amigos …”
Appendix I 5
(Question 1d)
Read Aloud Transcript Ancient Soldiers of Clay

Philip: “Is this thing on? Baboom baboom….”

Francesca: (With expression): “In the book, Ancient Soldiers of Clay, I wondered why, I mean how long it took them to make the soldiers. Then I wrote a Post-It down and I noticed that it says that um they had to make a mold for the clay soldiers so that is it. I think it says that. They made a mold for the soldiers.”

Mackenzie: “I have to find it. ‘Farmers found hard clay when digging a well.’ I found that out right from the text.”

Anthony: “Hi. I’m Anthony and I put ‘Why are the warriors under ground? Who made the terracotta warriors? And why did rebels raid the pits and set fires?’ ”

I am observing the students during this discussion. Philip is distracted

Philip: “I already went. So we all went …”

Mackenzie responds and addresses Anthony: “One of your questions tells why. If you think about it, he put it under ground, one because he wants to bury it by him and…”

Philip: “Like a time capsule.”

Mackenzie: “and two, who made the warriors. It says it somewhere in the book.”

Philip: “Anthony was the person who kept saying Baboom last time. He didn’t know it was on he just kept saying baboom.”

Mrs. LaBrocca: Any other important facts that you think you should discuss?

Mackenzie: “I found a lot of vocabulary!”

Mackenzie has a tally chart on her Post-It Notes and reads.

Mackenzie: “I found statue five times, I found bronze once, I found statue six times. I found clay three times, I found terracotta fifteen times… Noooo.” She recounts her tallies. “Eighteen times, no nineteen times. I found potter once…. no twice. I found molds once, and I found kiln once.”

Philip: “You never found Emperor?”

Mackenzie: “That wasn’t one of our art words.”
Philip: “Yeah it was…and soldiers was.. Anthony was the person that said Baboom last time…”

Anthony: “I was the person who said Konichiwa when I was supposed to be saying Adios. At the end of it I forgot what Konichiwa meant so I just said Konochiwa. I didn’t know it meant Hi and..”

Mackenzie: “It also means - Bye …”

Francesca: “I already found the word molded. And the word is mold.”

Anthony: “I underlined potters and craftsmen.”

Mackenzie: “I can’t find my chapter four!”

Philip: “I found warriors.”

Francesca: “I found soldiers.”

Mackenzie: “I got it …(referring to Chapter Four).”

Anthony: “I found molds.”

Francesca: “I found potters”

Mackenzie: “I found terracotta (singing)…. ‘The first order of the terracotta army to be built by ancient Chinese craftsmen was an enormous challenge. Anthony: ‘It says, ‘it took 10 – 11 years to build them.’”

Mrs. LaBrocca: “Hmm…how old are you boys and girls?”

Philip: Nine years old.

Mackenzie: “I’m eight. It took 10- 11 years to build the soldiers.”

Philip: “That’s more than I was born.”

Francesca: “I would be nineteen.”

Mackenzie: “We are learning about terracotta armies.”

The students are all reading from the text.

Francesca: “It says in the text that …’they made smaller parts such as ears and shoes with molds.’”
Philip: “You’re hogging the microphone…”

Francesca: “It says in the text that the ‘Ancient potters built each warriors body by hand. The craftsmen also used tools to carve details in every soldier. The potters baked each warrior in a kiln an extremely hot oven that hardens the clay. Afterward the craftsmen painted each hardened clay warrior with bright colors.’”

Mackenzie: “Chapter Four: Making Clay Soldiers. When the first emperor ordered the terracotta army to be built he gave the Ancient Chinese craftsmen an enormous challenge. They had to create almost 8,000 life-size painted figures. They were painted? Cool right? Anthony is going to say something extremely good …Anthony?” (She hands over mike)

Anthony: “Are we on this page? Clay is nice on page 17.” He reads: “Our investigations on China’s terracotta army has come to an end. But the work there will go on for many years to come. So far archeologists discoveries have told us a lot about the first emperors real army. The terracotta soldiers also tell us the great skills ancient Chinese craftsmen had (laughing).”

Philip: “Break down the door, break down the door…”

Anthony: “In time we will learn more not only about the terracotta army but about the whole underground city these warriors watch over. Adios…Now Philip will say a fact that might be interesting.’ ”

Philip: “Do you want to build a snowman?”

Francesca: “This is Francesca. You heard me before saying about how they molded the thing I mean warriors.”

Philip: “I missed my turn. Anthony skipped me.”

Francesca: “You said you want to build a snowman.” Many of the warriors they found still have traces of brilliant colors on their uniforms and bodies. It says in the text that they made soldiers have weapons, They had weapons such as axes, swords and hammers.”

Thank you Bye everyone. Frosty the Snowman…”
Appendix I 6
(Question 1d)
Read Aloud Checklist for Ancient Soldiers of Clay

Search for the art vocabulary we learned in each chapter. Copy the sentence that shows how it is used.

CHAPTER 1: THE DISCOVERY

CHAPTER 2: UNCOVERING A TREASURE

CHAPTER 3: THE PURPOSE OF THE TERRACOTTA ARMY

CHAPTER 4: MAKING THE CLAY SOLDIERS

CHAPTER 5: MORE TO DISCOVER
Appendix I 7
(Question 1d)
Art Discussion Checklist

<table>
<thead>
<tr>
<th>Philip</th>
<th>Mackenzie</th>
<th>Anthony</th>
<th>Francesca</th>
</tr>
</thead>
<tbody>
<tr>
<td>texture</td>
<td>overlapping</td>
<td>smooth</td>
<td>3 dimensional</td>
</tr>
<tr>
<td>smooth</td>
<td>texture</td>
<td>feature</td>
<td>3 dimensional</td>
</tr>
</tbody>
</table>
Appendix I 8
(Question 1d)
Art Discussion Transcript

Mackenzie: “I do not want to go first… Hi Konichiwa, Ola, Bonjour. This is my ancient horn. Who wants to go first?”

Philip is rolling his sculpture on the table. “ME!!! Baboom Baboom…Baboom…. Konichiwa.”

Mackenzie: “I already said that.”

Philip: “So my piece is like a pottish kind of piece and it has glaze on the inside. So you could put stuff in there. I call it the Spirit Keeper and it’s been carved. I carved it. It’s hollow, it’s round. It has some bumps on it that I made on purpose. It has spikes around the top. And it has a couple layers of glaze in the middle. It’s all black. There’s no other colors.”

Mackenzie interjects: “There’s a little terracotta.”

Philip: “and there’s a little terracotta on the bottom…. and that’s it.” He hands the mike over to Anthony.

Anthony: I’m Anthony. I made a voodoo monster. It’s eyes are stitched shut and it has a big mouth and—“

Mackenzie interjects: “It has an orange mouth.”

Anthony: “It has an orange mouth and a big spike on its head. It could be used in a fantasy world to read peoples minds and tell the future.”

Francesca: “Well I made a pig and it is pink. I forgot the most important part. The tail and I have a big nose, the eyes are brown one of the ears is tilted and when the ears are straight its laying down and… its big.”

Mackenzie: “OOOOOO! (Blowing into her sculpture….) “I made an ice cream cone slash horn.”

Francesca: “That’s an original thought….”

Mackenzie: “Yeah and that’s what I said last week. It could be if it was a horn it could be used to warn temples. If it was an ice cream cone it could be used as a paperweight… It has cross marks. I scored it on the front and I made a pinch pot on the top. I didn’t necessarily use the potter’s wheel for my sculpture. I used my hands.”

Mrs. LaBrocca: “Did everyone talk about how you made it?”
Mackenzie: “Everyone except Francesca.”

Francesca: “How I made my pig, is I scored the. …(pause) How I made the head is…. (pauses) I made a hollow head. I scored it and I connected it to the body ...Um I made my legs by scoring them and I made my eyes by scoring them too. I used a pink glaze because you know pigs are always pink, normally…. Why I made a pig is because I’m doing a play on Charlotte’s Web and Wilbur is a pig.”

Anthony: “I just made my voodoo creature head by starting out with a pinch pot and scoring it and putting on eyebrows and stitched eyes and a big horn on its head. Then I put a bunch of glaze colors to mix it around to make it one cool color.”
Appendix J
(Question 1e)
Writing About Art: Process Logs/ Journal Responses During Vocabulary Instruction
What have you done with your art?
What do you plan to do next?

Philip

March 5  making the body
         finishing the sharks tale I will squish the clay whe the end is and score so I can attach it to my clay.

March 12  making art smooth
         carving the basketball

March 19  glazeing my clay
         and firing it
         and sorting words
         Mrs. Labraca will firing clay

Anthony

March 5  I will work on sculpting my clay until I get the right shape.

March 12  I sculpted the right shape last week now I will take the newspaper out and put more detail and texture.

March 19  I will wait for my sculpture to dry in the meantime I will help sort the words on the Word Wall.

Francesca

March 5  I am sculpting a piggy bank and I am going to be making the head for my piggy bank today.

March 12  So far I’ve made my body and head. I’m planing on my ears and smooth the head out.

March 19  I am going to sculp the little deatails and legs

Mackenzie

March 5 Absent

March 12  I mand a ball and I am and I plan on making it an ice cream cone.

March 19  I have made a sculature and I’m going to add lots of texture I’m going to carve into my clay to make it purfect.
Appendix J (cont.)

Writing about Art: Museum Descriptions after Vocabulary Instruction

Philip’s Spirit Keeper

“It was made in 1678912384521699 bc it was made to keep spirits locked in the black artifact. It was made in Greece the archaeologist who found it was named Jhonson. Jhonson found it in 1862. It’s width is 2 inches and its height is 3 inches, its depth is 1 ½ inches. It is important to the finder because when he found it he kept hearing voices in his head and when he touched it he was healed and the devil was trapped. I made it by making two pinch pots and then scoring them together then glazed it.”

Anthony’s Voodoo Monster

“I made a sculpture of a vodo monster head. It has stitched shut eyes, big eyebrows and then I carved a horn for it’s head. It also has lots of glaze layers. It’s height is 2 inches. It’s length is 4 inches and its width is 2 ½ inches. This is important to me because monsters are the creatures that inspire me to draw. It could have been used by fortune telling beasts. It was used in the fantasy world and it could tell the future also it could read minds. I made it by first making a hollow pinch pot then I got the shape I wanted. Second I scored my piece and put eyebrows stitched eyes and a horn. Next I put glaze on it and put it in the kiln. Then I was finished!”

Francesca’a Wilber the Pig

Artist Name: Francesca
My piece is made of terracota and glaze and it is 6 inches long, 3 inches tall and is two inches wide. My piece is important to me cause I’m doing a play Charlates web and Wilber Charolates friend is a pig named Wilber. My acting teacher in my acting class.
I made it by makin the hollow body then a hollow head and scored them together that’s how I made my piece.

Mackenzie’s Achent Horn

Artist name: Mackenzie
Made in 2014 BC
Made to contact other hunters and to warn villeges for avalanches. It is a horn with scored ingravemets on the front. At the end there is a rubber ball that you squee but this is terracotta. When you squeeze it and blow it will let off a really loud sound. It is importen to me because it looks like ice cream. 7 ½ in tall 3 in wide 2 in depth. How Mackenzie made it is it started as a ball of taracota clay then it was a pinch pot she scored the eges of to pich pots then watered the rims. She stuc the to together then she put that a side and put to more together and moled it into a cone the I scored them together fiedred them glace them and fierd it again.
Appendix J (cont)
Study Group’s Sculptures

Philip’s Spirit Keeper
Mackenzie’s Ancient Horn

Francesca’s Pig
Anthony’s Voodoo Monster
Appendix K
Rubric for Art Journal and Art Discussion Responses

What sort of small group discussions does each student’s art work prompt before, during, and after literacy strategies are embedded?

How do students write about their art before, during, and after literacy strategies?

<table>
<thead>
<tr>
<th>Student: 1 2 3 4</th>
<th>Before</th>
<th>During</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Journal /Art Discussion</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Levels of Art Criticism</th>
<th>Evidence</th>
<th>Vocabulary Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descriptive</td>
<td>Student uses literal terms to describe their art. Makes simple references to colors, shapes, lines.</td>
<td></td>
</tr>
</tbody>
</table>
| Interpretive            | Student goes beyond literal description. Uses simile metaphors words that have poetic meaning to describe work. **Examples**
  - Experiential: This work makes me feel
  - Formal: references to composition and relationships amongst the visual forms….
  - Material: References to the material and how it connects to the artists theme.
  - Thematic statements: goes beyond the visual quality of a work, can use visual cues to determine meaning
  - Contextual: based on the historical context of the work | |
| Judgmental              | Statement of preference. Quick statements of pleasure Student fails to see work in any depth | |
| Evaluative Statements   | Judgments of value or significance. This is one of the finest forms of sculpture supported by knowledge of the genre, history | |

(Eisner, 1997; 2002)
### Appendix L

#### Codes

<table>
<thead>
<tr>
<th>SI</th>
<th>A. Social Interactions with Peers ie. Student Directed Conversations (talk that is not guided by teacher)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIg</td>
<td>1. Study Group (talk amongst group of four)</td>
</tr>
<tr>
<td>SIc</td>
<td>• Evidence of playful behavior</td>
</tr>
<tr>
<td></td>
<td>2. Class (study group’s interaction and talk with other classmates)</td>
</tr>
<tr>
<td></td>
<td>• Evidence of playful behavior</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CT</th>
<th>B. Class Tasks (activities introduced in the unit of instruction)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTv</td>
<td>1. Visual</td>
</tr>
<tr>
<td></td>
<td>• Word Wall (students ideas about sorting words and challenges of working together)</td>
</tr>
<tr>
<td></td>
<td>• Read-Alouds: Dave the Potter, Andrea Cheng poems, Ancient Soldiers of Clay Chapter 1: (students mention importance of illustrations in determining meaning of vocabulary, book preferences)</td>
</tr>
<tr>
<td></td>
<td>• Independent Reading (student recognition of vocabulary in text)</td>
</tr>
<tr>
<td>CTo</td>
<td>2. Oral</td>
</tr>
<tr>
<td></td>
<td>• Class discussions during explicit vocabulary instruction.</td>
</tr>
<tr>
<td></td>
<td>• Guided Read-Aloud discussions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CTt</th>
<th>3. Tactile Hands on Experiences</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Clay (using vocabulary while working with clay)</td>
</tr>
<tr>
<td></td>
<td>• Picture dictionary (student preferences for drawing vocabulary)</td>
</tr>
<tr>
<td></td>
<td>• Independent Reading (students mention of positive and negative)</td>
</tr>
<tr>
<td></td>
<td>• Writing about art (students use of vocabulary, pre and post, opinions both positive and negatives)</td>
</tr>
<tr>
<td></td>
<td>• Games (students mention of influence of Be a Mind Reader and Vocabulary Tally chart on making meaning of vocabulary)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CTTm</th>
<th>4. Teacher Modeling Scaffolding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Guided discussions (making meaning of vocabulary during read alouds)</td>
</tr>
<tr>
<td></td>
<td>• Class discussions (making meaning of vocabulary during whole class discussions).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EI</th>
<th>C. Influence of the Environment (through researcher observations)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Students using the word wall and pocket charts as visual reminders</td>
</tr>
<tr>
<td></td>
<td>• Students and the art library.</td>
</tr>
<tr>
<td></td>
<td>• Students environment for reading</td>
</tr>
</tbody>
</table>
Appendix M
Art Unit of Instruction Lesson, Plan 1

Objectives:
The goals of the art unit are: 1.) To develop coiling and pinching skills in working with clay 2) To demonstrate appropriate use of materials and tools and apply to both additive and subtractive sculpture 3). To develop an appreciation of how sculpture is used in different cultures, 4). To develop creative solutions to the prompt ‘If someone saw my art in the year 2113, a hundred years from now, what could they learn about me?’ and 5). To apply use of art vocabulary in conversations about art.

Materials:
1. modeling clay,
2. ceramic clay,
3. ceramic tools,
4. glazes,
5. vocabulary word cards,
6. student journals,
7. post card images of sculptures,
8. additional books for art library on sculpture.

Set Up:
Blocks of ceramic clay, clay tools, and plastic bags will be set up in the back of the room.

Motivation:
The modeling clay lesson will be introduced as follows: Create a clay sculpture out of clay.
When the students are finished they will display their art work for the following week.
The ceramic clay lesson will be introduced as follows: “Some art tells us stories about what life may have been like for different people many years ago. Throughout this unit, we are going to learn about art made with clay from three different groups of people: African-Americans, Ancient Chinese and Native Americans. As we read this story, I want you to think about what the main character created and the story it might tell us today. Dave the Potter by Laban Carrick Hill will provide the motivation for the unit. I want you to think about something that you could create out of clay that can tell someone something important about you, your friends or your family.

The children will talk to a partner about what they might make, and sketch ideas.

**Lessons:**

Most classes will begin with my demonstrating techniques for working with clay. Specifically, students will be taught the processes of creating a hollow sculptural form out of ceramic clay since ceramic clay must be hollow to be fired in a kiln. They will apply these processes to their artwork. Specifically, students will learn how to: 1). Coil and pinch to build a form, 2). Join clay pieces by “scoring.” Scoring means that the surface of the clay must be scratched with needle tools, moistened with water and blended to stay together 3). Add details through additive or subtractive processes and appropriate uses of carving tools. 4). Understand the processes of firing and the changes that heat creates. This means that after ceramic clay has dried, it is fired in a kiln to harden, 5). Apply and understand what glazes are and how they are used to add color to an artwork made of clay. Recognize the subsequent changes that occur during a second firing that results in a ceramic artwork. Students will be reminded of wrapping work in clay for the following week.
The unit meets the following New Jersey Visual Arts Content Standards and Cumulative Progress Indicators: (NJCCCS, 1.3; NJCCCS CPI,1.3.5.4 )

In addition, the Art History & cultural significance of African American, Chinese and Native American sculptures will be addressed through the following three books that will be read-aloud to the students 1). *Dave the Potter*, by Laban Carrick Hill,, 2). *Ancient Soldiers of Clay* by Susan Markowitz Meredith, and 3). *Andrea Cheng Etched in Clay*. This meets NJCCCS CPI 1.3.5.D.2.

The discussions will address NJCCCS CPI 1.4.5.A to employ basic discipline specific arts terminology to categorize works of dance, music, theatre, and visual art according to established classifications

**Summary:**

At the conclusion of the study, students will respond in writing to the prompt “If you could tell someone 100 years from now something about your art what would you say?”
Appendix M
Vocabulary Instruction Rating Scale, Lesson Plan 2

**Objective:**

To foster word consciousness by increasing student’s awareness of vocabulary and vocabulary instruction. To assess how students rate their own specific knowledge of art vocabulary words before and after instruction.

**Materials:**

1. A vocabulary rating scale worksheet comprised of the words in the read-aloud and used in the art unit of instruction. It is based on different levels of word knowledge. (Beck, McKeown & Kucan, 2002; Blachowicz, 2006)(see VKR, Appendix H).
2. Pocket chart with different levels of vocabulary words: color, line, shape: value, form, perspective, horizon line. (chosen from pilot VKR from another class)
3. Pencils

**Lesson and Procedures:**

Pre assessment:

The boys and girls came into art. They sat on the floor ready for instruction. “Can someone tell me why we need to learn new words?

“Can someone tell me why we would need to learn new words in art?

“There are some words on this chart that you know very well. I would like you to look at the pocket chart.

“Can someone find a word that you know very well. Well means you know what it means and can tell the class about it. You can also use it correctly in a sentence.

Can someone find a word on the pocket chart that you heard before but don’t really know what it means?. This may be a word that you really can’t use in a sentence or tell the class about.
Can someone find a word that you never heard before and don’t know what it means?

These are the levels that I want you to think about as you fill out this sheet. There are no right or wrong answers. Make sure you cross off only one box for each word. Write your name on the top.

We will do this right here on the floor.”

Allow about 10 minutes. Pass out the papers and pencils, collect.

Post Assessment:

This was repeated at the end of the unit of study.

**Evaluation:**

Students’ responses will be compared before and after.
Appendix M
Explicit Instruction Word Wall, Lesson Plan 3

Objective: To make learning vocabulary intentional, develop an awareness of vocabulary in art, provide multiple exposures to words.

Materials:

1. Words for the lessons are written with black marker on white index cards
2. Two pocket charts hold the words
3. An interactive Word Wall in the art room
4. White index cards
5. Sharpie markers

Motivation: Students hands-on engagement in clay will provide motivation for students to use the words in context.

Set up: Words for daily lesson were placed in pocket chart.

Lesson:
Meet the children at the door. As students enter the room, every fourth child is given a “ticket” a blank index card to enter. Children sit on the floor in rows of four.

“Place your ticket on the floor.”

Attendance is taken.

“What do we learn new words?”

Why would we need to learn Art vocabulary?

“Today we will be learning some new Art words. When you first learn something what do you have to do in order to get better? In order to learn these words, we want to practice them here in the art room. If you really want to learn them well you should also practice using them outside the art room.”
“John can you please find the word “hollow” on the pocket chart? Can you bring it up to the front?
Repeat for other words..
Let’s say the word…
Let’s clap the word …
Put your hand up if you know this word.
Put your hand up if you know what this word means and can tell the class.
Say the word again with me.
Let’s chant or clap the word number of syllables.
Repeat for the next word.
Each group of four students will be given a sharpie marker.” I want you to work with your group, write each word on the card. Turn and talk with your group about creating a picture that reminds you of the word and draw it on the card. When you are finished, put your group’s card in the pocket chart and join me for today’s lesson.”
These cards will be put into a class baggie for word sort activities
Demonstrate the words. Teacher does an art demonstration lesson, modeling the use of the words in context.
“ We will be using sketch journals this year in art. In the back of your sketch journal we will create a list of vocabulary words that we will learn this year. Write the words you learned and create a picture that will help you remember what the word means. After I have checked your words, you may begin your art.

Summary:
Call on a child to get one of the words from the day’s lesson. Have children line up holding the words in the front of the room.

Teacher begins: Raise your hand if you can solve the riddle “I am thinking of a word that means…….”

That row of children may line up. Please pin that word on our word wall.

Repeat … Encouraging children to make up riddles.

The following week, the words will be reviewed on the word wall.

Before or as the students line up for dismissal, one student will be asked to:

1. Make up a sentence with a new word
2. “Hit the new word” on the word wall
3. Demonstrate, draw or mime what the new word means.
Objective: To provide choice and opportunities for discussion about art words. To have students recognize relationships between art words.

Materials: Word cards *banana, orange, yellow, purple* and *green*

Set-Up: Art words were taken off the Word Wall and placed on counter. Words for lesson were on the easel.

Motivation: Students were asked to share what they know about word sorts or word attributes.

Lesson: The students gathered for their lesson in front of the easel. The words yellow, lemon, orange and banana are placed on the easel. Students are asked to turn and talk about the words with a partner to see if they could come up with a way to group the words and an attribute to describe their sort. Students come up to the easel and move the words around.

Students who finished their art work are then asked to go to the Word Wall and create a sort. They described the sort to the class at the end of class.
Appendix M
Read Aloud Discussion, Lesson Plan 5

Objectives:
To develop an understanding of the cultural significance of pottery in two different cultures: African-American and Ancient Chinese. To introduce art vocabulary within the context of the story in three Teacher Directed Read Aloud Lessons

Materials:
1. Three Read-Aloud Books
   a. *Dave The Potter: Artist, Poet and Slave* by Laban Carrick Hill
   b. *Ancient Soldiers of Clay* by Susan Markowitz Meredith
      www.readinga-z.com
   c. *Etched in Clay* by Andrea Cheng
   d. KWL chart set up in three sections: What I know, what I want to learn and what I learned.
   e. Art Library will be set up for the students
   f. Twenty-four student journals

Motivation: Each read-aloud lesson accessed prior knowledge through a KWL chart. Specific vocabulary words from each book were introduced, discussed in context, defined. Students were encouraged to use these in art.

Lesson:
Read-alouds: *Dave the Potter* was read to the students during art class on weeks four and five. Poems from *Etched in Clay* were read before art class began during weeks six and seven. *Ancient Soldiers of Clay* was read during week ten (see timeline, Appendix A). Since *Ancient Soldiers of Clay* was longer, only chapter one was read in art class. The children finished reading the story
in their classroom during independent reading. Students were directed to find art vocabulary in context and jot it down on a Post-It Note. They returned to art the following week with their books and Post-It Notes in preparation for read-aloud discussion. These books were added to the classroom library for students if they chose to finish reading on their own.

Specifically, the whole class gathered together on the floor so they could see the book. The cover and title of the book were shared with the class. Targeted vocabulary words from the story (see timeline, Appendix A) were placed on easel next to a copy of the book cover. Students were asked to turn and talk to a partner if they recognized the words. They were asked to listen for their use in the story and to give a “thumbs up” if they heard the word in the story. Students put the words on the word wall at the end of class.

**Read Aloud Discussion:**

After the read aloud, all students were put into groups of four for the read aloud discussion.

“We have been learning new words in art and discussed how important it is to use these words appropriately when we speak and when we write. Please remember this when you have your group discussion. One person will record on a checklist the art vocabulary words you hear your group using in this discussion. One person speaks at a time, and everyone must contribute to this discussion.” The following questions will be posted on the board. How did the author use the vocabulary words we learned in the story?” What did you learn from this story about art? Have one person from your group add to our KWL chart.” Discussions will last ten minutes.

I will sit with the four students, and set the recorder in the center. Students will be seated together to facilitate recording and note taking. Each discussion will last about 10 minutes.

**Summary:** Students will write and illustrate their vocabulary words in their sketch journals. Students will be encouraged to talk to a friend and use these words while they are making art.
Appendix M
Art Discussion Lesson Plan 6

Objectives: To engage students in the process of oral critique through reflection and provide opportunities to use art vocabulary in context.

Materials:
Clay sculptures that the students are creating.

Lesson:
Each discussion will last about 10 minutes and will occur during week three, seven and twelve of the art unit (see timeline, Appendix A). The class will be divided into groups of four. The students will use their clay sculpture as a prompt for their discussions.

“We have been learning new words in art and discussed how important it is to use these words appropriately when we speak and when we write. Please include these when you respond to the following prompt:

Take turns talking in your group. Talk about your art. Each person can ask two questions. Speak one at a time. Everyone must contribute to the discussion” I will sit with the four students, and set the recorder in the center. Students will be seated together to facilitate recording and note taking.

Summary:
The class will come together. “One person in your group can you tell us one thing that you learned about either yours or your classmates sculpture?”
Appendix M
Process Logs, Journal Writing Museum Description, Lesson Plan 7

Objectives: To engage students in the process of written critique and reflection and encourage application of art vocabulary when writing.

Materials:
1. Students’ sculptures
2. Individual journals
3. Sharpened Pencils

Lesson:
During week three, students wrote about their art process in response to their first clay sculpture. At the beginning of class for 5 minutes during weeks seven, eight and nine (see timeline, Appendix A) students wrote in process logs. During week 13, students created a museum description.

“We have been learning new words in art and discussed how important it is to use these words appropriately when we speak and when we write. Please include these when you respond to the following prompt: “What have you done so far with your art and plan to do next?"

Evaluation: Each student’s journal entries were analyzed by classroom teacher based on rubric for art criticism (see rubric, Appendix K) and labeled for easy retrieval.