

VISUALIZATION IN THE WRITING PROCESS:
A CASE STUDY OF STRUGGLING K-4 LEARNERS IN A SUMMER WRITING CAMP

by

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B.J., University of Texas at Austin, 1999
M.S., Kansas State University, 2005

AN ABSTRACT OF A DISSERTATION

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Abstract

The No Child Left Behind Act of 2001 (PL 107-110) drives today's teaching environment. With the pressure not to leave any student behind, classroom teachers often request struggling students to attend summer school. This qualitative case study sought to gain a deeper understanding of how visualization embedded in the writing process may influence struggling learners in a kindergarten through fourth grade summer writing camp.

The 3 ½ week summer writing camp was based on Donald Graves' (1983/2003) writer's workshop and writing process. The selected 19 students (K - 4) and 5 teachers in a Midwestern school district participated in the visual, learning, and literacy-rich environment. During the writing workshop, teachers gave Lucy Calkin's (1994) inspired mini-lessons to teach struggling students how to use visualization embedded in the writing process. Students participated in 4 community-based field experiences, which served as inspiration for drawing and writing. Mental imagery has powerful effects on reading comprehension (Sadoski, 1983, 1985) and students recalled information and images from the field experiences by observing digital photographs, and then drawing and writing. Thirty-nine student art/writing samples were analyzed using Lowenfeld and Brittain's (1975) stages of artistic development, Northwest Regional Educational Laboratory (2004) writing levels, and Piaget and Inhelder's (1969/2000) stages of cognitive development.

Drawing in the writing process created tangible images to help student authors in the primary grades increase their Six-Trait Analytical (Spandel, 2004) writing scores for Ideas, Organization, and Conventions. Students in the intermediate writing group also increased their writing scores in Ideas, Voice, and Conventions. In addition, the data revealed the student's stage of artistic development reflects his or her writing level and stage of cognitive development. The involved teachers believed aspects of the summer writing camp could be incorporated throughout the school year, and they wanted to learn more about using visualization in the writing process. This study provided insight essential to better understand how visualization embedded in the writing process influences struggling learners.

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Dedication

This manuscript is dedicated to all the students I taught. It was their energy and spirit which moved me daily in the quest to finish. Whenever I had a disheartening day, I remembered their smiles, innocence, and most of all their gratitude for being their teacher. My heart belongs to the children. All I have ever wanted to do is be the best teacher I could. I always strived to help the struggling students in my classroom so they too could feel successful. I hope the work and dedication put forth in this dissertation illustrates how honored I was to be their teacher.

CHAPTER 1 - Introduction

The teacher begins, “Does an image pop into your head when I say ‘cat’? Use your background knowledge of what a cat looks like to form an image. Now, look closer as if you were focusing the image with binoculars. Does the cat have whiskers? What color is the cat? Next, draw the image of the cat from your head in your writing journal.

Now, after visualizing the image in your head, describe what the cat looks like using words. “With this ‘picture in your head,’ what details do you see? Can you write those details?” Those images are expressed through the use of language.

“Let me show you my drawing and caption,” the teacher says. “The fat, lazy orange and white tabby with long, white whiskers peered out the window and watched the bluebirds flutter whimsically in the birdbath.” The teacher explains she had a cat similar to the one she drew and ironically named it Race because its white stripes looked like racing stripes on a car.

The teacher invites the students to share their pieces. One girl raises her hand to share “Kitten Surprise,” an illustration of a mother cat and her four babies curled up together, and reads a short narrative depicting the time her cat had four babies. From the “Kitten Surprise” illustration the young writer demonstrated using visualization to conceptualize the story line for her writing piece.

People often think and learn through the use of images, visual connections, and sound associations. Utilization of imagery aides in the structure of language, art, media, and the thinking processes. It is a formative element of communication and artistic creativity, and an integral aspect of thinking, speaking, listening, reading, and writing (Zitlow, 2000).

Many writing teachers understand the value of art as a form of pre-writing. Sidelnick and Svoboda (2000) note that drawing in the writing process can encourage reluctant writers to compose after the writers draw their ideas. It is important for writing teachers to understand the link between seeing, telling, drawing, and writing (Ernst, 1994).

This study utilizes a combination of learning theories and classroom practices to examine their use in the context of the writing workshop. The study examines visualization in the writing process with elementary students. Chapter 1 has the following sections: (1) teacher perspective; (2) overview of the issues; (3) statement of the problem; (4) purpose of the study; (5) research

questions; (6) significance of the study; (7) limitations of the study; (8) definition of terms; (9) and organization of the study.

Teacher's Perspective

After teaching second grade for 4 years in a fairly diverse school near a military installation, I implemented a visualization strategy in the writer's workshop to help students in their concrete stage of learning physically draw and see what they intended to write. The writing produced in conjunction with these drawings promoted ideas, organization, and word choice—traits typically used to assess student writing.

During those 4 years, I decided to continue my professional education and 2 years ago, I completed and passed the National Board Certification for Teachers. The strongest of my four entries for the certification process was “Writing: Thinking Through the Process.” To fulfill the requirements for this entry, students had to create a fictitious dinosaur, using any media, and compose a narrative based on their new dinosaur's characteristics. This lesson opened my eyes to using visualization in the writing process. My “ah ha” moment arrived as I observed the students inventing amazing story lines matching their dinosaurs and the creative, original names the students conceived. My students created new dinosaurs such as “Cotton-a-saurus” using cotton balls and “Macaroni-a-saurus” from macaroni shells. The students' artistic creations were the springboard for their writing.

The student's idea of a pasta-eating dinosaur named Macaroni-a-saurus was original and ingenious. The use of these simple classroom aides became a palette and canvas with which to write. The students' writings described texture, shape, color, and other features of the dinosaurs while utilizing a variety of word choice. The students' visualization of the dinosaurs made the creatures tangible and come to life with vivid detail. Students could see and touch the dinosaurs, then communicate their ideas in a precise and meaningful manner. Previously, student writings lacked the luster and vibrancy of descriptive and inspired writing. After assessing these student narratives, I noticed their scores increased in every category of the district's writing Criterion Reference Test (CRT) compared to previous compositions. I merely stumbled on this circumstance, and my observations were converted into the nucleus of my motivation. I began to understand and embrace the concept that students must visualize what they are writing before

they put pen to paper. The products my second graders produced during this dinosaur writing project stood in stark contrast to their other writings. Their work surpassed the other narratives the students composed. Upon reflection, I realized that visualizing as part of the pre-writing stage could lead to incredible writing.

Overview of the Issues

Policy makers, school board members, and educators constantly search for ways to promote learning while closing the achievement gap. In 2002, President Bush signed No Child Left Behind Act [NCLB] of 2001 (PL 107-110). With NCLB (2001), schools are required to make Adequate Yearly Progress (AYP), and the law mandates schools provide students with a high-quality education to make AYP. Reading First (National Reading Panel, 2000), an NCLB (2001) initiative, outlines the manner in which funds and tools are provided to ensure every student can read on grade-level by third grade.

Higgins, Miller, and Wegman (2007) assert current language arts curricula concentrates heavily on reading due to mandatory state testing. As a result of NCLB (2001), many schools adopted an uninterrupted 90 minute block of language arts instruction. A March 2006 report from the Center on Education Policy (p. xi) confirmed that 60% of school districts surveyed reported policies which apportion a specific amount of time to reading instruction and 50% reported similar practices for math. The report also stated that in order for districts to provide more instructional time for reading and math, districts reduced time for all other subject areas of instruction, including the arts. This lack of time for writing requires struggling students to attend after-school or summer literacy programs to receive direct instruction and multiple opportunities to develop as a writer. NCLB has caused educators to think about other strategies to reach all students to make them successful. The National Commission on Writing for America's Families, Schools, and Colleges (2006), reported that writing was the neglected "R" of, "Reading, wRiting, and aRithmetic" in the time of NCLB. To increase students' writing abilities, the Commission (2006) recommended doubling the amount of time students write and increase the amount of resources devoted to writing instruction.

Teachers can refer to the *Standards for the English Language Arts* (National Council of Teachers of English/International Reading Association [NCTE/IRA], 1996) for guidance to

maximize writing instructional time. The purpose of the standards is to provide all students opportunities and resources to develop language skills so the students can become participating, literate members of society (NCTE/IRA, 1996). The impact of NCTE/IRA standards have affected how teachers, administrators, and curriculum developers view and define elementary writing. The following four standards are applicable to writing instruction:

- Students adjust their use of spoken, written, and visual language to communicate effectively with a variety of audiences for a variety of purposes.
- Students use a varied range of strategies as they compose and use different writing process elements to communicate with audiences.
- Students should apply knowledge of language structure, language conventions, media techniques, figurative language, and genre to create, critique, and discuss print and nonprint texts.
- Students should participate in a variety of literacy communities (NCTE/IRA, 1996, p. 3).

These standards are addressed in the writing workshop. Graves (1983/2003) noted the writing workshop must occur at least three to four times a week for 45 to 60 minutes per session to increase writing skills. Writing is recursive and should be taught through connections and modeling instead of through grammar drills and assigned timed writing topics (Flower & Hayes, 1981). These fundamentals create the writing workshop model (Atwell, 1987; Graves, 1983/2003). Fletcher (2001) noted that students who participated in the writer's workshop often performed well on formalized tests. With state testing demands and time constraints often driving curricula, how can writing instructors incorporate research-based best practices in writing instruction and meet national standards?

Writing is a form of communication and should be shared with others. Students should have the ability to choose what to write about, have ample time to develop ideas, and receive feedback from peers and instructors to write effectively (Atwell, 1987; Routman, 1994; Wood & Dickinson, 2000). Donald Graves (1983/2003) stated young students should publish because, "Publishing contributes strongly to a writer's development" (p. 54).

One of the main goals of teachers is to create lifelong writers. To achieve this goal, teachers should provide positive writing experiences in a comfortable learning environment where students feel free to take risks and express themselves (Chambliss & Bass, 1995). When

students enter kindergarten they most often do not see themselves as readers, but almost always as writers. Language is the ability to construct meaning from experiences (Tompkins, 2001). From the kindergarten students' perspectives, they can write because, to them, their scribbles and drawings have meaning.

To create lifelong writers, teachers should provide opportunities for students to write and express themselves every day. Writing should be seen as a way to record information, write personal notes, share poetry, and stories. Writing should not be produced in isolation, but integrated in every subject. Using writing as an everyday tool can show children the value of writing is one's life. Katie Wood Ray (2001) described the writing workshop as, ". . . often filled with so many more possibilities than is a room where students do the writing process" (p. 5).

With less time and money, "No Child Left Behind legislation means increasing academic time for core subjects, which translates into cutting time for arts education," (Young, 2005, p.88). The Center for Education Policy's March 2006 report, *From the Capital to the Classroom: Year 4 of the No Child Left Behind Act* revealed, "71% of school districts reported that they have reduced elementary school instructional time in at least one other subject to make more time for reading and mathematics—the subjects tested for NCLB purposes" (p. ix). With arts programs first among those feeling the budget and time crunch, classroom teachers often incorporate arts in the daily instruction in order to meet the national standards.

The arts stimulate learning by stimulating developmental areas not used in other subjects which include, "integrated sensory, attentional, cognitive, emotional, and motor capabilities and are, in fact the driving forces behind all other learning" (Jenson, 2001, p.2). Armstrong (2003) claimed arts can enhance literacy skills and encourage new types of literacy to occur. Students learn best when they create because engagement and attention are essential for comprehension (Marzano, 2004). Fiske (1999) asserted all students, especially those at-risk—English-language learners and students with learning disabilities—can prosper from art activities. When students are actively engaged and using different parts of their brain and multiple senses, the products they produce improve and showcase their talents.

Copple et al. (2000) state, "learning to read and write is a complex and multifaceted process that requires a wide variety of instructional practices" (p. 14). From a curriculum and standards perspective, using visualization in the writing workshop to help generate ideas could meet both literacy and art national standards.

Drawing in conjunction with writing permits the child to use multimodality to communicate. Visual/Spatial intelligence is the ability to think in images and understand their relation to other objects or to one another (Gardner, 1983/2004). A drawing is a tangible image for the writer. Rochelle I. Frei (1999) expressed in plain words, “[art] can be used the same way written text can to expand a child’s knowledge of the world and to understand what children do when they make sense of that world . . . Art can provide a window into how children negotiate their understandings of images and their knowledge of the world” (p. 386). Donald Murray (1994) believed all writers write from images either from paper or their minds. The writer “must use words to communicate the story/image/emotion . . . Writers love their language” (Fletcher, 1993, p. 32). Regie Routman (2005) believed prewriting could occur before writing, but also occurs when the writer rethinks what he or she has written. She listed several ways to prewrite which included, “drawing to spur writing” (Routman, 2005, p. 179). Olshansky (1995) stated when student’s stories are driven by visual images, their writing is transformed in many powerful ways which enriches the story and enhances the finished product. Drawing is one manner with which young students gather and organize ideas for writing.

Statement of the Problem

Elementary school teachers face a number of challenges teaching every subject in a demanding, state-test driven environment. Educators continuously seek ways to meet the individual needs of learners while simultaneously closing the achievement gap. Many teachers alternate their literacy curricula to meet the heavy demands of testing (Harmon, 2000). Unfortunately, standard, prescriptive, teacher-centered curriculum drives instruction in most states (Falk, 1998). To further complicate the matter, teachers often do not know how to teach writing or schedule the writer’s workshop. Through the writing workshop, students learn to express themselves artistically, emotionally, and factually.

In the modern teaching environment driven by NCLB, educators constantly struggle to demonstrate AYP by producing results instead of teaching meaningful lessons. Wolf and Wolf (2002) state, “Driven by state testing, teachers are being pulled toward prompt-and-rubric teaching that bypasses the human act of composing and the human gesture of response” (p. 230). With progress now directly tied to the federal budget; administrators are faced with a dilemma.

How do schools demonstrate AYP and achieve a standard of educational excellence given the current metric of success is the standardized tests? This complex issue is, at times, at odds with the fundamental reasons for teaching, the growth and development of young minds and the building of a strong foundation for life.

Regardless of protests against or arguments in favor of NCLB, it is an issue teachers and administrators confront daily. Presently, there is a trend to provide additional time for literacy and math instruction by taking away time spent in instruction in the arts (Rentner et al., 2006). With reading and mathematics so heavily emphasized in a time when AYP is a benchmark for success, everything else has become subordinate to those two subjects. Educators must now find ways to incorporate writing instruction and balance the most precious and dwindling resource of the school—time. Time must also compete with other subject areas which are not measured by standardized testing under the provisions of NCLB. Visualization embedded in the writing process may offer multiple techniques and methods to affect student learning. The current popular and successful method of the writing workshop model (Atwell, 1987; Graves, 1983/2003) takes time on its own. How can educators accomplish everything while providing meaningful and effective writing instruction?

Purpose of the Study

This study sought to gain a deeper understanding of how elementary age students (kindergarten through fourth grade) in a summer school writing program use art to visualize their writing. Designed as a qualitative case study, this research sought to provide rich description of some practices and techniques that utilize visualization in the writing process during a summer writing camp. Research about the benefits of visualization in conjunction with writing is lacking. Furthermore, the educational field lacks research about the potential developmental relationship between one's stage of artistic development, writing stage, and stage of cognitive development.

Visualization is defined as the ability to create a mental image and draw the image before writing (Douville, 1999). To understand visualization in the writing process one must analyze the methods, activities, and techniques used to incorporate it. Ernst (2001) asserted when drawing is part of the writing process, the picture becomes the tangible image. Drawing provides the author the ability to see it clearly, write details, and revise both thinking and writing.

The participants of the study were struggling learners attending a summer school writing camp. Students used a variety of experiences and media to visualize images. They then drew in their art/writing journal, as a prewriting strategy, before drafting and referring to the drawings throughout the writing process. Students used self-created art as a springboard to compose either a narrative or expository texts.

As a teacher, I know organizing the writer's workshop is difficult for a classroom with diverse personalities and abilities. However, when my students drew before writing, I observed, they were less confused about what to write. If my students created something out of clay, paint, or other media, the concrete creation meant something to them and articulating its meaning was easier than writing about a fictitious character. I wanted to understand how the prewriting act of creating an image helped students develop and organize ideas. Although combining writing and art will not create more time in the instructional day, it allows teachers to maximize the time they have left after the reading and math blocks. In addition, using visualization in the writing process simultaneously exposes children to the often removed art curriculum standards.

Available research raises many interesting questions which, to date, have remained unanswered or unexplored. This case study sought to understand how visualization can be used in the writing process to help struggling learners.

Research Questions

Other areas related to learning, such as artistic and cognitive development stages, are foundations to better understanding the writing levels of students in kindergarten through fourth grade. Due to the importance of these areas of learning, a number of research questions utilize these ideas. Thus, the overarching question in this qualitative case study is:

How does the use of visualization embedded in the writing process influence struggling learners in a kindergarten through fourth grade summer writing camp?

To gain a deeper understanding of this topic, the questions below explore the use of visualization in the writing process and seek to provide insight into how visualization can be used as an instructional technique in the classroom.

Specific subquestions include:

1. What types of instructional methods, activities, and techniques engage children in visualization during the writer's workshop?
2. How does visualization influence potential effects in the individual writing scores of the Six-Trait Analytical Model (Spandel, 2004)?
3. How do the students' writing and art stages reflect the stage of cognitive development of the writer?
4. How do students and teachers view potential connections between art and writing?

Significance of the Study

The connection between the arts and literacy has garnered attention in recent literacy research (Berghoff, 1995; Buehl, 2001; Ernst, 1994; Harste, 1994, 2003; Lambert-Stock, 2004; McKay & Kendrick, 2001; Short, Harste, & Burke, 1995). However, there is limited research linking the visual arts and the writing of a text. There is little to no research stating how a student's writing and art stages reflect the stage of cognitive development of the writer.

Writing workshop manuals written by Donald Graves (1983/2003), Lucy Calkins (1986/1994), Regie Routman (2005), and Katie Wood Ray (2004) see student's drawings accompanying the student generated text, but analyze the words instead of the art. There is little available research to help understand how pictures inspire writing or when in the writing process a student drew the picture. Currently, the most common way of incorporating the visual arts into written literacy is drawing a picture after the text is written. This post-writing artwork is typically seen as a way students celebrate their writing (Ray, 2004).

There are several articles written from a teacher-researcher point of view about the power of implementing writing-artist workshops. Elizabeth Olbrych (2001) explained that the power of her fourth-grade students' voices reminded her of the importance of using a physical image to jumpstart writing. The opportunity to create artwork before writing helped her students develop skills of description, reflection, and word choice. Kay Cowan (2001b) stated that drawing inspired word choice in a kindergarten and first grade classroom in rural Georgia: "their drawings helped them find words to tell their stories when they were composing verbally or in writing" (p. 17). The ability to visualize an idea to write enhances the ability to communicate

according to Ernst (2001), “When drawing is part of literacy, it helps us know our subjects and our thinking and encourages us to dig in” (p. 3).

Visualization is strongly connected to increasing reading comprehension. Keene and Zimmerman (1997) in *Mosaic of Thought* state, “Proficient readers spontaneously and purposefully create mental images while and after they read” (p. 141). “Students create vivid mental images of ideas and concepts that help them remember information longer” (Buehl, 2001, p. 61). Furthermore, research reveals students who create visual images, before, during, and/or after reading increase their comprehension (Douville, 1999; Fillmer & Parkay, 1990). Teachers rely on visualization to increase comprehension. The educational field lacks an in-depth systematic case study focusing on how visualization embedded in the writing process may be used to help struggling learners in kindergarten through fourth grade. There is evidence linking visualization and reading. However, research connecting visualization and the writing process is lacking and needed.

Limitations of the Study

Qualitative research captures rich details of the case study’s subject which is a summer school writing program in a Midwestern school district. The study’s context has inherent limitations. By identifying the limitations from its inception, they can serve as a stepping stone for further research and not provide a false perspective. I selected a case study approach to understand the specific in depth, rather than generalize (Merriam, 1998). Limitations of this study may include: 1) duration of the study; 2) small sample size; 3) student choice; 4) collection of artifacts; 5) teachers’ right to instructional decision making; and 6) researcher’s predisposition.

The length of the study is one of its shortcomings. The context and timeframe of the case study does not mirror the traditional duration of the school year. Much will be accomplished in the 3 ½ week summer school period, but the ability to continue to develop the concepts and repeated visualization/writing links is limited. Due to the study’s narrow time span, any changes to the students’ writing levels and art stages may not be representative of any changes which may occur using the same techniques over the traditional school year. A writing and art base line will be established and the results of a final writing and art assessment will be discussed in Chapter 4.

As with many qualitative studies, the sample size of this research is small. The 19 students selected for analysis offer diversity in demographics. Most students were selected by their classroom teacher to attend summer school based on academic need. Struggling learners are those who are not on grade-level in reading and math as determined by letter grades and district test scores. Struggling students also include English- language learners (ELL), students at-risk determined by low socioeconomic status or high mobility, and students receiving special education. As a result of those selected to attend summer school, the percentage of students categorized as struggling learners will be higher in this study than the representative population. Although this case study may have a small research sample, I purposefully selected the study's context to provided rich opportunities for data collection. The summer school writing program's complete focus on writing provided more opportunities to observe visualization embedded in the writing progress and gain a deeper understanding of how these practices and methods of instruction may help struggling learners.

The summer school program was divided into four camps. Writing was one of the four camps. Other camps included technology and writing, math and science, and drama and music (see Appendix A1). Parents completed the summer school forms for their child and requested one of these four camps (see Appendix A2) after discussing the options with the student's teacher. However, the intent of the summer school program was to allow students choice in their learning. The participants in the writing camp may want to be there because they enjoy writing and parents respected their choice, or the parents felt their child needed extra assistance in writing based on their child's abilities.

Collection of artifacts at times was limited because the media used was not always conducive to duplication. The color yellow does not duplicate well, and I arranged for darker shades of yellow to be available for the students when coloring. Using a digital camera to capture images provided another option for duplicating the students' work.

The teachers in the study were not trained to embed visualization in the writing process prior to being selected to teach for the summer school writing program. Some teachers were assigned to the summer writing program despite a desire to teach another summer program. I respected the teachers' instructional decisions. At times respecting the instructional decisions were contrary to the stated purpose of this research. More details about my relationship with the teachers and the results of their decisions will be discussed in Chapters 3 and 5 respectively.

I decided to act as a participant-observer in this study. This was the most suitable role for gathering data given the context of the summer school writing program. I explain the rationale behind this decision in the Role of the Researcher section of Chapter 3. My years as a classroom teacher have helped shape my views in using visualization embedded in the writing process. Eisner (1991) and Patton (1990) both assert a researcher's ability to be sensitive to the data effects the credibility of the research. My professional experience as a classroom teacher and my personal experience during the National Board Certification process shaped a theoretical sensitivity to the, "subtleties of meaning of data . . . [It] refers to the attribute of having insight, the ability to give meaning to data, the capacity to understand, and capability to separate the pertinent from that which isn't" (Strauss and Corbin, 1990, p. 42).

These limitations are relevant to the context of this qualitative case study. It is for future researchers to explore whether comparable research environments will provide a similar understanding of visualization embedded in the writing process in a summer school writing program for struggling learners in kindergarten through fourth grades.

Definition of Terms

The following terms are defined as they relate to the context of this case study:

1. **Egocentrism:** A central theme in Piaget's (1926) Theory of Intelligence. It refers to a child's awareness of him or herself and how that awareness is expressed. The degree to which a child exhibits an egocentric focus indicates into which of Piaget and Inhelder's (1969/2000) four cognitive stages he or she can be categorized.
2. **Developmental cognitive thought process:** A student's ability to express his/her thoughts which can be categorized into Piaget and Inhelder's (1969/2000) four cognitive stages: Sensorimotor, Preoperational, Concrete, and Formal.
3. **Field experiences:** Events where teachers led their students to activities in the local community to create experiences, provide schema, and form a visual environment.
4. **Intermediate writing camp:** Refers to the students in grades second through fourth who attend the summer writing camp for struggling learners sponsored by a Midwestern district.

5. **Art/writing journals:** A premade book with three fourths of the page blank for drawing and the bottom fourth, lined for writing. They are used by students to record observations from field experiences as well as personal entries. Writing ideas for the final writing and art piece came from the students' journals.
6. **Journal writing:** The act of writing thoughts, observations, memories, and emotions in a journal, day book, or notebook as a way of rehearsing (Calkins, 1986/1994; Graves, 1983/2003).
7. **Literacy:** The ability of an individual to read, write, listen, speak, view, or visually represent their thoughts and ideas by communicating, understanding, and interpreting both print and non-print media (Hancock, 2007).
8. **Mental imagery:** The mind's ability to create images or the patterns produced by the eye and brain (Broudy, 1987).
9. **Mini-lesson:** "Is our forum for making a suggestion to the whole class- raising a concern, exploring an issue, modeling a technique, reinforcing a strategy" (Calkins, 1986/1994, p. 193).
10. **Multimodality:** The various ways one makes meaning through drama, art, singing, images, or computer games (Siegel, 2006).
11. **Primary writing camp:** Refers to the students in kindergarten and first grade who attend the summer writing camp for struggling learners sponsored by a Midwestern district.
12. **Semiotic meaning construction:** Experiences where students construct and translate meaning across sign systems (Cowan & Albers, 2006).
13. **Semiotics:** Knowledge of and facility with communications systems including art, language, math, drama, and dance (Cowan & Albers, 2006).
14. **Spatial Relationship:** The degree to which students place drawn objects in relation to each other with respect to their location, orientation, and scale (Piaget & Inhelder, 1969/2000, Lowenfeld & Brittain, 1975).
15. **Summer writing camp:** The 3 ½ weeks of writing instruction for struggling learners sponsored by a Midwestern district. It is the context of this case study.
16. **Transmediation:** Recasting meaning from written language to another sign system (Cowan & Albers, 2006).

17. **Visualization:** The ability to create a mental image and draw the image before writing (Douville, 1999).
18. **Visual arts:** Art forms that are referred to as visual such as drawing, painting, photography, and sculpting (McDonald & Fisher, 2006).
19. **Visual literacy:** “The ability to understand (read) and use (write) images and to think and learn in terms of images, i.e., to think visually” (Hortin, 1983, p. 99).
20. **Writing process:** Taking a piece of writing through the writing stages: prewriting, drafting, revising, editing, and publishing (Graves, 1983/2003). In this case study, various stages of the writing process were modeled by teachers and implemented by students.
21. **Writing workshop:** A devoted allotment of time and space where children practice writing, take a piece through the writing process, and learn from mini-lessons and conferences with an instructor. This experience is “. . . simply a time when children get to try their hands at making written language work—at generating text—all on their own” (Ray, 2004). In this case study it refers to the time spent in the classroom where teachers taught mini-lessons and counseled with students about their pieces, and when students collaborated with each other about their work. It is the community of writers formed by the participants of the summer writing camp. Students had the opportunity to take one piece of writing through the writing process (Graves, 1983/2003).

Organization of the Study

Chapter 1 introduces the case study by providing a background of relevant issues and information. It develops these issues, identifies the need to conduct the research, and states the overarching research question and sub-questions which guided this research. It is organized into the following sections: teacher’s perspective, overview of the issues, statement of the problem, purpose of the study, research questions, significance of the study, limitations of the study, definition of terms, and organization of the study.

Chapter 2 presents a broad theoretical framework highlighting theories and research pertaining to cognitive development, sociolinguistic theory, theory of multiple intelligences, emerging theory of visual literacy, developmental stages in art, and brain research which framed

the context of the study. Weaving these theories together demonstrates how they provide the necessary theoretical framework for this qualitative case study.

Chapter 3 explains the methodology of the study including how rich data were collected and analyzed to gain a deeper understanding of how visualization embedded in the writing process may help struggling learners in kindergarten through fourth grade. It includes a detailed description of a pilot exploration which provided the framework of the qualitative case study. I define my role as a researcher, provide a vivid description of the context of the study, explain the data collection and analysis processes, and discuss trustworthiness.

Chapter 4 presents a detailed analysis of the student art/writing samples collected during the case study. I divide the chapter into sections which correspond to each of the field experiences. I provide rich details of a representative group of students' work and weave observations of mini-lessons and comments from other student participants to describe the rich visual and literacy environments of the summer writing camp.

Chapter 5 is an extension of the analysis in Chapter 4, but it takes a holistic approach to the summer writing camp. In this chapter, I analyze artistic, writing, and cognitive levels for all selected participants to gain a greater understanding of how visualization embedded in the writing process may help struggling learners. I also incorporate a discussion of the codes which were revealed in the course of analysis of interview, mini-lesson, and fieldnote transcriptions.

Chapter 6 presents the theories and research in Chapter 2 overlaid with the analysis of the collected data in Chapters 4 and 5. I discuss the research questions and frame them in the context of the results of the case study, address areas for future research, and discuss implications for the practicing classroom teacher.

CHAPTER 2 - Review of Literature

Before examining the role of visualization in the writing process, we must understand its context. Literature exists concerning elementary-aged students' cognitive development growth, learning styles, writing abilities, and drawing abilities. This chapter reviews literature from the fields of learning and cognitive theories. This theoretical portion of the chapter is organized in the following sections: 1) theory of cognitive development; 2) sociolinguistic learning theory; 3) theory of multiple intelligences; 4) emerging theory of visual literacy; and 5) developmental stages in art. Following the theoretical portion is a discussion of research related to this qualitative case study from the following areas: 1) brain research; 2) writing workshop; 3) visual literacy; and 4) literacy and art.

Theoretical Perspectives

This study's framework incorporates several learning theories. Writing is a complex act drawing from cognitive development, sociolinguistic, multiple intelligence, and art development theories. The specific methodology of this qualitative case study, described in Chapter 3, is based on an understanding of these theoretical perspectives.

Several educational philosophers believe teaching should be student centered and meaningful. In "My Pedagogic Creed," John Dewey (1897) articulated, "only true education comes through the stimulation of the child's powers by the demands of the social situations in which he finds himself" (p. 77). The case study I conducted explored the various powers of writing, visualization, and drawing to create a student-centered, purposeful learning experience.

Theory of Cognitive Development

Jean Piaget (Piaget & Inhelder, 1969/2000), a developmentalist, described children according to the development of their behavior patterns. He made contributions to the educational field through extensive research on how children progress through different cognitive stages and he noted four general stages of development which contribute to the child's

cognitive ability: Sensorimotor, Preoperational, Concrete-Operational, and Formal-Operational. Jean Piaget's (Piaget & Inhelder, 1969/2000) theory of cognitive development serves as the main theoretical framework because elementary age students are at the center of the study.

The first stage is the Sensorimotor Stage (birth to about age 2). It is the beginning of comprehension, thinking, and making sense of one's environment. The stage is characterized by six sub-stages: imitation, circular reactions, time reactions, the object concept, the causality concept and the space concept (Brainerd, 1978). The child moves and interacts with objects using his senses. As the child manipulates an object, he develops schemas, or a mental representation (Cohen, 2002).

The second stage is the Preoperational Stage (from about ages 2 to 7) and indicates the precursor to mental operations. Unlike the other stages, this stage is defined in terms of the lack of certain abilities (Brainerd, 1978) and is divided into two categories: preconceptual (2-4 years) and intuitive (4-7 years) (Cohen, 2002). In this stage, operation originates in action and in an organized manner. Here the child uses speech and other activities such as drawing and playing by pretending to develop language and communication skills (Piaget & Inhelder, 1969/2000).

The third and most pertinent stage to this qualitative case study is the Concrete-Operational Stage (from about ages 7 to 11). In this stage, children work with concrete and tangible information to form an operation, categorized as either logico-arithmetic or spatial operations (Brainerd, 1978). At this point, the child can think in abstract terms and has the ability to generalize knowledge from previous experiences (Piaget & Inhelder, 1969/2000).

The Formal-Operational Stage (from about ages 12 to 15) is last in the cognitive development continuum. The child uses deductive reasoning to make sense of something he or she previously encountered and begins to think in a scientific, inductive, or abstract manner in order to comprehend information (Brainerd, 1978). This requires the child to form higher-level cognitive thought processes and allows the child to think about events which might occur using his or her prior knowledge and experiences (Cohen, 2002).

These stages help the educator understand the child's developmental cognitive thought processes. They are not finite stages, but act as developmental guides. The ages assigned to each stage are not restrictive because children move through stages when developmentally ready (Piaget & Inhelder, 1969/2000). Arthur Efland (2002) asserted that Piaget never claimed children move concretely from stage to stage; rather, they gradually progress. These vague boundaries

give educators a guideline of what to expect from their students. This qualitative case study is primarily concerned with the Preoperational (from ages 3 to 7) and Concrete-Operational (from ages 7 to 11) stages (Efland, 2002).

Within the Concrete-Operational stage is a category known as spatial operations. Piaget (Piaget & Inhelder 1969/2000) described two sub-stages of development within spatial operations. The first involved the child grasping the concept and relation of one object and the second is the child's ability to locate an object in space relative to another object (Brainerd, 1978). Spatial development, within the Concrete-Operational stage of cognitive development, is necessary to understand the drawing in the writer's workshop because creating a drawing may encourage a greater understanding of the student's writing idea.

Piaget also observed the development of imagery and drawing in his studies. The ability to draw or make a graphic image usually does not appear before age 2 (Piaget & Inhelder 1969/2000). Drawing is a function which occurs between play and the ability to form mental images. Most drawings are representations of what the child sees. These drawings are depicted realistically (Piaget & Inhelder, 1969/2000). The ability to make a mental image forms because of a child's experiences and manipulation of objects. To make an image, a visual becomes an internalized imitation (Piaget & Inhelder, 1969/2000). Mental images fall into two broad categories: reproductive images and anticipatory images. Drawing and mental images are developed in the Preoperational stage and refined in the Concrete-Operational stage.

Although educators and psychologists do not agree on Piaget's developmental theories, his contributions to the educational field are noteworthy. His theory of cognitive development promotes using concrete examples in the classroom to increase students' ability to construct meaning (Piaget & Inhelder, 1969/2000). Piaget's theory served as a framework to design writing workshop lesson plans which used visualization as a technique to include tangible examples for students in their various stages of cognitive development.

Sociolinguistic Theory

A second theoretical perspective of learning and language development is Lev Vygotsky's (1978, 1986) sociolinguistic theory. Vygotsky (1978) was a pioneer in the field of psychological thought in the early part of the twentieth century. A large portion of his work, and the subsequent efforts of his colleagues and students, has general implications on the study of

learning and education. These Vygotskians developed and refined a theory, with respect to learning, which had not been considered before. Vygotsky concentrated on how a child interacts with his or her parents, siblings, and peers (Cohen, 2002). He theorized that language is developed through social interactions (Vygotsky, 1978, 1986) with adults and peers (Efland, 2002). This theory's relevance to this study is specifically related to the methodology used in conducting this qualitative case study. The concept of the writer's workshop could be categorized as a Vygotskian method.

Vygotsky's (1978) sociolinguistic theory was revolutionary because it reversed the way educators viewed the development of a child's cognitive thought process. Unlike his forerunner Piaget, Vygotsky believed some mental development in children was a result of their own experiences. This was contrary to other contemporary theories in which the child's cognitive development was seen as occurring naturally and independently of his or her environment. Vygotsky proposed the environment to which the child is exposed is critical and directly shapes the experiences which drive the mental development. This dual approach of engaging the child and acknowledging the social context of his or her experience became commonly referred to as *social constructivism*.

Vygotsky believed that children constantly sought to acquire higher mental functions and in order to reach a higher functioning level, a child needed to acquire a number of skills, techniques, and methods. Vygotsky (1978) refers to these skills as the cultural tools of a society. Cultural tools in Vygotsky's (1978) world are diverse, but regardless of their form, their function remains the same (Bodrova & Leong, 2001). All cultural tools are defined as external or internal (Bodrova & Leong, 2001). External tools are those which assist students to understand concepts above their current mental processing abilities while internal tools are solely within a child. Therefore, cultural tools range from language, to shared activities, to rules commonly experienced in children's games. They may be specific to a society and/or generalized across all cultures.

The cultural tools exist to help a child progress from a shared state to an individual state of learning. In the shared state, a child can only comprehend and understand concepts, actions, and artifacts. The child relies on guidance from others with a higher degree of mental maturity in order to bridge the gap between knowledge and experience (Bodrova & Leong, 2001). As time progresses, and a child becomes more capable of functioning on the same level with their

original guide, he or she begins to transition to the individual state of learning. However, it is important to note that depending on the topic studies, a child may be in multiple places on the shared-individual state of learning continuum. Progression from an individual state of learning to a shared state is commonly referred to as *the law of the development of higher mental functions* (Vygotsky, 1978).

Cultural tools also help bridge the gap between what a child can accomplish on his or her own and what he or she can accomplish with assistance (Freedman, 1994). Vygotsky (1978) refers to this gap as the *zone of proximal development* (ZPD). The ZPD is, “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (p. 8).

The ZPD is a fundamental concept in Vygotsky’s (1978) theory, but it highlights another issue. How do educators use cultural tools to bridge the ZPD? The answer is what has commonly been called *scaffolding*. According to Bruner (1985), this occurs when educators, “arrange the environment to enable the child to reach a higher or more abstract ground from which to reflect, ground on which he is enabled to be more conscious” (p. 23). Scaffolding is how a teacher gradually facilitates a student’s transition from a shared to individual state of learning. The further towards the individual side of the learning spectrum a student lies, the greater the use of internal cultural tools. Although the term scaffolding is not Vygotsky’s, it has helped succeeding generations of researchers and educators understand a practical method to employ his techniques.

Vygotsky’s (1978) sociolinguistic theory is relevant to the context of this qualitative case study because the writing workshop is an external cultural tool which places the learning within a comfortable, social context. Through this comfortable, learning environment, students are able to act as each other’s guide through the writing process. A Vygotskian practitioner may use visualization to improve the learning process and reduce the ZPD. Freedman (1994) stated, “The ideal situation for students to learn to write is one where they are engaged in social interaction and faced with accomplishing tasks they cannot complete individually” (p. 3).

naturalus Vygotsky (1978) examined how children learn to use language as a tool to share cultural meaning as well as how using language affects the child’s learning and cognitive development. Vygotsky (1978) stressed how each child internalizes an experience contributes to the cognitive and personality development. Therefore, if all students are given the same material

to learn, each student may have a different experience depending on his or her background and learning style. Through visualization, teachers may provide an external cultural tool to scaffold the learning experience in an effort to bridge the ZPD.

The role of cognitive development and artistic ability needs to be further investigated to fully understand its impact on education. Linqvist (2001) remarks:

Vygotsky argues that children's creativity in its original form is syncretistic creativity, which means that the individual arts have yet to be separated and specialized. Children do not differentiate between poetry and prose, narration and drama. Children draw pictures and tell a story at the same time; they act a role and create their lines as they go along. Children rarely spend a long time completing each creation, but produce something in an instant, focusing all their emotions on what they are doing at that time. (p. 8)

Theory of Multiple Intelligences

Teachers must keep abreast on learning theories to maximize lesson design. Over the past decades, there has been a shift in thinking regarding how intelligence relates to the education field. This shift is due to psychologist Howard Gardner's (1983/2004) multiple intelligence theory (MI), which challenged traditional views of intelligence. "Multiple intelligence theory proposes that it is more fruitful to describe an individual's cognitive ability in terms of several relatively independent but interacting cognitive capacities rather than in terms of 'general' intelligence," (Moran, Kornhaber, & Gardner, 2006, p. 23).

Franz Joseph Gall (1835) claimed that different parts of the brain mediate different functions. Building upon Gall's phrenology theory, Gardner observed that people's cognitive abilities corresponded with the development of different parts of their brain. This provided the impetus for Gardner's theory of MI. Gardner's MI theory is included in the design and framework of this qualitative case study. In Gardner's *Frames of Mind* (1983/2004) he identified seven intelligences humans possess:

- Linguistic intelligence involves the mastery of language. It refers to the learner's ability to learn through spoken and written forms of communication.
- Musical intelligence encompasses the ability to recognize and internalize musical concepts such as tone, pitch, rhythm, melody, and harmony.
- Logical-mathematical intelligence is the ability to reason and think logically.
- Spatial intelligence is generally defined as one's ability to comprehend through manipulation and orientation of three-dimensional objects.
- Bodily-kinesthetic intelligence is the ability to use one's mind to control bodily movements.
- Interpersonal intelligence requires the learner to be personable and communicate effectively with others.
- Intrapersonal intelligence occurs when the learner uses self reflection to monitor comprehension of concepts and emotions (Gardner, 1983/2004).

His extensive research with a diverse population at Harvard Project Zero produced the original seven intelligences: linguistic, musical, logical-mathematical, bodily-kinesthetic, inter and intra personal intelligence (Gardner, 1983/2004). Recently, Gardner added two more intelligences to the original seven: naturalistic and existential intelligences. Gardner offered an alternative view to identify intelligence without short answer tests. Instead of believing a person's intelligence lies in the power of an empirical, intelligence quotient test to predict success in school, Gardner (1983/2004) suggests accurately identifying the cognitive ability of a person. Gardner (1983/2004) asserted one needs to evaluate the individual as a whole

Linguistic and spatial intelligences remain a focus of this qualitative case study. Linguistic intelligence is the most common type of intelligence (Gardner, 1983/2004). The child who possesses linguistic intelligence finds power in words when exercising his intelligence. "Future writers are those individuals in whom the linguistic intelligence has flowered through work and, perhaps as well, through the luck of the genetic draw" (Gardner, 1983/2004, p. 84). A learner who learns linguistically savors language. Words have meaning and linguists stress finding the words to express the right thoughts or emotions. Gardner (1983/2004) noted that the poet appreciates language and its complex intricacies because the poet possesses, "A sensitivity to the meaning of words, whereby an individual appreciates the subtle shades of differences

between spilling ink ‘intentionally,’ ‘deliberately,’ or ‘on purpose’” (Gardner, 1983/2004, p. 77). Everyone has the ability to acquire language, but the child considered to have linguistic intelligence chooses language, either spoken or written, to communicate and learn.

Spatial intelligence is important to this study because it involves one’s ability to create and manipulate mental images (Gardner, 1983/2004). Spatial intelligence allows individuals to identify identical items, rotate them, and comprehend verbal directions or, “[to] receive the visual world accurately” (Gardner, 1983/2004, p. 173). Spatial intelligence stems from the ability to observe the visual world. Mental models or images play a role in problem solving and are helpful tools in thinking (Gardner, 1983/2004). Gardner (1983/2004) notes:

In the view of many, spatial intelligence is the “other intelligence” – the one that should be arrayed against, and be considered equal importance to, “linguistic intelligence.”

Dualists speak of two systems of representation—a verbal code and an imagistic code: localizers place the linguistic code in the left hemisphere, the spatial code in the right hemisphere. (p. 177)

Spatial intelligence requires many skills and is even thought to be as important as linguistic intelligence.

Spatial intelligence is acquired in stages. Piaget viewed spatial intelligence as part of one’s logical growth. He studied the development of spatial cognition and believed spatial intelligence was, “part and parcel of the general portrait of logical growth” (Gardner, 1983/2004, p. 178). Corresponding with Piaget’s learning stages, Gardner found, “At the end of the sensory-motor stage of early childhood, youngsters become capable of mental imagery” (Gardner, 1983/2004, p. 179). A child can create mental images of an object or a place without actually touching it or physically being present because of his or her ability to recall images from a previous time. Regardless of how developed a child’s spatial intelligence appears, visualizing then drawing, followed by writing, reinforces the importance of spatial intelligence to the writing process.

Although, “MI was originally developed as an explanation of how the mind works—not as an education policy . . . ,” teachers and administrators value the importance of multiple intelligences when designing curriculum for all learners (Moran, Kornhaber, & Gardner, 2006, p. 23). MI assists teachers to meet the needs of students by shaping and designing lessons to best fit their learning styles. Teachers may reach every student by recognizing that the students may learn in different ways. Gardner’s MI theory changed the way educators view intelligence from asking the question, “How smart are you?” to, “How are you smart?” (Aborn, 2006).

Emerging Theory of Visual Literacy

John Debes first coined the term “visual literacy” in 1969 (Fransecky & Debes, 1972). Debes (1969) believed visual literacy referred to seeing (viewing) and simultaneously having other sensory experiences. Later Ausburn and Ausburn (1978) suggested, “Visual literacy can be defined as a group of skills which enable an individual to understand and use visual for intentionally communicating with others” (p. 291). Hortin’s (1983) definition of visual literacy is the definition of visual literacy for this case study. Hortin (1983) stated, “Visual literacy is the ability to understand (read) and use (write) images and to think and learn in terms of images, i.e., to think visually” (p. 99).

Teachers implement any strategy, including visualization, to boost struggling readers and increase comprehension. Visualization has roots in the arts and literacy. Teachers frequently have their students visualize the text as they read to make meaning of the words and help increase reading comprehension. NCTE and IRA state that educators should, “challenge students to analyze critically the texts they view and to integrate their visual knowledge with their knowledge of other forms of literacy” (NCTE & IRA, 1996, p. 6). Consequently, there has been interest for the past decade in the role of visualization with regards to literacy.

The development of Dual Coding Theory (DCT) is somewhat new to the literacy field, but its roots can be traced to the 1960’s cognitive revolution. DCT incorporates verbal and nonverbal cognition into the act of writing (Sadoski & Paivio, 2001). The nonverbal characteristic refers to mental imagery while the verbal portion refers to linguistics. Sadoski and Paivio (2001) suggested writers possess mental images of what they want to write. For example, when writing a thank you note, writers use their mental imagery to recall the format of the thank you note and details such as a salutation. Imagery can also be utilized in the writing process

through dream imagery, which can produce inspiration for and organization of writing. A famous historical example of dream imagery can be found not in the realm of writing or the arts, but rather in science. D.I. Mendeleev, a renowned chemist, went to bed after struggling to find a way to organize the known elements based on their atomic weight. He dreamt about a table with the elements laid out and the result became what is known today as the Periodic Table of Elements (Sadoski & Paivio, 2001). As this shows, images from the mind can function as ideas about which to write.

Visual literacy appears different in reading than writing. In reading, students are frequently encouraged to read then periodically stop to visualize the text. Linda Zeigler (2005) stated, “This activity helps students become brain active and responsible, creating mental images from the informational text and describing these images to peers” (p. 42). Teaching students to visualize requires practice and modeling. “Students tend to not realize the power of visualization nor do they understand how to create detailed mental images in response to texts” (Zeigler, 2005, p. 40). Zeigler described six reasons why using visualization is an effective strategy to increase understanding. For this qualitative case study, the most relevant reasons for utilizing visualization in the writing process are listed (Zeigler, 2005):

- Mental imagery helps students remember important information.
- Teachers can stimulate students to connect new information to their prior knowledge.
- When students connect the content vocabulary to the targeted topic, spatial memory is fostered.
- Activities that encourage metacognition can help students consider what knowledge they have and what information still needs to be clarified so that clear images can be formed. (p. 44)

Zeigler’s reasons for using visualization to increase understanding support using visualization for reading comprehension. Laura Staal (2000) noted several visualization strategies to help readers. Staal applies her story faces, which are similar to a story map but with different shapes and labels, as an example of one of these visualization strategies. Examples of visualization strategies include but are not limited to cognitive mapping (Boyle, 1996), critical thinking maps (Idol, 1987a), semantic feature analysis (Boss, Anders, Filip & Jaffe, 1989), semantic mapping (Englert & Miarage, 1991), story mapping (Idol, 1987b), and visual imagery

(Carnine & Kidner, 1985). Many of these strategies benefit struggling readers and skilled readers. If visualization can help skilled and unskilled readers improve reading skills, such as comprehension and vocabulary, then visualization may help all learners in the writing process. If visualization helps reading comprehension, it is plausible visualization may help with writing. In this research, mental imagery is one visualization strategy writers will employ in the writing process.

Artistic Developmental Stages

Arnheim (1954), Lowenfeld and Brittain (1975), and Parsons (1987) are a few of the contributors to the field of artistic development. Like Piaget's cognitive development stages, Lowenfeld and Brittain (1975) assert children draw in distinct stages. Similar to Piaget's stages of development, it is difficult to tell when a child's developmental stage in art begins and ends. "Growth in art is continuous and stages are midpoints in the course of development" (Lowenfeld and Brittain, 1975, p. 47). Not every child will move from one stage to the next at the same time. These stages are universal and do not depend on the child's culture, ethnicity, race, or gender. Lowenfeld and Brittain (1975) suggested that there are five stages of art development:

- The first stage, referred to as the Scribbling Stage, in which a child between ages two and four makes random marks on the paper.
- The next stage is known as the Preschematic Stage. This stage usually starts around four years of age and lasts until about age seven. It is this stage where the child makes his drawing look representational. "These first representational attempts provide an opportunity for adults to converse with children about their drawings and usually children of this age are eager to explain and show what they have done without self-consciousness" (Lowenfeld & Brittain, 1975, p. 48).
- At about age seven the child enters the Schematic Stage and remains there until about age nine. In the Schematic Stage, the child's drawings show details which symbolize aspects of everyday life. "It is at this time that one interesting characteristic of children's drawings appears: the child arranges the objects he is portraying in a straight line across the bottom of his page" (Lowenfeld & Brittain, 1975, p. 48).
- Around age nine the child enters the Stage of Dawning Realism. This stage usually lasts until about age 12. These drawings are much more detailed than previous

drawings. Often the drawings will symbolize the child's environment instead of representing objects. "Not only is he beginning to draw smaller, but he is no longer eager to show his drawings and explain them; in fact he hides them from adult observation" (Lowenfeld & Brittain, 1975 p. 49).

- The last stage is known as the Pseudo-naturalistic Stage, or the stage of Reasoning, and begins around age 11 or 12. The drawings depict great detail and other aspects of visual arts such as gradations of color.

Due to the age of the students who participated in this qualitative case study, the Preschematic, Schematic, and Dawning Realism stages were the most relevant. Lowenfeld and Brittain (1975) noted that these developmental stages were fairly consistent with all children and added that what the child drew differed only due to his or her environment. "Drawings give us a good indication of the child's growth, moving from an egocentric point of view to a gradual awareness of the self as part of a larger environment" (Lowenfeld & Brittain, 1975, p. 52). For example, Piaget conducted an experiment where a child watched water poured from a short beaker to a tall one. The child thought he had been tricked because the water level appeared higher in the taller, narrower beaker. When the water was poured back into the short beaker, the child again thought a trick had occurred because he thought the water level diminished. It is not until after the age of six or seven that the child knows the volume of water does not change. Piaget and Inhelder (1967) discovered children eight and older would draw the water level being constantly horizontal after asked to draw a representation of what they saw—the level of water in a container held at different angles.

While Piaget and Inhelder's (1969/2000) stages depict the child's cognitive development, and Lowenfeld and Brittain (1975) depict the child's art development stages, the two theories do not directly correspond (Efland, 2002). For example, a child in the Preoperational stage of cognitive development cannot be directly labeled in any art development stage solely on the basis of this cognitive classification. Instead of a direct relationship between cognitive and art development stages, Lowenfeld and Brittain (1975) claimed it was possible to look at the progression of a child's artwork to provide greater understanding of his or her whole development. It is promising to look at children's stages of art development as a way of

classifying ideas and representing the environment while understanding the child's intellectual development.

Related Research

The next sections review research related to the fields of brain literacy, visual literacy, the writer's workshop, and literacy and the arts. The research findings begin broadly then narrow towards the end of Chapter 2. Reflecting on previous research helped shape the framework of the methodology for this qualitative case study.

Brain Research

The brain is a complex organ which powers all human thought and understanding. Unfortunately, the intricacies and workings of the human brain are only partially understood, but we understand the importance of the brain and its relationship to education. More importantly, for the context of this study, we understand the brain plays a role in literacy and visualization. A brief examination of the connection between the brain, literacy, and visualization lays the foundation for greater knowledge of both literacy and visualization themselves.

Brain and Literacy

The brain plays a role in literacy development. Scientists once thought the left hemisphere controlled language and logic functions while the right hemisphere controlled visual images and emotions. More recently this has been challenged (Brueggemann, 1989). It is now thought the left side controls the linguistic development of the child. However, even if the left hemisphere were removed for medical purposes within the first half of the child's life, the right hemisphere would compensate. Language would then develop in the right hemisphere using visual and spatial operations normally associated with the right brain hemisphere (Gardner, 1983/2004).

Researchers studied both sides of the brain in regards to literacy and found that the "left brain suppresses or represses right-brain language functions in writing. Secondly, although the right brain appears to know and understand language, it often cannot 'verbalize' or 'express' it" (Brueggemann, 1989, p. 129). Brueggemann (1989) also admitted little research had been conducted concerning the direct correlation of writing to either hemisphere in an undamaged

brain. Therefore, it is not unreasonable to consider that both hemispheres are needed for language functions and, by extension, necessary for writing.

The act of visualizing uses both sides of the brain. The ability to generate an image is dependent on the left as well as the right hemisphere (Posner & Raichle, 1994). As Jensen (2001) said, “Of all the effects on cognition, visual arts seem to be strongest when used as a tool for academic learning” (p. 58). There are several studies showing strong links between visual learning and reading (Eisner, 1998) but there are limited studies concerning how visual arts may improve writing.

The brain system plays a role in how students learn. The writing brain relies on cognition, language, and the ability to write (Berninger et al., 2002). Generating ideas is one of the most important components of the writing system, and it draws on all language resources such as listening, talking, reading, and writing. When planning, the brain needs working memory but, the memory has space limitations (Kabrach & McCutchen, 1996). A working memory has a finite amount space so when children are working and writing, they are susceptible to interruptions. These interruptions affect the child’s timing and coordination, and both are needed in writing (Berninger, 1999). The writing brain relies on short-term, long-term, and working memory to solve problems. This is important to understand because writing requires problem solving (Scardamalia & Bereiter, 1986). The problem solving space of the brain is hard at work during writing and may easily become overloaded. Having students draw before they write, then refer back to the illustration, may help reduce some of the working memory requirements which thereby allows students to concentrate on the act of composing (Berringer, 1999). The drawing is present to assist the students to remember the topic about which he or she plans to write.

Brain and Visualization

Over the course of multiple studies regarding drawing and its relationship to mental activity Sheridan (1990) showed that drawing is a substantive mental activity. Based on her observations, she developed The Scribble Hypothesis which is a series of four hypotheses outlining the purpose behind young children’s scribbling. Her third and fourth hypotheses are particularly relevant. The third hypothesis proposes that young children’s scribbles help them practice and organize shapes or patterns of thought. This suggests that drawing and creating some visual representation of the child’s emotions, experiences, and observed world are important in the development of cognitive function. Her fourth hypothesis conjectures that very

young children's scribbling encourages an affinity for drawing, which prepares the mind for literacy. Jenson (2001) claimed drawing is unique because it makes the learner visualize and plan actions. These observations again reinforce the notion that drawing has positive effects on literacy.

The idea that incorporating arts benefits the student and impacts their learning is not new to teachers. Dewey (1934) noted that thinking in art improved thinking in other disciplines. Students with memory problems profit from art integration and, "in fact drawing arts can help establish, diagnose, and retrain memory problems in learners" (Jensen, 2001, p. 59). Arts integration, according to Cornett (2003), is grounded in brain research and Gardner's (1983/2004) MI. In a study conducted by Kindler (2003), she found I.Q. scores increased consistently over the past couple of decades, and almost the entire increase was attributed to spatial and visual areas. She also discovered that art, which involved kinetic dimensions, normally activates dormant areas of the brain. These observations reinforce the premise that inclusion of visual imagery which relies on movement and gesture may benefit students' cognitive development.

Perhaps if students drew before they wrote the visualization of their story might increase their writing ability. One study (Davidson, 1996) of a third grade class found that drawing complemented the writing and thinking process when using the following method. The students read, then drew, thought, then read, and then drew again. Results showed that each of the 14 cases examined demonstrated an improvement in writing using this method (Davidson, 1996). The students reported that drawing helped clarify ideas which improved their comprehension. The educational field lacks a strong study understanding if a potential link between art and writing is perceived. Kindler (2003) explicitly states, ". . . active involvement of the art education community in such inequity could make it more useful to our field" (p. 295). The question of whether visualization can positively assist in the writing process still needs to be addressed.

Art and Cognitive Research

A common theme missing from available research is the understanding of the connection between mental processes associated with the arts and literacy. According to Lowenfeld and Brittain (1975), art is developmental and Lowenfeld built on the Stage Theory in 1947 to develop

his stages of artistic development. Piaget and Inhelder's (1969/2000) stages of learning are developmental as well.

There is some research discerning the connection between the development of writing and drawing in studies regarding emergent literacy (Bissex, 1980; Dyson, 1986). Dyson asserted that children around age 2 begin to use drawing more for storytelling and play. As the students develop, they draw and write. Students draw and write simultaneously, and they begin to 'symbol weave' as they start to 'write' stories (Dyson, 1986). Karl Bühler (1930) asserted that a student's drawing reflects their conceptual knowledge of language. He observed that the more unordered a student's drawing appears, the less control he or she has of language. Howard Gardner (1980) that asserted drawing is the only media detailed enough for expression for students who have not yet mastered writing. He claimed students' writing abilities were not sophisticated enough to offset their ability to express themselves graphically until age 9 or 10.

Goodenough (1926) believed drawing was language for children. She understood drawing to be a cognitive expression which served a function other than expression of artistic ability. Goodenough (1926) conducted a visual perception exercise where she placed a skewer through an apple and had students draw their observations. She found younger students drew an uninterrupted representation of the skewer despite not being able to see the portion which passed through the apple. Slightly older students shifted towards representing the skewer passing through the apple in a two-dimensional manner. She observed only the oldest students attempted to display the skewer passing through the apple in a three-dimensional manner showing perspective. Goodenough's (1926) results indicated, "Given the idea, the nature of the drawing was no longer dependent upon the image immediately present" (p. 73). Her research illustrated that as students mature, so do their drawing abilities. Student concepts of objects become more abstract as their experiences with the objects increase.

As the student matures, he or she struggles with drawing three-dimensional objects on a two-dimensional medium. Arnheim (1969), acknowledged it was difficult for the child to represent what he or she saw as he or she struggled. They became displeased with their basic drawing abilities and tried to find other complex manners of drawing, but as students' mature, they begin to experiment with artistic methods to represent objects in three dimensions. This skill is often enhanced, "empirically by trial and error, or by noting photographs and pictures" (Harris, 1963, p. 203).

Andrzejczak, Trainin, and Poldberg (2005) sought to determine how students create complex cognitive meaning in their art and how the meaning leads to written expression. Their work combined observations of two students with student and parent interviews. The researchers developed an emergent coding scheme which identified four major themes. These themes illustrated the levels of art involvement in the writing process. The themes ranged from art serving as the initial motivation to writing to the use of art as the basis for writing. Andrzejczak, Trainin, and Poldberg (2005) found these themes were similar to those utilized by Olshansky (1994), and when followed, were found to maximize cognitive engagement. While Olshansky (1994) developed a method to integrate art into the writing process, Andrzejczak, Trainin, and Poldberg (2005) evaluated the manner in which students utilized art itself. In neither case was art's influence on writing examined.

Hale (1996) drew from Piaget's (Piaget & Inhelder, 1969/2000) developmental theories and Lowenfeld and Brittain's (1975) stages of artistic development. In her research, she categorized her sample population according to the levels indicated in both theories. The sample in this case included 15 first grade students from an elementary school in Starksville, Mississippi. The primary question posed in the study was: What do the child's choices, reactions, comments, and questions reveal about cognitive skills related to literacy? She discovered a connection between cognitive developmental stage (Piaget & Inhelder, 1969/2000) and their artistic development stage (Lowenfeld & Brittain, 1975). The students in the study were classified in either Preoperational or Concrete Operational stages of cognitive development and in either Preschematic or Schematic stages of artistic development. The results of the study showed that students classified as Concrete along the cognitive scale were most likely to read chapter books and operate in the Schematic stage of artistic development. Conversely, students classified in the Preoperational stage of cognitive development were most likely to either not exhibit a literacy level capable of reading chapter books or even read at all. Of these cases, just over half of the Preoperational stage students were classified in a transitional artistic development stage between Schematic and Preschematic.

It is most interesting to note the association between the artistic stage of development and the literacy levels. Although not explicitly stated as a goal of Hale's (1996) research, the implications to this proposal are obvious. Hale (1996) referenced Galda's (1982) work, *Assuming the Spectator Stance: An Examination of the Responses of Three Young Readers*, where she

states that a child's literacy development may be determined by his or her cognitive development. She found the same to be true in most of her students.

In their work, *Creative and Mental Growth*, Lowenfeld and Brittain (1975) state if a child exhibits signs of a Preschematic artistic development, specifically, the inability to relate objects in drawings to each other, then the child cannot possibly relate letters, and, therefore, has not reached a point where he or she is ready to learn to read. Perhaps as a student's cognitive abilities develop, so does his or her awareness of the surroundings and environment, and, therefore, his or her ability to reproduce order in their lives. As Hale (1996) showed, with artistic development comes a natural increase in literary abilities.

Writing Workshop

During colonial America reading was highly regarded, especially reading of religious texts. The teaching of writing followed that of reading and was reserved for those who planned to attend college or work outside the home. Girls did not usually learn how to write. However, the gap between girls' and boys' writing abilities which began centuries ago is closing. Donald Graves' (1983/2003) book, *Writing: Teachers and Children at Work* changed how teachers implemented writing in the classroom and his ideas remain prevalent in today's teaching. Graves (1983/2003) coined the term "writing workshop."

The writing workshop consists of an uninterrupted block of time devoted to students' writing, sharing, and conferencing with each other and their teacher (Atwell, 1987). The writing workshop allows students to develop writing in a safe, comfortable learning environment where they keep journals or notebooks and live the *writerly life* by taking daily notes on observations, feelings, or stories (Calkins, 1986/1994). Students are encouraged to choose topics to write about instead of teachers assigning non-motivating writing prompts (Graves, 1983/2003). Many writing workshops begin with mini-lessons developed by the teacher and are based on notes generated from conferencing with students (Calkins, 1986/1994). Graves (1983/2003) noted that there was not enough time during the dedicated writing period to give mini-lessons to individual students during their conferencing time. Graves (1983/2003) noted that Lucy Calkins changed the writing workshop by implementing mini-lessons, which are usually taught to the whole group at the beginning of the writer's workshop. The substance of the instruction is based upon the teacher's reflection of student writing.

Literacy exists in and outside the classroom. Within the context of familial occasions, the child notices print in the form of thank you notes and grocery lists (Heath, 1983). Writing has many uses; it is a communicative tool akin to speech which members of society use to make meaning and pass information on to their children (Scribner & Cole, 1981). Authors categorize the different purposes for writing (e.g., to persuade, inform, and entertain) and researchers believe there are as many styles of writing as varied styles of oral language (Chafe & Danielewicz, 1987). Ethnographers of communication believe it is the social context in which writing is composed which determines the purpose and style of writing. Learning language depends on the social context in which it occurs and the nature and structure of the content taught (Tompkins, 2001). Epstein (1995) viewed literacy between home, school, and the community as overlapping spheres which promote literary diversity. In today's literate society, one must be able to read a bus route, pay bills, or write a science report in order to function. At the summer school writing camp, the students participated in field trips to various local sites. The kind of writing the students composed may differ depending on the context.

Before Graves' (1983/2003) book, the writing process theoretically had three phases: planning, translating, and reviewing (Flower & Hayes, 1981). Today, teachers instruct writing in five components: brainstorming, drafting, revising, editing, and publishing (Atwell, 1987). The modes of writing consist of writing aloud, shared writing, guided writing, collaborative/cooperative writing, and independent writing. The writing process should not be confused with the writing workshop. Students do not brainstorm on Monday, draft on Tuesday, revise on Wednesday, edit on Thursday, and publish on Friday (Graves, 1983/2003). The writing process describes how a writer takes a piece from start to presentation within the writing workshop (Calkins, 1986/1994). It may take a student 3 to 8 weeks to publish a piece depending on the maturity level of the writer (Graves, 1983/2003).

In order to understand the complexity of writing, we must examine writers at work. To teach writing, teachers must model the writing process. *Think alouds* help students understand how a writer thinks about an idea and writes it on paper (Emig, 1971). For example, the teacher would bring a bright colored flower into the classroom. As students look at the flower, the teacher says aloud what he or she notices about the flower and records it on chart paper. Through the *think aloud*, the teacher might say how the colors remind him or her of the colors of a sunset in Sedona, a trip he or she took with a loved one. This train of thought might spark the writer to

write a poem about the trip and give it to the loved one. During the writing workshop, there is much conversation and collaboration between writers. This interaction develops ideas and promotes oral language and is consistent with Vygotsky's (1978) sociolinguistic theory. Writers draw in their journals and these sketches give them ideas about which to write (Graves, 1983/2003). The writing workshop is alive with activity because of the interaction between students. Students experiment with pencil and paper, form letters and words, and eventually write stories (Clay, 1977). Students share these stories with peers as a way to seek ideas from each other while creating a community of writers.

Usually, the first word a student can write is his or her name. From this point, students seek to write other words. It is common for them to experiment and play with print's graphic features such as lines and shapes (Clay, 1977). As the students progress, they will write names, well-known words, and repetitive sentence structures. Throughout the school year, the child's spelling will improve and he or she will be able to write lengthier, more detailed pieces of text. Not only do the texts become longer, they become more coherent with better syntax structure (Gundlach, 1982). Most children know basic narrative text structure before they enter school because they recognize phrases like "once upon a time" and "happily ever after" (Applebee, 1978). However, not until the middle school years will events unfold with detail. The ability to know when to revise and edit occurs gradually. Calkins (1980) believed students may find it easier to abandon drafts than revise them. However, working in collaboration with others may help students with the revising and editing processes (Graves, 1983/2003).

Today, 25 years after Graves (1983/2003) and 22 years after Lucy Calkins (1986/1994) wrote their insightful books, elements from both of these eras remain. Many teachers use the writing workshop format. Teachers create mini-lessons, conduct conferences with writers, hold an author's chair for students to share, and reflect upon what makes a good writer. Recognizing the link between seeing, telling, drawing, and writing is crucial and an important part of teaching writing (Ernst, 1994).

The best teaching practices outlined in Graves' (1983/2003) and Calkins' (1986/1994) books were incorporated at the summer school writing camp where students wrote everyday and had the opportunity to take at least one piece of writing through the writing process. The community of writers established through informal discussion among peers taught students to appreciate each other's work and provide helpful feedback. Peers can be powerful teachers and

partners (Gere, 1987). The social interaction which takes place within the writing workshop supports Vygotsky's (1978) sociolinguistic learning theory. Students had the opportunity to create meaningful social experiences and enhance their literacy skills at the summer school writing camp.

Visual Literacy

There is considerable research connecting visual literacy with reading comprehension. This section reviews research regarding decoding, sight word learning, identifying vocabulary, and reading comprehension in order to help understand the history and importance of visual literacy in language arts. Understanding visual literacy and the history of its development provides the basis of the discussion of visualization in the writing process.

To better understand the relevance of visual literacy to this research, a broader discussion which addresses how students use visualization strategies to read is required. Allison Baer (2005) sought to better understand this process when she incorporated a Symbolic Reading Inventory (SRI) interview methodology with her students. Baer's students used cutouts to represent characters, feelings, and events which assisted her understanding of how the students thought about, analyzed, and interpreted stories. In the process of her study, Baer (2005) developed four coding strategies. One of the four categories, "What Was Seen" (p. 218), indicated that students felt and expressed an extensive use of their own imaginations to draw meaning and construct their own visual imagery of the texts they read. A similar, but markedly different approach utilizing a different visual genre was utilized by Leonora Macy (2004) in *A Novel Study Through Drama*. In this case study with fourth graders, Macy utilized a preliminary dramatic instructional method of "imaging and collective drawing" (p. 242) to inspire students to create images of settings. Macy (2004) found students were able to add another layer of understanding of their texts because of their emphasis on visualizing the various settings and circumstances contained therein. To Macy (2004), this understanding was due in large part to the concrete example these visual products provided. Both Baer (2005) and Macy (2004) drew on the important social interactions espoused by both Freedman (1994) and Efland (2002) in their use of small group work and open discussions. Both studies observed that students were more engaged with their readings when incorporating these highly visual, kinesthetic, and spatial approaches to literacy.

Continuing on the path of visual imagery and its relationship to reading instruction, Rosenblatt (1978) acknowledges the power of mental imagery when interacting with the text. She stated:

The capacity of the human being to evoke images of things or events not present, and even never experienced, or which may never have existed, is undoubtedly an important element in art. It is especially important in . . . speech and verbal text [and] . . . is basic to any kind of verbal communication. (p. 32)

Teachers try many strategies to increase student text comprehension. Many teachers intuitively understand that induced imagery may have an effect on the reader (Sadoski & Paivio, 2001). Pressley (1976) instructed third-grade children to construct mental images to increase story recall. After practicing with sentences, paragraphs, and stories with both a treated group and a control group, participants were asked to read a story with alternating printed and blank pages. The imagery group students were reminded regularly to form images, and the control group students were reminded to use any strategy they chose to recall information, but were not explicitly encouraged to use imagery. On a short answer test, the imagery group outperformed the control group which reported no significant growth in reading times. Induced imagery may have helped students recall information during and after reading. If a child can induce an image in his/her mind and create a representation by sketching or drawing, then will the child be more successful at recalling the story he or she wants to write?

Part of the answer to this question can be found in Linda Parson's (2006) study which documents the complexity of the students' reading experiences and their visualizations of the story world. Her efforts as a teacher-researcher working with a select group of elementary level readers were unique. She worked cooperatively with students, and her students assisted with the coding process of their own responses to reading. In the study, Parsons (2006) used memory work, group discussions, and visual protocol to encourage *transmediation* between written, spoken and symbolic representations. Visualization, in this case, utilized metaphors within the text to create mental images. The students never created any physical representation, but Parsons

(2006) indicated that visualization formed part of the perspective from which the students could view the story world.

Pressley's (1976) and Parsons' (2006) works showed that visualization in various forms may contribute to a student's ability to understand and draw meaning with a text. Therefore, students may have a difficult time comprehending texts when they do not understand the vocabulary. Those from less literacy-rich homes came to school with a smaller vocabulary than students who came from literacy-rich environment (Morrow, 1995). Morrow contended that home was the first school and parents were the first teachers (1995) and highlighted the earlier parents are involved with a child's literacy, the more powerful the effect. The Barbara Bush Foundation for Family Literacy also emphasizes a connection between literacy practices at home and the child's literacy development (Morrow, 1995).

In another study, Levin (1985) sought to increase vocabulary acquisition by having the student learn a new word using the keyword method. For instance, "learning the word *carlin*, meaning old woman, may be accomplished by using the keyword *car* and having the learner generate an image of an old woman driving a car" (Sadoski & Paivio, 2001, p. 169). Later, when asked to recall the definition of *carlin*, the student mentally retrieved the *car*'s image because it made similar sound to *carlin* and then the student recalled an image of an old woman driving a car. Levin, Johnson, Pittelman, Hayes, Levin, Shriberg, and Toms-Bronowski (1984) explored the keyword method utilizing semantic mapping with high and low ability middle school students and found both groups outperformed their counterparts. If recalling images helped readers with recalling definitions, it may also help struggling learners increase word choice when visualizing an image for a piece of writing.

Educators understand that the ability to decode unlocks many keys to fluency and comprehension. Ehri, Deffner, and Wilce (1984) instructed pre-readers in picture mnemonics to help them learn grapheme-phoneme correspondences. One group of students was shown pictures in which the letter was part of the drawing. A second group was shown pictures which did not contain the integrated letter. The third group was shown pictorial associations with the names of the pictures. The students were assessed on how well they knew the grapheme-phoneme correspondences. The results indicated that the third group performed better than any other group. Ehri et al. (1984) believed that the pictures provided images of what letters began with and formed a mental connection. If an image may help learn grapheme-phoneme

correspondences, can an image help students remember their storylines which would be signaled by an improvement of ideas and organization during the writing process?

Although there is some research concluding that pictures may detract from reading and may cause the reader to lose meaning, Arlin, Scott, and Webster (1978-1979) proposed that the use of pictures in sight word recognition is useful. In their work, one group of kindergartners was given a set of sight words with a picture, another group was given the word and the pronunciation guide, and the final group observed only the word. When asked to read only the word, the words shown with a picture produced sight word learning 80 % faster than the other groups mentioned. Sight words are difficult to read, spell, and comprehend for many young readers, but by building a mental image representation of the word, readers may remember them easier.

There is research that asserts visual literacy may help students construct meaning when reading and writing, but what about teachers who utilize visual literacy practices in their classrooms? Deborah Begoray (2001) considered this same question when she worked to understand the nature of middle-level teachers' experiences implementing visual literacy into their classroom teaching strategies. Both Begoray (2001) and the Canadian middle school-level students commented that the use of visualization in lessons positively influenced their learning. In the study, the students analyzed, criticized, and appreciated (viewed) visuals and subsequently created (represented) visual texts. This dual process, "assisted those students who struggle to say what they mean using linguistic sign systems" and "offered students more opportunities to participate in a variety of communicative arts" (p. 214).

T. Lee Williams' (2007) findings supported these statements when she explored effects of visual literacy on children in, "Reading the Painting: Exploring Visual Literacy in the Primary Grades." She showed that students gave more attention to visuals included in fiction and non-fiction books which in turn demonstrated how responsive young children are to an expanded view of literacy. However, Williams' (2007) study uncovered a previously unseen phenomenon with writing and visualization. She observed during the initial stages of the study, that students were unable to move beyond describing pictures to constructing meaning without introduction of multiple comprehension instructional strategies. This indicated that the use of visual tools was not sufficiently effective to be used as an instructional strategy. Another strategy is required to

provide the instructional context to structure learning. Could these strategies be taught in the mini-lesson portion of the writer's workshop?

Literacy and Art

The next step in analysis of existing research is examining the interplay between literacy and the arts, and most important to this qualitative case study, the connection between writing and drawing. Literacy and the arts are both broad topics and a brief introduction of some concepts is required to narrow the scope of the discussion. First, is the concept of transmediation, which is commonly defined as the recasting of meaning from the written language to other sign systems such as music, art, math, or drama (Cowan & Albers, 2006). A second important concept is *social semiotics* which Cowan and Albers (2006) define as the use of signs in any system which is culturally familiar to the author and the audience and adds meaning and clarity. We can reasonably define both literacy and arts in these terms. Literacy is nothing more than transmediation—the transition between written, spoken, and read language in a cognitive sense. In this study, drawings became the socially semiotic tool which scaffolded the writing process for the student.

An analysis of these concepts and how they relate to this qualitative case study begins with a broader view of the connection between literacy and the arts. Acting as a teacher-researcher, Kauffman (2006) sought to understand how books may ignite new ideas; she hoped students would gain a better understanding of themselves and other people of the world in the process of her research. She conducted her work with third grade students in South Africa and instructed them to create symbolic representations of how they saw themselves as readers and writers. These symbolic representations took the form of sketches which accompanied the students' own text. In each case, Kauffman (2006) found drawing helped students explore the conflict in their lives and create visual images to represent the conflict. Reflection on the texts written by each student showed drawing helped the students express themselves and the world around them. A common theme from Kauffman's students' writings was that drawing helped them understand and relate to the books and the important topics they discussed.

In another study, researchers desired to understand how students comprehend as they read, and talk about literature, and then transform, or transmediate, those understandings into art, drama, music or math (Short, Kauffman, & Kahn 2000). This work was conducted with two

multi-age fourth and fifth grade classrooms, incorporated read alouds, small group literature circles, literature logs, and student interviews. The researchers noticed that students were consistently more comfortable expressing feelings, trying new ideas, and making more connections when using these incorporated techniques. The researchers observed that group discussions were enriched when students sketched their feelings and interpretations of the text read aloud. It appeared this period of reflective analysis engaged the students in thoughtful and productive transmediation between reading, drawing, and spoken sign systems. (Short et al., 2000). These researchers focused on transmediation primarily between literature and art, drama, music, and math. The absence of focused research into transmediation involving writing invites further inquiry. In the Short et al. (2000) study, drawing was the final product of this process. Can drawing, or the visual arts, serve as the beginning for transmediation into other sign systems?

The development of writing entails many changes through experimentation. The educator must consider students as a whole to understand their needs. First, students make marks on the paper, and then they begin to draw. Researchers discovered students draw, talk, and use other symbolic forms of communication to express themselves before they can write (Graves, 1983/2003). Students understand that writing, like drawing, is a way of communicating and expressing their experiences. Students view writing as direct symbolism even though they may not know how to form letters. Instead, they represent people and objects with their illustrations (Ferreiro & Teberosky, 1982). Initially, young students' drawing is used by them as their own written language. As the drawings improve in detail, it becomes more like language, but as the students acquire language skills, they come to rely more on language to communicate instead of their drawings (Van der Host, 1950). Graves (1983/2003) and Zalusky (1983) agreed that elaborate details in students' drawings indicated equally elaborate writing capabilities. However, they observed it was not the drawing or writing which became more detailed, it was the discussion surrounding the drawings which became more elaborate. Then, students could translate these elaborate discussions into more detailed writing. Drawing is a concrete activity while language is abstract. Students rely less on drawing to communicate because they are now able to express ideas, an abstract concept, using an alternate mode of communication which is inherently abstract itself (Van der Host, 1950).

Olshansky (2006) desired to create a democratic community in which words and pictures were treated as equal and complementary languages for learning. This did not completely reverse the process of Short, Kauffman, and Kahn (2000), but it came one step closer. In her work, Olshansky (2006) used picture books as mentor texts in an attempt to teach dual language and remove the normal verbocentric bias. She created a four-step process to give equal weight to pictures and words and wove visual arts into each. During her workshops, Olshansky (2006) encouraged each student to create pictures before writing. This encouraged the transmediation from pictures to writing. Although similar in concept to this qualitative case study, the lack of any systematic examination of the process renders this work anecdotal. Olshansky's (2006) observations are not without merit: the students transformed from reluctant, to actively engaged, challenged readers and writers.

Another set of teacher-researchers, Cowan and Albers (2006), explored the potential for visual arts to develop these complex literacy practices. More specifically, they endeavored to show how visual arts engendered thinking across sign systems. In the course of their work, Cowan and Albers (2006) refer to semiotic systems, that, as described previously, are culturally appropriate and familiar symbols and ideas which are easily recognizable within the students' context. In their work, Cowan and Albers (2006) used word visualization to generate synonyms and antonyms. After conducting mini-lessons on basic art principles such as color, form, shape, and texture, the researchers encouraged students to visually represent those synonyms and antonyms. They observed that students tended to write with better clarity, precision, and imaginative creativity as a result of this artistic representation process. This practice of manipulation across sign systems, in Cowan and Albers' (2006) opinion, helped the students develop stronger literacy practices. Cowan and Albers (2006) observed what they termed the "blank page" syndrome in students when they started to write. They also identified three methods to help students write: 1) student writing should be a personal experience; 2) students should choose their writing topic; and 3) students may combine written expression with elements of the arts (Cowan, 2001b). These three techniques highlight part of the methodology used during the summer writing camp described in detail in Chapter 3.

In McKay and Kendrick's (2001) work, they conducted a systematic inquiry of how students viewed reading and writing. These two researchers organized students into groups of three to four and asked them to draw their ideas about literacy. As part of the analysis, McKay

and Kendrick (2001) developed categories to evaluate students' perceptions of literacy. This probe revealed that as students' ages increase, so their conceptions of the role of reading and writing expand. Although systematic in terms of how it was organized, McKay and Kendrick's (2001) study does not establish any connection between the two semiotic systems of drawing and writing.

Olshansky (1994) went one step further than McKay and Kendrick (2001). In another of her explorations, she integrated visual imagery into every stage of the writing process. She used highly visual and kinesthetic methods to allow students to extend their own creative processes. In doing so, Olshansky (1994) created her own imaging system and laid it over the writing process. Although closely paralleling the writing process, this image-finding, image-weaving, image-making, image-reading progression was more focused on tapping into students' visual and kinesthetic intelligences. She discovered specific points at which the confluence of these intelligences with verbalization (specifically in the image-weaving stage) served to enhance the students' writing process. Ultimately, Olshansky (1994) found students were able to move from narrative to fiction writing faster than expected while simultaneously including greater detail and descriptive language. However, it was unclear whether it was the process uncovered by Olshansky (1994) or the incorporation of the arts which influenced this change.

A previous study provided a wider and more focused look into the connection between drawing and writing. In Joan Davidson's (1996) study, she hypothesized that drawing in conjunction with writing would require students to do something with their knowledge and would assist in the development of both written and graphic communication techniques. In Davidson's (1996) study third grade students were asked to create an initial drawing of their city block and describe it in writing. After this first drawing and composition, the teacher and students reflected on their work in both one-on-one and peer conferencing sessions. The teacher facilitated the student editing process and two subsequent drawings and writings were created. At the conclusion of the three drawing and writing processes, the students engaged in one-on-one discussions with Davidson and answered a pre-determined questionnaire. Each student's drawings were analyzed with Lowenfeld and Brittain's (1975) criteria and their graphical development from the first to the last drawing was chronicled and recorded.

For almost all of the 14 students who participated in the research, Davidson (1996) was able to detect the development and progression of their artwork through the course of the editing

and conferencing processes. Due to constraints of the study, only 10 of the 14 students participated in a peer-focused interview in which the questions they were asked related to a partner's drawings and writings. In this peer evaluation, when asked whether the drawing helped with their partner's writing all 10 students responded in the affirmative. The reasons cited by the students in this free response interview typically revolved around the increased amount of detail or length of the writings which their partner produced. Conversely, when asked the reverse question of whether the writing helped them in their drawing, only six responded positively. This disparity indicated benefits of the combined drawing and writing strategy. The results of the self assessment interview in which nine students participated by evaluating their own progression from the beginning of the project to the end is similar. In this case, six of the nine students believed their personal writing improved by incorporating drawing and only three of the nine believed their drawing improved as a result of their writing.

The results of Davidson's (1996) study have some educational implications. First, it appears a connection between drawing and writing improvement may exist. The students showed an increased awareness of details as their awareness of the details provided by their drawings increased. The methods used in this study were closely related to the writing workshop format already incorporated in many curricula. Rather than incorporating other common subject areas such as social studies and science, the study only incorporated art. Davidson (1996) potentially found new relevance for art through her incorporation of writing.

As one reads the results of the interviews with the students and Davidson's (1996) own evaluation of the improvements made in each student's artwork, a number of questions surface. If the drawing process improved as a result of incorporating of writing, how much did writing improve as a result of incorporating of drawing? How may visualization of a student's environment and events in his or her life help add details to their writing? How can students tap into their artistic intelligence to increase their writing proficiency? What are the implications to curriculum design in the era of state testing when writing and specials, such as art, are often left with the remnants of the school day? Those questions go unanswered by Davidson's (1996) study and are open to continued investigation.

The study performed by Judy Hale (1996) in *Determining Relationships between Young Children's Cognitive Stage of Development and Art Stage of Development as They Relate to Literacy*, is the next step after Davidson's (1996) efforts. Hale's (1996) study investigated how

students' response to literature may help develop literacy. In this case, as with Davidson's (1996), the method of response to literature utilized artistic expression.

Although McKay and Kendrick's (2001) work contained both drawing and writing evaluations, the evaluation of the writing was conducted in order to gain insight into the perception of literacy of children of different ages and artistic development. They did recognize a difference based on age, but no formal evaluation of writing was undertaken, nor was it evaluated on the basis of the drawing had impact.

Davidson's (1996) work most closely paralleled the purpose of this qualitative case study. In her research, she attempted to understand the connection between visualization tools, specifically drawing and writing. However, her primary focus was the artistic side of the spectrum. With her background in the fine arts, Davidson (1996) wanted to understand how systematic writing helped students' drawing capabilities. The most compelling result was the testimony of the students themselves. In most cases, the students claimed drawing actually helped them write. However, her analysis focused on improvements to drawing instead of improvements to writing because of drawing.

More research needs to be conducted to understand how art compliments the writing process and how students and teachers perceive this to occur. This qualitative case study considers the students' stage of artistic development and students' writing level to gain a deeper understanding of any potential connections between the two functions.

After considering the research regarding connections between literacy and the arts, a number of questions remain. How may artistic development be used as a springboard for accelerated growth in literacy, specifically writing? What methods, techniques, and instructional practices use visualization? How can student writing improve when drawing is used? Finally, how can either writing or art be used to indicate a student's cognitive level? Visualization and its connection to writing is the overarching purpose of this qualitative case study. The aforementioned studies and inquiries indicate a potential connection between visualization and writing and a connection between a student's cognitive developmental stage and stage of artistic development.

Summary

Understanding how visualization in the writing process influences struggling learners requires the understanding of several theories. Piaget and Inhelder's (1969) cognitive development theory and Vygotsky's (1978) sociocognitive theory serve as the framework upon which the writing workshop is built. Identifying the student's cognitive developmental stage may provide an understanding of the whole student. This is important when the student expresses his or her ideas verbally about his or her drawings and writings. Linguistic and visual/spatial intelligence, two of the nine multiple intelligences stated in Gardner's (1983/2004) MI theory, are applied to the writer's workshop when visualization occurs. The emerging theory of visualization encompasses the ability to make mental imagery, and the act of drawing images serves as a springboard for writing.

Results of inquiry from the fields of brain research, art and cognition, the writing workshop, visual literacy, and literacy and art contributed to the framework of this qualitative case study. Although the available research discusses writing and art from various points of view, none focus on the potential developmental connection between one's stage of artistic development, writing level, and stage of cognitive development. Also, the available research does not address visualization embedded in the writing process with a systematic method of inquiry. Weaving together multiple theories and related research may help understand how visualization in the writing process may benefit writing instruction.

CHAPTER 3 - Methodology

This chapter describes the research methodology used to conduct this qualitative case study. I collected and analyzed data regarding visualization in the writing process. This chapter is organized in the following way: (1) research design and questions; (2) pilot exploration; (3) role of the researcher; (4) gaining entry; (5) setting of the study; (4) participants; (5) data collection; (7) data analysis; and (8) establishing trustworthiness. The following overarching question provided the framework for the proposed study:

How does the use of visualization embedded in the writing process influence struggling learners in a kindergarten through fourth grade summer writing camp?

Specific subquestions include:

1. What types of instructional methods, activities, and techniques engage children in visualization during the writer's workshop?
2. How does visualization influence potential effects in the individual writing scores of the Six-Trait Analytical Model (Spandel, 2004)?
3. How do the students' writing and art stages reflect the stage of cognitive development of the writer?
4. How do students and teachers view any potential connections between art and writing?

Research Design

The literacy field lacks an in-depth systematic case study focused on how a student draws images before he or she writes. Therefore, such research is needed. A qualitative study will encourage a detailed, multidimensional, focused, complex, and holistic picture (Creswell, 1998):

Qualitative research is an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem. The

researcher builds a complex, holistic picture, analyzes words, reports detailed views of informants, and conducts the study in a natural setting. (p. 15)

A case study, in a focused time period (Merriam, 1998), investigating how students use visualization in the writing process, will provide the detailed, multidimensional picture Creswell (1998) describes.

I chose a case study design to gain a deeper understanding of the role of visualization in the writing process and its connections on the thinking process. A qualitative case study is particularly useful in developing a profile of teaching and learning through visualization because it can provide greater insight into the visualization process and accompanying writings. Merriam (1998) specifically characterizes cases studies as having, “rich, thick description,” while recognizing, illustrating, and analyzing themes as they occur. The case study methodology is a way for “systematically gathering enough information about a particular person, social setting, event, or group to permit the researcher to effectively understand how it operates or functions” (Berg, 2001). For this case study, I used a social constructivist orientation recognizing students as an essential source of information for how they use visualization in the writing process. This case study provides a comprehensive analysis of two writing classrooms during a summer school writing program. This study is a description of one summer school writing program and, therefore, is a case Merriam (1998) would describe as “unique” (p. 62).

Joan Davidson’s (1996) study formed the basis on which this case study was designed. I used a write-draw-conference paradigm to understand the connection between drawing, writing, and cognitive development. After each writing and drawing assignment, teachers used a combination of peer editing, group conferencing, and one-on-one interaction to help develop new ideas for drawing and writing. Although the research followed the writing workshop (Graves, 1983/2003) methodology, the focus of the summer writing camp was geared toward improving writing. In this study, the district Criterion Reference Writing Test (CRT) and the final writing pieces produced at the summer writing camp were holistically evaluated using the Six-Trait Analytical Model (Spandel, 2004) to understand the development of the students’ writing. The evaluation of any changes in the student’s writing was detected using the Six-Trait Analytical Model (Spandel, 2004) along with individual interviews. Each student’s drawings, which

accompanied journal and writing pieces from the summer writing camp, were evaluated using Lowenfeld and Brittain's (1975) criteria. Analysis of each student's artistic development stage was conducted to better understand how these stages connect to the student's writing and cognitive development.

This study also draws from Judy Hale's (1996) study, *Determining Relationships between Young Children's Cognitive Stage of Development and Art Stage of Development as They Relate to Literacy*. However, in my study, I substituted the students' reading levels with the students' Spring 2007 CRT writing scores derived from Spandel's Six-Trait Analytical Model (2004). To identify the students' artistic stages at the beginning of the summer writing camp, the students drew a picture of a man, and this picture was evaluated using Lowenfeld and Brittain's (1975) criteria. This drawing approach was similar to the Goodenough's Draw-a-Man test (1926), a survey indicating the intellectual status of young children. Goodenough's drawing test requires the drawing of a man to represent a concrete object, familiar to younger children who are unable to conceptualize anything beyond themselves (Harris, 1963). However, the formal and complete Draw-a-Man test (Goodenough, 1926) has since been expanded to include drawing a man, a woman, and oneself. This initial analysis created a base line for the students' stage of artistic development, Six-Trait scores, and writing levels at the beginning of the study.

At the conclusion of the study, I analyzed the students' final art and writing samples according to the same methodology which included an analysis of each student's cognitive stage of development during the review of the final projects. For both the base line and final analysis, the individual Six-Trait scores were averaged and the results determined the students' writing levels. Thus, students received both a pre-and post-assessment of their writings and drawing samples.

The case study involved several participants from within one Midwestern school district. Nineteen elementary school-aged participants ranging from kindergarten through fourth grade were purposefully selected by their classroom teachers to attend summer writing camp in hopes the program would help these struggling literacy learners. An investigation of the 19 students, ranging in age and cognitive ability, offered data of broad developmental depth. Five of these 19 students were selected as a representative group for detailed evaluation throughout the entire case study.

This study investigated how elementary students used visualization in the writing process during summer writing camp. I focused on analyzing several writing pieces to better understand any visualization connections. Bounded in time and place (Merriam, 1998), the summer writing camp provided a natural setting to conduct a qualitative case study, collect multiple sources of information, and delve deeper into the research questions. This natural classroom setting offered a holistic perspective and a deeper understanding about how elementary students create and use images as a springboard to write.

Pilot Exploration

I conducted the pilot exploration for this qualitative case study in the summer of 2006 at the Flint Hills Youth Writing Camp at Kansas State University. Due to the success of this pilot, I convinced the Curriculum and Instruction department of the district where I taught to create a summer writing camp for struggling learners modeled after the Flint Hills Youth Writing Camp. The district's summer camp used many of the recommendations I made to create the four-week summer school for writers.

The organization and structure of the pilot experience provided the practical framework for this research. The pilot youth summer writing camp was part of a larger community of writers known as Camp Flint Hills, a site of the National Writing Project. A total of 16 students ranging from first through fifth grade were participants in the camp upon submission of application (see Appendix B1). The youth writing camp in the summer of 2006 was four days, Monday through Thursday, from 9 a.m. to 12 p.m. The room was located in the education building on the university campus, and resembled a camp scene with tents, a faux campfire, pinecones, and firewood arranged around the room. The camp was run by two certified elementary school teachers, in addition to me, who were fellows or graduates of the Flint Hills Writing Project. There was also one assistant who was both a certified middle school language arts teacher and a fellow. The main objective of the youth writing camp was to create a community of writers among the students for enrichment and to help generate ideas for writing.

I was unable to take detailed observational fieldnotes during the pilot experience because I was one of the teachers. I was not able to observe the students' interactions and listen to their conversations while they wrote or prompt the students to draw to help them write. This need for

observational fieldnotes and data reinforced the importance of not teaching while conducting research. Based on that experience, I decided to act more as a participant observer during my research.

At the conclusion of the pilot experience, an open-ended survey was given to parents. Many parents said they looked forward to returning next summer, and provided ideas to improve the camp. One suggestion was to separate the grade levels to allow more individualized and challenging instruction. This feedback contributed to the creation of primary and intermediate classrooms during this qualitative study. Parents also commented on the daily length of instruction and most favored a half-day schedule with both primary and intermediate classes meeting simultaneously. Both ideas, combined with my observations and the comments of fellow teachers from the pilot exploration, shaped the format of the instruction in this qualitative case study. This pilot exploratory program gave me a glimpse of how visualization embedded in the writing process could be used to help learners.

The Flint Hills Youth Writing Camp was not the same as the district's summer school program, but provided the initial framework for the organization and design of the summer school writing camp. The summer school writing camp occurred at an elementary school for 3 ½ weeks for 3 hours a day, Monday through Friday. The five teachers, assigned by the district to teach during the summer school writing camps, were distributed among the two classes; three for the primary and two for the intermediate classrooms. The camp was community focused and included field experiences to local landmarks and other resources which provided meaningful learning experiences. These field experiences were an integral part of the pilot program. Some of the best writing was produced following the students' visit to the university art museum. As a researcher, I did not teach, but acted as a participant-observer who conferred with the other instructors about lessons and talked to the students as they wrote. These roles enabled me to record fieldnotes and observations, interview students and teachers, and collect research documents.

The most important lesson learned from the pilot experience, and reinforced by my own classroom experience, was that students who drew, particularly younger students, were able to write more coherent ideas (see Appendix B2). However, I was uncertain if the writing influenced the drawing or if the drawing influenced the writing. I also did not know how drawing was connected to their thinking processes. These unanswered questions motivated me to investigate

more. I wanted to observe, interview, and collect documents to better understand how visualization embedded in the writing process could be used to help struggling learners in kindergarten through fourth grade become better writers.

Role of the Researcher

As the researcher, I interpreted observations and activities in the summer writing camp. The lens which shaped my findings was the lens of a classroom teacher who witnessed the successful use of visualization in conjunction with writing. However, so many other immeasurable factors which are impossible to replicate in this study may have attributed to these perceived successes. Prior to conducting this research, I taught fifth grade for two years and second grade for four years. In addition to classroom experience, I am a National Board Certified Middle Childhood Generalist. This depth of personal and professional experience provides a degree of theoretical sensitivity (Strauss and Corbin, 1990) which supports my readiness to conduct this qualitative inquiry.

My primary role as researcher was to collect data in an unobtrusive way through observations, interviews, and collection of artifacts. To reduce the problems of gathering data, Krathwohl (1998) believed the researcher should use participation by observation to reduce obtrusiveness. I regularly interacted with the students in order to gain their trust and facilitate recordings of observations. As a former teacher in the school selected to host the summer writing camp, I knew several of the students involved in the study. The students viewed me as a teacher as I attended every field trip and was present everyday during summer school. Students often asked me for help or would share their writing spontaneously. While students were engaged in various steps of the writing process, I circulated through the classrooms and interacted with them about their drawings and texts. I kept fieldnotes covering the students' types of writing and drawing. The students were accustomed to my presence. This immersion with the students during the study gave me a better foundation with which to understand the implications of visualization in the writing process as well as students' writing, artistic and cognitive levels.

With the two writing camps divided by grade level, I often observed one classroom setting and quickly went across the hall to observe events in the other. I carried my laptop and digital camera to capture observations of students, teachers, and lessons. Early in the study, after

realizing I was in danger of missing observations in one or other classroom, a teacher from each classroom volunteered to record observations and responses to the lessons and students as well as take photographs. These reflections helped me capture the data I might otherwise have missed while observing in the other classroom. I held daily conferences during summer school with teachers either before or after instruction depending on their schedules. These conferences helped the teachers plan lessons, gather materials, and discuss their observations of student development. The discussions were instrumental to my understanding of their observations and views of visualization and the writing process.

To ensure the summer school teachers were able to teach visualization in the writing process, I met with them once before the summer writing camp began. The district provided an eight hour planning day for all teachers involved in the summer school program to meet, create an initial calendar of events, (see Table 3.2) and form a list of materials the district would purchase for the camp. After discussing research goals for the writing camp with the teachers, I provided examples of how to incorporate visualization techniques by describing some of the lessons I used as a classroom teacher. As a team of five teachers and one researcher, we decided who taught in each classroom. Three teachers, who were from the same school and knew each other, decided to teach the primary writing camp and two teachers who did not know each other, but had upper elementary experience, volunteered to instruct the intermediate writing camp. Then, we organized four field experiences for the students to attend with one field trip scheduled each week. The field experiences were selected to provide motivation for the students to write. All lunch and travel arrangements for the field trips were arranged during this planning time.

During the first week of June we met for half a day to establish the camp-like classrooms. After the first week of summer school all the teachers and I met to review the lesson ideas and methods to instruct visualization. At the conclusion of the second week, I wrote lesson plans for both camps to provide a framework for the teachers (see Appendix A3). I also modeled a lesson for the primary classroom teachers which covered writing a technical piece using visualization. Additionally, I met with each teacher individually and provided them writing and drawing samples from my own classroom to showcase the stages of visualization in the writing process and give them a better understanding of the camp. Finally, I distributed a copy of this chapter from the research proposal to each teacher for use as a reference.

As an unconcealed observer, I communicated with the students and teachers and scribed observational notes within sight of the participants to reduce obtrusiveness. As the students drew before writing, I recorded observations, conversations, and thought processes of the students. During the last week of summer writing camp, I interviewed the students, some individually and some with partners. I also collected simple background information before the start of the summer writing camp from each teacher and conducted a video interview with each teacher during the final week of the camp.

Being able to act as a participant observer allowed me to act as an insider and gain trust (Jorgensen, 1989). I understood my primary purpose was to collect and analyze data. However, I was respected and treated like a colleague due to my established rapport with the teachers and the principal of the school. Table 3.1 shows the timeline of the study and my daily role. While some of my tasks were consistent, others varied at sequential stages based on the occurring event.

Gaining Entry

I sought to enter an organization which felt secure in order to gain trust and acceptance during my research. To gain access to the district's summer school writing camp, I asked my principal, who acted as the "gatekeeper" (Hammersley & Atkinson, 1995), to assign me to the district summer school committee. My principal subsequently provided written consent for me to conduct my study in the school as part of the summer school program (see Appendix C1).

It was clear from the first meeting that the district was interested in pursuing alternative avenues than those previously used in hopes of providing a more motivating experience for the struggling students in summer school. During a round-table discussion, teachers entertained the idea of setting up various magnet-like summer camps for the students to attend. At the second meeting, I proposed the idea of a summer writing camp based on the success I experienced with the Flint Hills Youth Writing Camp. I showed a video documenting the camp, and the committee decided a writing camp would be one of the four camps offered to summer school students. The writing camp was approved and scheduled to occur at the school where I taught once the district obtained the IRB letter of approval from the Office of Research Compliance at Kansas State university (see Appendix C2). Clearly, I entered a trusted place to research.

Table 3.1. Researcher Timeline

Date	Activity
05/08/07 (T)	Plan summer writing camp with teachers. Develop calendar.
06/04/07 (M)	Set up classrooms for summer writing camp.
06/06/07 (W)	Review visualization and writing workshop procedures with teachers. Complete Teacher Face Sheets.
06/07/07 (U)	Take photographs of initial day of study at research site. Send home permission slips for participation in research. Observe students and teachers and record information in fieldnotes.
06/08/07 (F)	Meet with teachers to discuss camp's progress. Observe students and teachers and record information in fieldnotes.
06/11/07 (M)	Videotape K-1 perspective lesson. Observe students and teachers and record information in fieldnotes.
06/12/07 (T)	Observe students and teachers and record information in fieldnotes.
06/13/07 (W)	Observe students and teachers and record information in fieldnotes.
06/14/07 (U)	Model lesson for K-1 camp. Observe students and teachers and record information in fieldnotes.
06/15/07 (F)	Meet with teachers to discuss camp's progress.
06/18/07 (M)	Observe students and teachers and record information in fieldnotes.
06/19/07 (T)	Observe students and teachers and record information in fieldnotes.
06/20/07 (W)	Videotape 2-4 camp mini-lesson: beginning, middle, end.
06/21/07 (U)	Observe students and teachers and record information in fieldnotes. Interview teacher.
06/22/07 (F)	Interview small group of student and teacher, record fieldnotes.
06/25/07 (M)	Interview small group of student and teacher, record fieldnotes.
06/26/07 (T)	Interview small group of student and teacher, record fieldnotes.
06/27/07 (W)	Interview small group of student and teacher, record fieldnotes.
06/28/07 (U)	Make-up interviews and artifact collection.
06/29/07 (F)	Make-up interviews and artifact collection.

As a researcher, I was not an employee of the district. I understood “choosing a situation because prior familiarity makes entry problems minimal may result in problems in making the ‘familiar strange’” (Krathwohl, 1998). However, the situation was new to me. I never taught summer school and I worked with teachers with whom I had not collaborated before. Initially, the other teachers and principal regarded me as an employee and asked me to engage in tasks beyond my role as a researcher. To mitigate these issues, I met with the summer school teachers and explained my role and responsibilities and how I appreciated their cooperativeness. If any uncomfortable or awkward situations arose, I addressed these in my fieldnotes.

Setting of the Study

I needed to conduct research in a non-traditional classroom to meet the unique requirements of this qualitative case study, specifically, the need for dedicated writing instruction. First, summer school provided an uninterrupted block of time for field experiences and writing which is difficult to obtain during the school year. The 3 hours a day for 3 ½ weeks model, where all time was dedicated to writing improvement, provided an opportunity to conduct a qualitative case study in an environment focused on literacy instruction for struggling learners.

Second, the district where the study was conducted desired a different format for summer school. The summer writing camp I proposed met the district’s need for creating an innovative, literacy-based instructional experience by providing lower teacher-student ratios, real-world experiences, and the integration of multiple subjects. The summer school setting provided a different way to teach struggling writers, identified by their classroom teachers, for additional instruction in writing.

Finally, the pilot exploration results indicated the summer writing camp would be more beneficial if conducted over a longer period of time with a separation of students by age group. Once the district approved the concept, it employed five teachers who facilitated the separation of students into primary and intermediate learning groups. Therefore, conditions were ideal to collect data of struggling learners, during a non-traditional setting, by a trusted former faculty member of the school, and in a district which supported the implementation of a new summer school program.

District

This 3 ½ weeks summer writing camp was located in a district near a military installation in a Midwestern town with a population of approximately 16,000. The installation, which provides 53 % of the student population, is highly mobile with many service members currently serving in Iraq or Afghanistan. There were approximately 6,000 students enrolled in the district at the time of the study. The student population was 52 % White, 25 % African American, and 23 % Hispanic and other. The student gender composition was 48 % females and 52 % males. Fifty-three percent of the students were from economically disadvantaged homes and 54 % of the students received free and reduced lunch. The district's ELL population was 6 % and students identified with disabilities comprised an additional 14 %. There were 13 elementary schools (grades K-5), 2 middle schools (grades 6-8), and 1 high school (grades 9-12) in the district. Six of the schools receive Title I funding based on the number of economically disadvantaged students. Four schools in the district were recognized as “blue ribbon” schools under NCLB and the district received numerous awards as well. Four schools were designated as “Distinguished” Title I schools. Every school received at least one 2006 Kansas Standards of Excellence Award. The criteria for these awards varied at the elementary, middle, and high schools. The criteria evaluated were the number of students assessed at the exemplary level on state tests and the number of students on academic warning status.

The district allowed individual schools to adopt NCLB reading programs such as Success For All[®] (Slavin & Madden, 2001) or use the Harcourt Brace *Collections* series (2001). There was not a district-wide writing program teachers followed. Teachers were given a set of *Write Source Handbooks for Students* (Kemper, Sebranek, & Meyer, 2000-2003) text books to help teach grammar and different styles of writing. The Curriculum and Instruction department of the district adapted the Six-Trait Analytical Model (Spandel, 2004) for two main reasons. First, Spandel's model (2004) was research based and created by teachers. Second, the six-traits were closely aligned with state standards and testing. The district provides instruction for teachers to use the model to guide writing lessons and score student papers using the traits. The district does not promote the six traits as the only way to teach children how to write, but rather as a tool to help promote writing.

Literacy Environment

The summer writing camp was structured to create a literacy rich environment to foster best practices in writing instruction. The main characteristics of the literacy environment included: the writing workshop, mini-lessons, the writing process, and living the writerly life (Calkins, 1986/1994). Teachers emphasized these characteristics at various points in the summer writing camp.

The idea of a summer writing camp was inspired by Donald Graves' (1983/2003) writing workshop. Students wrote in personal art/writing journals daily and these became sources for ideas upon which students could write. Students collaborated with each other by sharing their writing with others during peer conferencing and editing. Teacher to student conferencing was an integral part of the summer writing camp. Through conferences teachers counseled students how to re-read to ensure sentence fluency, stretch out sounds in words, and remain on topic.

In both primary and intermediate camps, teachers created mini-lessons after reviewing the students' work and reflecting upon their own observations. The Calkins' (1986/1994) inspired mini-lessons were categorized in one of the six traits of the Six-Trait Analytical Model (Spandel, 2004). Lessons consisted of 10 to 20 minute blocks of instruction on such topics as: word choice, conventions, selecting writing topics, and using art to help include details, descriptive narratives, writing styles, and informational technical pieces. In addition to whole group mini-lessons, small group lessons were conducted on a needs basis by the teachers and provided additional, focused instruction for students struggling to grasp concepts.

Teacher selected quality literature, which provided schema prior to field experiences, served as touchstone literary pieces (Nia, 1999) for mini-lessons and illustrated different literary styles. The writing process differed slightly between the primary and intermediate writing camp according to their ability levels. After each field experience, both classes brainstormed ideas through discussion and review of digital photographs. Once students determined a topic, they created an artistic representation of the subject using a variety of media including markers, crayons, map pencils, clay, and watercolors. For each writing project, students and teachers referred to the student's artwork. I intended for students to use their artwork as the basis of their initial writing drafts. At a minimum, all students created initial drafts but the intermediate students, because of their writing fluency, completed second drafts on two of their four writing projects.

Teachers modeled the writing process for the primary students. The teachers modeled how to use the field experiences and the photographs to brainstorm ideas about which to draw, and then they modeled using the drawings to generate ideas about which to write. The revision techniques included how to read the writing out loud to oneself and to a partner to check for clarity and accuracy. Students checked their pictures and writing to ensure the two corresponded during the revision process. For every writing piece, students conferenced with teachers before proceeding to the editing phase. These conferences focused on using digital photographs and student created artwork to add detail to writing. Teachers also had students read their writing out loud to check for vocabulary accuracy, count the number of words in a sentence string and develop ideas. During the editing process, teachers modeled counting the number of sounds they heard to help spell unfamiliar words, adding punctuation, and correcting capital letters. The final drawing and art pieces were shared during author's chair.

The revising and editing phases for the intermediate writing group were grade level appropriate. During revision, the intermediate group focused on increasing the level of detail. The intermediate group used techniques and tools such as *zooming in* on an idea to narrow the topic, and a sentence amplifier wheel to aid students with adding detail and elaboration. In the editing process, intermediate students focused on writing conventions such as paragraph structure and format, spelling, and punctuation. These revising and editing techniques were all modeled by the intermediate teachers, then applied through self-revising and editing, peer revising and editing, and conferencing.

The use of art/writing journals permitted students to write and draw about personal and shared experiences. Many of the experiences the students described in their art/writing journals were the whole-class field experiences. These real-world events gave students purpose and audience for their writing, which was seen as a part of their life instead of being associated as an event which only occurs in the classroom at the teacher's request. The students' immediate responses to the field experiences were written in the art/writing journals. Students were encouraged to write and draw about topics of interest in their art/writing journals rather than according to prescribed writing prompts. To clarify this, some pieces written outside of the students' art/writing journals were prescribed based on the needs of the students. An example was when preformatted sentence templates were used after the second field experience based on the primary teachers' assessments of their students' abilities. I did not originally intend to

include these in the summer writing camp; however, I had to respect the assessments of the classroom teachers. Sometimes, the teachers had the students elaborate their ideas outside the art/writing journals to allow for more writing, revision, and publication opportunities.

The use of literature combined with these best practices provided the framework for writing instruction. The writing workshop, mini-lessons, and the writing process were characteristics consistently found in both the primary and intermediate summer writing camps. This literacy environment formed one of three environments emphasized at summer writing camp.

Visual Environment

Visualization occurs through seeing or creating images in one's mind (Douville, 1999). The visual environment, including the physical organization of the three instructional classrooms, consisted of images the students were able to see and experience. The classrooms themselves were decorated like camp scenes and not regular classrooms. The primary classroom had a faux fire in the middle of the carpet for students to sit around during share time. The intermediate group had a tent for students to write in during independent writing time or to share writing during peer revising and peer editing time. The intermediate classroom also had an ice chest full of books for students to read as well as clear, glass jars full of pine cones, leaves, and seeds. A third room, which was normally the computer lab, had two tents for students to use during their free writing time, stuffed animals for students to read to, a pine tree, and a large lawn chair for author's chair. The wall behind the tents was decorated with blue posters and yellow stars to resemble the nighttime sky.

Many of the images, which comprised the visual environment, were related to direct participation in field experiences or time spent on location. These images provided ideas about which students chose to draw and write. During the first week, both the primary and intermediate camps went fishing. Before the event, teachers read *Fishing With Dad* by Michael J. Rosen (1996) to provide background information. The illustrations in the book showed students how to use lures, bobbers, and fishing poles. After learning about fishing, the students walked to a nearby pond where they hooked worms, cast fishing lines, and caught fish. Students examined and touched worms and fish up close. After fishing for an hour, students wrote and drew in their art/writing journals about the experience. While students were fishing and journaling, I took

digital photographs of the students in this environment to print and post for the next day's instruction.

During the second week of camp, the students visited a local prairie conservation. Guided by a docent, the students were separated into small learning groups. The docents pointed to and named different flowers, trees, insects and animals seen in the area. The students crossed two bridges over small creeks as they hiked through the prairie and experienced nature. Again, I took several digital photographs of the hike and printed them for students and teachers to review and discuss the following day. The field experience was reinforced with a reading of *If You're Not From the Prairie* by David Bouchard (2002) and illustrated by Henry Ripplinger which reiterated the images seen on the hike. The reading occurred the day after this field experience due to the additional time required to travel to and from the prairie conservation.

During the third week of camp, both writing groups traveled to a nearby nature preserve. At the nature center, students explored the museum area through a scavenger activity which required them to search for certain animals. The second part of this field experience was learning about a variety of animals the nature center maintained. In a small auditorium, students watched the nature center educator show living specimens of a hissing cockroach, a turkey vulture, a king coral snake, a tarantula, and a scorpion. Several students volunteered to hold these animals. Once more, I snapped digital photographs and printed them to observe the next day for student art/writing journal entries and discussion. As with the prairie conservation field experience, our reading of *Scranimals* by Jack Prelutsky (2002) and illustrated by Peter Sís occurred the following day due to transportation related time constraints. The illustrations in the book provided the format for the primary student's extended art/writing piece.

Only the primary writing group went on a fourth and final field experience to the fire department and local library during the final week of summer writing camp. While the intermediate group worked on revising and editing techniques with one of their pieces, the kindergartners and first graders sat in an ambulance and examined the inner workings of a fire truck. The tour was lead by a fireman who showed the students where he lived and worked including a personal demonstration of how to slide down the fire pole. The tour concluded with the fireman putting on his uniform and equipment, including a mask which frightened many of the students. After visiting the fire department, the students and their teachers walked to the library where they saw their prairie drawings and writings posted for publication. Then, the

primary students created a bookmark using stamps and watched storytellers at the library bring a book to life through acting and props. As with the other experiences, digital photographs captured the day's events and were prepared for use the next day.

The art students created to accompany their writing also formed part of their visual environment. Students used crayons, markers, and map pencils to illustrate their pictures in art/writing journals. The primary writing group used different ways to express their visualization and creativity. One piece of art created after visiting the nature center involved taking a black line master of one of the animals the students learned about and gluing different types of media on it such as feathers, beans, beads, and rocks to create a new animal.

For their last writing piece, intermediate students drew their favorite summer camp experience. To revise their artwork, students took their drawings and transferred the images using water colors, scratchboard paper, and clay and created their final piece of art. After modeling responsibility with basic forms of media, intermediate teachers modeled using water colors to paint their ideas. This encouraged students to focus more on the topic or idea rather than the details. The intermediate group concentrated on labeling parts of the pictures they drew to help with vocabulary and details. One revising technique employed by the intermediate group was zooming. This consisted of first folding paper into quarters and drawing a picture in one square. The students then redrew the image in each successive square and zoomed in on the image, thereby increasing the images' size and detail. Each of the four images appeared larger and more detailed than the previous image, which encouraged students to both narrow the focus of their art and increase the details depicted. Once complete with the four images, students transferred the final, most narrow, and detailed depiction to an 11 x 14 inch piece of paper.

The digital photographs served as a tool to recall facts. Each classroom had a designated board to post photographs at eye level for the students to view. When teachers were discussing the experiences in terms of what the students learned, saw, felt, and heard, the teachers were able to point to the photographs. The teachers used the photographs to prompt students to recall of their experiences to write and draw about them. Digital photographs taken during the field experiences inspired many of the drawings students created. Often during the independent drawing and writing part of camp, students walked to the board and reviewed the photographs to see what an object looked like or to locate a specific detail and then returned to their seat to complete their drawing or writing.

To help the students view different materials in the writing camp, intermediate teachers used an ELMO (document camera) to project images. The primary teachers created their own charts in the shape of eyes, nose, mouths, ears, and hands to help write sensory words. Teachers created charts to make word walls. These word walls included sight words, transition words from mini-lessons, or vocabulary learned from the experiences. Many of the experiences provided artifacts to bring back to the classroom and post such as maps from the prairie. These tools aided the discussions and writing.

Douville (1999) asserted visualization involves seeing or composing pictures in one's mind. The visual environment of the summer writing camp included the classroom design, field experiences, digital photographs, artwork, and materials. The summer writing camp attempted to provide an environment where visualization could flourish.

Learning Community Environment

The summer writing camp provided struggling learners with the opportunity to gain knowledge in a comfortable learning environment. The environment created community, acceptance, and collaboration among students.

Students from different schools in the district were centralized at one school. Many students did not know each other prior to attending summer school; therefore, whole-group events were designed to encourage whole-camp community and trust. When the whole group was separated into two smaller groups by grade level, a sub-community of writers was created. Often the teachers modeled writing and drawing techniques to the students and invited the students to “share the pen” (Button, Johnson, & Furgeson, 1996) with them to create a whole-group writing piece. Students showcased their writing and art work with each other in the author's chair. Teachers and students offered positive reinforcement for shared work in the form of cheers. Evidence of a community built within the smaller writing groups was found when students shared and solicited each other's help with writing and art work.

Working with each other to help spell a word or draw a picture was not the only form of cooperative learning observed at summer writing camp. Teachers utilized many cooperative learning techniques, such as think-pair-share, during brainstorming activities. Students discussed ideas with their tablemates. The peer revising and peer editing activities, found in the writing

process, also required students to communicate with each other about their writing in both a positive and helpful way.

Although a great deal of communication between students occurred, teachers counseled students through mini-lessons and conferences during the writing workshop. Teachers often sat with small groups of students or individuals and gave them the attention they needed to be successful. The primary teachers often sat one-on-one with students to help phonemically stretch sounds. Students felt comfortable and wanted to share their writing with teachers. As time progressed, primary students did not need as much help and would often either write by themselves or sit by a friend if they needed extra help.

The primary group consisted of kindergarten and first graders. Younger students were paired with an older student to help them draw and write their ideas. The intermediate camp consisted of second, third, and fourth grade students. Many of the second grade students asked fourth grade students to help them spell words, peer revise, or peer edit their papers to improve their writing. This multi-age grouping of students allowed peers to collaborate to improve their writing and drawing.

The summer writing camp created a learning community environment through cooperative learning, positive reinforcement, multi-age grouping, and creative classroom structure. Both the primary and intermediate camp teachers allowed students to move around and write where they felt comfortable to motivate students to write. The concept of a camp-like classroom helped enable students' creativity.

Instructional Context

The case study was based on the Picture-Writing process, a strategy students use to integrate visual art as part of the pre-writing process (Andrzejczak, Trainin, & Poldberg, 2005). Picture-Writing was developed in the mid 1990's and was the focus of several teacher-researcher studies (Olshansky, 1990, 1994, 1995, 1998). The Picture-Writing curriculum in this study revolved around the historical and informational attractions of the community. Students were given pencils, crayons, map pencils, and art/writing journals to help compose visuals to accompany their writing. For 3 of 4 field experiences, thematic literature was integrated to teach writing genres and skills. The visuals served as scaffolding to help the writers recall their ideas. The final products were taken through the writing process and shared at a culminating event.

Each day of summer writing camp looked different, but instruction was based upon the framework Olbrych (2001) created. Every morning, students journaled and then gathered together for explicit instruction in writing. Teachers selected students for small group instruction as required. This instructional time included mini-lessons, sharing of artwork and writing, read alouds, personal reflections, collaborative writing, quick writes, and use of materials to create. The third part of Olbrych's (2001) writer-artist workshop was known as workshop time, an opportunity to work independently or collaboratively. During this time, teachers worked alongside students and conversed with them about their ideas, provided instruction in small groups, and observed student progress. The final stage of Olbrych's (2001) writer-art workshop was sharing. Students met together again and shared a line or excerpt from the writing he or she worked on that day. This reinforced the community concept.

Table 3.2 outlines the daily activities which occurred during the summer writing camp for both the primary and intermediate writing camps. Activities specific to either camp are identified according to their respective camps.

Participants

Research over the past 20 years shows students' lack of motivation is a primary concern for teaching struggling learners. Burger & Winner (2000) and Ernst (1994) suggested visual art is beneficial to struggling learners because it serves as a motivational entry-point to reading and writing activities. It is documented students may become motivated to participate in academic learning by using art as the hook (Burger & Winner, 2000; Winner & Cooper, 2000; Winner & Hetland, 2000). Eisner (2003) studied the role of arts education in cognitive development, and he believed visual art may act as a vessel for capturing ideas and concepts. He also asserted concrete representation of ideas is conducive to an editing process such as editing in writing. Dyson (1986) explored how visuals lead to higher-order thinking which allows students to use modality to communicate. Visualization in the writing process may increase struggling students' motivation to write. By implementing the writer's workshop structure, teachers created a community of learners which minimizes students' fears of being judged, thereby increasing their self-confidence (Atwell, 1987).

Table 3.2. Daily Camp Timeline

Date	Event
06/06/07 (W)	Community building exercises and introductions.
	Each camp writes a Writing Is Poem together.
	Read <i>Flip's Fantastic Journal</i> by Angelo DeCesare (1999).
06/07/07 (U)	Both camps model how to make journal entries.
	Primary students decorate art/writing journal and create first journal entry.
	Intermediate students learn to observe nature and create first journal entry.
06/08/07 (F)	Read <i>Fishing With Dad</i> by Michael J. Rosen (1996).
	Field trip: Fishing at pond and journal about experience.
	Free write in art/writing journal.
	Discuss and look at pictures from fishing.
	Read <i>Diary of a Worm</i> by Doreen Cronin (2003).
06/11/07 (M)	Primary students have worm stations with mini-lessons on perspective, touch and how to make worm cup desserts.
	Intermediate students make worm farm, mini-lesson on how to.
06/12/07 (T)	Field trip: prairie preserve.
	Discuss, observe pictures from prairie and journal about experience.
	Read <i>If You're Not From the Prairie. . .</i> by David Bouchard and Henry Ripplinger (2002).
06/13/07 (W)	Primary student mini-lesson: five senses (word choice) and write poem.
	Intermediate student mini-lesson: word choice. Write personal narrative.
	Free write in art/writing journal.
06/14/07 (U)	Intermediate students write a personal memory about prairie.
06/15/07 (F)	Field trip: nature center.
	Review, discuss, and look at digital pictures from nature center.
06/18/07 (M)	Free write journal for both camps.
	Both camps read <i>Scranimals</i> (2002) by Jack Prelutsky and Peter Sís.
	Primary students use media and black line master to create new animal and write fictional writing.

06/18/07 (M)	Intermediate students create new scranimal of choice. Share art work.
06/19/07 (T)	Primary students write three describing sentences about new animal. Intermediate students free write in art/writing journals. Intermediate students write and types poem about scranimal.
06/20/07 (W)	Free write in art/writing journal. Primary students attend field trip to the fire department and the public library. Intermediate student mini-lesson: beginning, middle, end (videotape lesson). Intermediate students draw beginning, middle, and end of narrative.
06/21/07 (U)	Free write in art/writing journals. Primary students discuss and look at digital photographs of the fire department, writes a thank you postcard and descriptive personal narrative. Intermediate students read <i>Zoom</i> by Istvan Banyai (1995) write personal narrative.
06/22/07 (F)	Free write in art/writing journals. Students brainstorm about final writing piece by observing pictures.
06/25/07 (M)	Draft final piece. Mini-lesson: revising. Teachers conference one-on-one with each student about their writing.
06/26/07 (T)	Students self and peer revise or finish draft. Mini-lesson: editing. Teachers conference one-on-one with each student about their writing.
06/27/07 (W)	Write a new Writing is . . . poem. Students edit final writing pieces.
06/28/07 (U)	Students publish final pieces. Primary students release poems in balloons.
06/29/07 (F)	Celebration of Writing/Authors' Party at high school for the community to participate. Intermediate students release poems in balloons.

Student Selection

All participants of the study were purposefully selected by their classroom teachers. Teachers from the district recommended five students and three alternates per grade level (K-4) to attend summer school on a needs basis. These needs included ELL, students with learning disabilities, students with attendance problems, and lower-level learners. Students identified camps they desired to attend in order of preference. The district’s summer school camp choices included drama/music, technology/writing, math/science, and writing/community history (see Appendix A1). Parents of selected students signed a summer school form and paid a \$10 fee (see Appendix A2). If a parent was unable pay the fee, it was waived.

A total of 33 students in kindergarten through fourth grade attended the summer school writing camp. Of those 33 students who attended, 32 returned permission forms I sent home the first day of camp (see Appendix C3). One letter was translated in Spanish to meet the parent’s language needs. It was returned with consent the next day. All participants of the study received consent from their parent(s) or guardian (see Appendix C4).

The primary camp included 15 students whose demographics are displayed in Table 3.3. There was one African American, one Hispanic and one Caucasian boy in kindergarten and one Caucasian boy in first grade for a total of four boys. There was two Hispanic, one African American and two Caucasian girls in kindergarten, and six girls were in first grade; two African Americans, one biracial, and three Caucasian girls. The 2 of 3 Hispanic students received ELL services during the school year.

Table 3.3. Primary Camp Demographics

Grade	Caucasian		African-American		Hispanic		Biracial		Total
	M	F	M	F	M	F	M	F	
K	1	2	1	1	1	2	0	0	8
1st	1	3	0	2	0	0	0	1	7
Total	2	5	1	3	1	2	0	1	15

Table 3.4 displays the demographic information of the 17 students who attended the intermediate writing camp. Nine students were in second grade; four boys and five girls. Of those four boys, two were Caucasian, one was Hispanic who received ELL services during the year, and one boy was African American. Three of the second grade girls were Caucasian and two were African American. There were two third graders. One was a biracial boy and one was a Caucasian girl. There were six fourth graders including one Caucasian boy, two Caucasian girls, two African American girls and one biracial girl.

Of those 32 students, 19 were chosen using purposeful sampling to select students able to provide rich data for in depth study. I chose the maximum variation sampling (Patton, 1990) technique to select the 19 students so any common patterns which may emerge during the study are distributed across gender, race, and grade. Lincoln and Guba (1985) asserted maximum variation sampling is a useful technique for the naturalistic approach.

Table 3.4. Intermediate Camp Demographics

Grade	Caucasian		African-American		Hispanic		Biracial		Total
	M	F	M	F	M	F	M	F	
2nd	2	3	1	2	1	0	0	0	9
3rd	0	1	0	0	0	0	1	0	2
4th	1	2	0	2	0	0	0	1	6
Total	3	6	1	4	1	0	1	1	17

Representative Student Group

Although there were 32 participants, I selected one student from each grade level to discuss their cognitive, writing and art abilities in depth. These students were not selected prior to the start of the summer school writing camp, so I could ensure the students attended at least

90% of the instructional time during the course of the summer writing camp. I used the following criteria to select the five students who comprised the representative group:

- One student per kindergarten through fourth grade;
- A balance of gender;
- Racial diversity;
- One English-language learner (if available);
- Student ability to be social and extroverted.

Below are short biographical sketches of the five selected representative students.

Kendrick was an African American male entering first grade. He is 1 of 12 people living in his house. His older brother and cousin also attended summer writing camp. He struggled to work independently and his summer school teachers believed he needed one-on-one support for most tasks. When not with a teacher, he relied on other students to help him. His former kindergarten teacher recommended him for testing to qualify for special education services. Mrs. Pullman, his future first grade teacher who also worked with him during the summer writing camp, informed me of his academic challenges.

Brittany was a biracial girl entering second grade. She had round, brown eyes and often wore her brown hair, which was highlighted in copper tones, in pigtails. Her pigtails were usually adorned with a ribbon, hair twist with balls, or a colorful barrette at the base. She lived with her Caucasian mother. Her African American father visited her about every two weeks. This caused Brittany to feel confused and unsure of her family situation. She was prone to crying outbursts as well as fits of anger. She attended summer school the past two summers.

Jose was a male Hispanic ELL entering third grade. During the school year he received support from an ELL teacher because his primary language is Spanish. Every letter sent home must be translated in Spanish for his parents to read. His cousin attended the writing camp with him, but did not return after the first week. He loved to draw and even practiced art at home with his father. He enjoyed learning about nature, made friends easily and got along well with others.

Jacob was a biracial boy entering fourth grade. He had brown eyes, short brown hair and caramel colored skin. Freckles adorned his face. His mother was African American and his father was Caucasian. His parents are married, but frequently argued which resulted in one moving out of the home for a short period of time. He liked to play video games and talk to his neighbors.

His demeanor was happy, but he did not take responsibility for his work. He worked well under pressure, but needed constant redirection to complete tasks in a timely manner.

Beyonce, the oldest child in her family, was an African American girl entering fifth grade. She could complete tasks independently. She frequently sought to gain attention from others. Beyonce had used writing in her personal life as a way to express her emotions. During summer writing camp, her brother was in the hospital and her mother spent much of her time with him. Beyonce's uncle supervised her when her mother was not home.

Additional Student Participants

Although I discussed the five students mentioned above, it is also important to include data from the other 14 students selected for this case study based on their attendance, ability to communicate their thoughts, grade level, gender, and race. Below are short biographical sketches of the additional 14 students involved in this case study.

Chris was an active Caucasian boy entering first grade. He struggled with attentiveness, and it was difficult for him to work independently. He often did not know how to begin writing, he got distracted, and did not complete work in the allotted time. Chris did not finish his final piece, and, in order to concentrate, worked in a small group with a teacher during recess. Chris liked praise and attention from the teachers. Most of his stories and drawings showed action.

Tonya was an African American girl entering first grade. Her vocabulary and sound recognition seemed well above the other kindergarteners and even some first grade students at the summer writing camp. She worked independently. She absorbed the contents of each lesson and was able to produce high-quality work. Tonya was also smaller in physique compared to the other first graders in her writing camp. She behaved appropriately and her teachers often commented how they were amazed at her intellectual ability.

Andrea was a short, petite Hispanic girl with long brown hair and almond eyes entering first grade. She was enthralled with rainbows and she drew them at every opportunity. Her mother walked Andrea to summer writing camp every morning which excited Andrea because she looked forward to spending time with her. She frequently wrote dashes between letters in the same word to segment sounds.

Miley, a Caucasian girl who lived with her mother and younger sister, was a first grade student entering second grade. Her grandmother was involved in her life and walked Miley to school every day. In kindergarten Miley was recommended for testing based on behavior issues

and speech difficulties. She had been abused and often acted out in the classroom. Her speech did effect her spelling which made her writing difficult to read. She struggled with focusing and getting started on her own. During the school year she received paraprofessional support in the classroom to help with her impulsive nature and to focus on assignments.

Grant was a blue-eyed boy entering the second grade. He had short, blonde hair, a big smile and freckles dotted his nose. He played well with others. Grant had good manners and raised his hand to speak. He often got excited about writing and rarely needed prompting to get started. He had great ideas for writing. Grant liked to be finished after writing his first copy. His father was deployed in Iraq during the summer writing camp.

Sierra was a cheerful student entering second grade. She loved to participate in class, tried hard and enjoyed pleasing the teachers. She was an African American girl whose hair was always in multiple, braided ponytails. She sat close to the board because she could not see despite passing the school's vision screening. Sierra's sound recognition was poor which contrasted her extremely high verbal ability. She answered questions with detail, added to conversations, and anticipated what the class would learn next. She enjoyed writing and kept a personal journal at home.

Tyra was the cousin of two students, Kendrick and Keenan, and she was one of 12 children living in her house. She lived with her aunt, not her parents. She was an African American student entering second grade. Tyra always had a big smile. Her writing camp teachers considered her academically above average for a student entering second grade. She was placed in summer school by her teacher, who also taught in the writing camp, for economic reasons. At camp she would receive two meals a day and a snack. She attended the Boys' and Girls' Club after summer writing camp.

Meredith was a Caucasian girl entering second grade. Meredith enjoyed pleasing the summer writing camp teachers and sought their approval. She was mindful of other students and frequently helped with their drawing and writing. Meredith was initially apprehensive with her personal writing and was reserved around the other students for the first few days of camp. As she became comfortable in her surroundings, Meredith opened up. Her summer writing camp teachers described Meredith as an independent writer.

Jonah was a Caucasian boy entering third grade. He had brown hair with blonde highlights and dark brown eyes. He did not enjoy writing; he preferred action. Jonah had

difficulties starting to write because he struggled with phonemic awareness. He was distracted easily and often needed to work one-on-one to stay focused and succeed. Jonah let out grunts and sighs of boredom and often put one hand on his forehead as he tried to write.

Jaime was a blue-eyed, Caucasian girl with blond hair entering third grade. She had bangs and wore her hair in a ponytail with lacey, tool ties. She was polite and willing to help other students. Jaime always talked about the positive things the students learned and how to better her writing. The soon-to-be third grader liked to please teachers and often imitated their drawings and writings. Jaime struggled applying her learned strategies on her own. She enjoyed writing and generated a large amount, but struggled completing her thoughts.

Shannon was an energetic, Caucasian girl entering fourth grade. She had freckles and brown hair with blonde highlights. She had bangs and often blew them out of her way in order to see. She talked a great deal and made friends easily. She enjoyed drawing and learning about animals. She was a reluctant learner and did not want to make mistakes. If she perceived she could not do something or it was not good enough, she would shut down making it difficult for her to complete work.

Jocie was a tall, Caucasian girl entering fifth grade. She had blue eyes and auburn, shoulder length hair. Freckles dotted her nose and arms. She was quiet and finished her work in a timely manner. She did not have many friends at summer writing camp. She lived with her mother and father, and he was often away on business which made Jocie sad. Her grandmother, who owns a local office supply store, helped take care of Jocie while her father was away. Jocie liked to draw and write and did not show any difficulty in completing assigned tasks.

Avril was a Caucasian girl entering fifth grade. She had blue eyes and brown freckles. Avril talked constantly. She struggled with focusing but was able to do the work. Avril required a lot of attention and redirection to complete her assignments. She often started arguments with other students to get attention. Avril left her seat frequently and talked to the other teachers instead of raising her hand and working. She worked at a fast pace, but the pace did not match her potential. At the end of camp, she commented she did not want to leave.

Zena was a tall, slender African American girl entering fifth grade. Her hair was fixed in many tiny braids with tan rubber bands securing the bottoms. She was an only child and lived with her mother and aunt. She was an excellent artist with an uncanny sense of humor. She

arrived late to summer school several times. She was quiet and friends with Beyonce. Zena taught herself how to draw and kept a journal at home.

Table 3.5 depicts the 19 students selected for this case study varied by race, gender, and grade level. These students were selected for the case study because they attended summer camp 17 of the 18 days and showed the ability to communicate their ideas through oral and/or written expression. Their diverse backgrounds provided a deeper understanding of how visualization embedded in the writing process could help a myriad of struggling learners.

Table 3.5. Demographics of 19 Selected Student Participants

Grade	Caucasian		African-American		Hispanic		Biracial		Total
	M	F	M	F	M	F	M	F	
K	1	0	1	1	0	1	0	0	4
1st	1	2	0	2	0	0	0	1	6
2nd	1	1	0	0	1	0	0	0	3
3rd	0	1	0	0	0	0	1	0	2
4th	0	2	0	1	0	0	0	1	4
Total	3	6	1	4	1	1	1	2	19

Teachers

The student participants did not make up the entirety of this study. In addition to the students, five teachers volunteered to teach summer school and were employed by the district. All five teachers gave consent to be a part of this case study (see Appendix C5). I collected the following information regarding their background through face sheets (see Appendix D4), observations, and in-person communication.

Eva Buchannon had sandy blonde, shoulder-length hair and hazel eyes and was a Success for All[®] facilitator at a school in the district. Although she had six years of experience as an educator in three different schools, Mrs. Buchannon did not feel comfortable as a classroom teacher and switched to the facilitator position.

Mrs. Buchannon commented that she received little writing workshop professional development as a new teacher. Her art experience was limited to one college class. She believed the scope and sequence of the district’s writing standards were not clear. She did not request to work with the writing camp, but after being assigned to the camp, was partnered with the primary group of students.

Amanda Pullman was an articulate first grade teacher with a master's degree in Curriculum and Instruction with an endorsement for ELL. She taught five consecutive years at the same school in the district. She was the only first grade teacher in her school and usually had about 12 students in her class. She conducted a writer's workshop in her classroom everyday and had students working on different pieces at different times. She had the most experience with the writing workshop and modeled mini-lessons well. To plan her mini-lessons she used a notebook to record notes and used her reflections to teach skills to whole or small groups. She did not have any experience with art. Mrs. Pullman's expertise was utilized by placing her with the primary students.

Christine Sykes had long, dark brown, straight hair and big, round brown eyes. She taught third grade at the same school as Mrs. Pullman and Mrs. Buchannon and were also assigned to teach the primary students. She was the youngest teacher of the group with only two years of experience. She learned of the writing workshop through college classes. In addition to writing courses, she also completed an art course as part of her undergraduate studies. Mrs. Sykes said she struggled with teaching writing. She believed this was due to a lack of clear expectations from the district, in addition to struggling herself with writing when she was a student. She claimed to dread the writing workshop because she did not know how to organize for it in her classroom or how to help students with their writing.

Reba McCourt, a tall and slender woman, had 20 years of teaching experience which more than tripled the amount of the other four teachers combined. She had taught kindergarten through fifth grade. During the previous school year, this experienced teacher taught one higher level fifth grade class of reading, five to six classes of reading tutoring groups and one class every other day to high math students from third grade. She taught all 20 years in the same district where I conducted the case study. She claimed to not have any writing workshop experience as a classroom teacher. She recalled a couple of conferences about writing in the classroom and was trained to use the Six-Trait Analytical Model (Spandel, 2004). Mrs. McCourt completed several art classes throughout her high school and college career. She also attended pottery and photography classes as part of her continuing education and received several awards at the local county fair for her photography. Mrs. McCourt had a great deal of patience with the intermediate group and worked well with students one-on-one to increase their understanding and vocabulary.

Lisa Yost taught for six years in the classroom, but five of those years were as a remedial reading specialist. The previous year, she taught fifth grade at one of the lowest socio-economic schools in the district. She was scheduled to teach remedial reading to primary age students the next year. However, with her recent intermediate teaching experience, she served as the second teacher for the intermediate writing group. She was tall and slender with golden spun hair and bright blue eyes. She lived in a city about 30 minutes from the district and commuted to work daily. Most of her previous teaching experience was in private schools. Upon entering the district, she took a Six-Trait Analytical Model (Spandel, 2004) writing course. As a student in college she also completed an art course. Mrs. Yost graduated from college 20 years ago and was concerned that her methods of instructing whole language were not relevant to today's type of writing instruction, including the writing workshop. As a fifth grade teacher, her method of teaching writing was, *Brainstorm on Monday, draft on Tuesday, revise on Wednesday, edit on Thursday and publish on Friday.*

Reba McCourt and Lisa Yost taught the intermediate students while Amanda Pullman, Christine Sykes, and Eva Buchannon worked with the primary students during the summer writing camp. All teachers were Caucasian females with varying degrees of teaching, writing, and art experience. Although Amanda Pullman, Christine Sykes, and Eva Buchannon worked in the same school during the regular school year, none of these teachers ever collaborated during classroom instruction prior to the summer writing camp.

The case study involved two types of participants: students and teachers. Although there were 32 student participants with parental consent, I selected 19 students based on the following criteria: attendance, ability to communicate effectively, grade level, and diversity. Of those 19 students, I further focused on a five student representative group from the kindergarten through fourth grade. Kendrick, Brittany, Jose, Jacob and Beyonce served as the representative students for this case study. The five teachers volunteered to teach summer school and were selected to teach at the summer writing camp by the Curriculum and Instruction department of the district.

Data Collection

Data were collected through extensive field observations of students and teachers, interviews with students and teachers, videotaped sessions of the writer's workshop, and student artwork and writing pieces. This list is consistent with the types of data Yin (1989) suggested to collect when conducting qualitative research. The following sections elaborate the details of the data collected during this study.

Fieldnotes

I kept observational fieldnotes during the 3 hour observation time of 8:30 - 11:30 a.m. daily. I recorded the fieldnotes in chronological order and created a written account of what I heard, saw, experienced, and thought while collecting and analyzing information (Bogdan & Biklen, 2003). I typed the descriptive fieldnotes using Microsoft Office Word 2007 and recorded details of the observations. A two and a half inch margin on the right side of each document was added to note reflections, thoughts, and personal comments. These reflections, thoughts, and comments were added to each transcribed set of fieldnotes by using the edit functions of Microsoft Office Word 2007 (see Appendix D1).

Bogdan and Biklen (2003) suggest using observations such as portraits of subjects, reconstructions of dialogue, descriptions of the physical setting, accounts of particular events, depictions of activities, and observer's behaviors. I annotated the date, time, and location on each set of fieldnotes. I recorded my observations of the students' and teachers' physical appearance, dress, mannerisms, and style of talking and acting to paint a portrait of the subjects. I sat next to students while they drew and wrote to record student, teacher, and teacher-to-student conversations. I used digital photographs of the three classrooms as they appeared during the study to capture the physical setting. I noted who was involved and which actions occurred during daily instruction. During field experiences, I recorded observations in a line-filled paper journal and typed the notes later the same day. I reviewed the fieldnotes that evening and added events or comments to provide a holistic view of the observation. This review of the notes provided time to reflect and guided future observations and conversations with teachers. These fieldnotes served as a primary source of data during this case study. To ensure the safety of this data, I saved them to an external hard drive each night.

Artifacts

Student-created documents such as artwork and writing samples were duplicated or digitally photographed as they emerged. This captured the writing and drawing during the different stages of the writing process. I collected the art/writing samples composed in response to the following field experiences: fishing trip, prairie conservation, nature center, fire department, and the intermediate camp wrote a personal favorite summer activity for the fire department field experience. I collected the final art/writing samples for all 19 students in both the primary and intermediate camps. Artifacts included:

- Student art/writing journals (only the entries in response to a field experience);
- Artwork (images created before, in conjunction with, and after writing in response to a field experience or the final piece);
- Writing samples (text created before, in conjunction with, and after drawing in response to a field experience or the final piece).

I created color copies of student art/writing journals at a copying center at the end of each week because students wrote and drew in them daily. I was then able to return them to the students each Monday. At the end of each summer school day, I copied or photographed students' artwork and writing to preserve the interim transformations. Artwork which was made with colors, markers, paints, and map pencils was reproduced in color. I took digital photographs of other artwork students created with clay or three-dimensional media. I reviewed each artifact to help identify writing, artistic, and cognitive developmental stages and discussed the progress of each piece with the teachers to develop future mini-lessons and conferencing ideas. All copied material was kept in a file cabinet and sorted by each student's name.

Student Interviews

The data gathered from student interviews focused on understanding two specific aspects of the study. The first was to increase my understanding of student perceptions of visualization in the writing process. Second, I sought to gain a perspective on how students viewed themselves as writers and their responses to the summer writing camp. I conducted individual and small group interviews with students. I individually interviewed students I observed who either struggled with focusing or had quiet demeanors. I paired students for small group interviews based on age,

ability levels, and their demonstrated willingness to work together. Overall, I wanted the students to speak honestly and openly. The students were interviewed on the dates, as either individuals or in groups, as shown in

Table 3.6. As the table indicates, I interviewed 25 students during the summer writing camp. Some students were interviewed but not selected based on their inability to communicate their ideas. All 19 selected students were interviewed.

Table 3.6. Student Groups and Interview Dates

Date of Interview			
6/22/07 (F)	6/25/07 (M)	6/26/06 (T)	6/27/07 (W)
Grant & Chris	Avril	Destiny & Andrea	Shannon & Beyonce
Jonah & Jaime	Brittany	Miley	Kendrick & Keenan
Jacob & Adam	Sierra	Zena	Hannah, Donisha, & Alison
Tonya & Meredith	Jocie		
	Tyra		
	Jose		

I video recorded individual and partner conversations from June 22nd to the June 29th. Initially, I used partner questions as suggested by Davidson (1996) to guide the conversation between two or three students (see Appendix D2). However, the questions proved difficult for the primary students to understand. I reworded and condensed the questions to help guide the conversation (see Appendix D3). The largest group of students I interviewed was three. These small groups reduced noise and confusion between speakers. I recorded the interviews in the third classroom, which housed the tents and computers, with the door closed and a sign posted which read, “Please do not enter. We are taping.” I sat the students down with their materials and began interviews by showing them the camera so they would not wonder about it during the

interview. I recorded the interviews using a small SONY Handycam, 25 megapixel digital video recorder and several 30 minute DVR discs. The recorder was equipped with an audio zoom microphone to capture the students' voices.

To establish rapport (Bogdan & Biklen, 2003), I started each interview with minor conversation about what grade the student would be in next year and other personal pieces of information I gleaned from previous observations to make the students feel comfortable and at ease. To account for any unforeseen absences, I allocated 2 days at the end of summer writing camp for any make-up interviews. All subjects provided written permission (see Appendixes C3 and C4) for the interviews from their custodial parent/guardian as part of the IRB consent form.

Teacher Interviews

The intent of teacher interviews was to gain more information through purposeful conversation (Morgan, 1997). These interviews provided a way to collect data and gain a deeper understanding of the lessons instructed during summer writing camp. I used the interviews to obtain data in the participants' own words.

I conducted teacher interviews in the third classroom, as I had with the student interviews, to ensure privacy and quietness. The same sign was posted to avoid interruptions. The only difference in procedures from the student interviews was I sat opposite the teacher instead of next to them as I had with the students. Before starting the interview, I asked each teacher for her permission to record the interview. I began each interview with minor conversation, as suggested by Bogdan & Biklen (2003), to establish rapport with the interviewees. Then, I proceeded to ask open-ended questions (see Appendixes D4 and D5). I scribed notes during the interview to help with future transcriptions and to formulate possible questions. Videotaping the interview permitted me to maintain eye contact and record physical observations of the interviewee. The interviews were guided conversations consisting of several open-ended questions which allowed for ongoing elaboration.

I recorded all interviews then transcribed and reflected on the text using the comment feature of Microsoft Office Word 2007 (see Appendix D6). Creswell (1998) suggested recording the interview and then transcribing to certify information. Each transcript included a heading containing information about the interviewee and the date and time of the interview. The purpose of the interview was to gain a deeper understanding on how teachers incorporated visualization

in the writing process, how they perceived students' attitudes, strengths, weaknesses, and their thoughts on the benefits of the summer writing camp. I scheduled the teacher interviews during the final two weeks of instruction to provide more time for reflection after modeling different visualization techniques. This scheduling allowed teachers to gain greater insight on incorporating visualization in the writing process and provide rich detail. Informal interviews or conversations were documented in the observational fieldnotes.

I interviewed Mrs. Pullman on Thursday, June 21st in the afternoon towards the end of the third week of summer school. During camp, I worked daily with Mrs. Pullman and discussed lesson plans, student writings, and art samples to help develop professional rapport. The interview on June 21st served as the first formal interview with the teachers. Mrs. Pullman asked to review the eight open-ended questions before the interview to help her feel comfortable while being videotaped. The interview with Mrs. Pullman lasted about 30 minutes and formed the basis of the four remaining teacher interviews. All the teachers asked to review the questions before their interviews. I interviewed Mrs. Sykes on Friday, June 22nd, Mrs. Buchannon on Monday, June 25th, Mrs. McCourt on Tuesday, June 26th, and Mrs. Yost on Wednesday, June 27th. I interviewed one teacher each day to allow time to interview groups of students. The teachers were paid by the district for 30 minutes of planning either before or after the summer school day so I interviewed each teacher during this time to prevent the teachers from staying longer at summer school without compensation. I asked each teacher all of the eight open-ended questions (see Appendix D5). However, the questions were not always asked in the same order due to the nature of the conversation. A question may have sparked another conversation during the interview. All transcripts and DVD recordings remain in my possession. The video recorder captured nonverbal gestures which were added to the transcripts.

Lesson Videotapes

To capture voice inflection and student and teacher movements during lessons, I video recorded one lesson each from the primary and intermediate writing camps. These data provided an opportunity to understand how teachers used visualization in the writing process and how students responded to the lessons. The videotaped lessons also captured how students acted as a writing community by sharing their writings and drawings with each other and the teachers.

Students' direct and indirect attitudes about drawing and writing through verbal and nonverbal cues were recorded.

I intentionally selected a lesson from each camp to showcase the differences in how primary and intermediate teachers incorporated visualization. After discussing possible lessons to record with the teachers, I decided to record a mini-lesson from the primary class and a whole group lesson from the intermediate class. I recorded how Mrs. Pullman, a primary teacher, used visualization to teach perspective in writing. The digital video showed how she used techniques such as pointing to her head and closing her eyes during the mini-lesson. The digital recording of the mini-lesson allowed me to capture which students participated, their expressions, their behavior, and their conversations.

The whole group lesson for the intermediate class focused on how to write a beginning, middle, and end of a narrative piece. Mrs. McCourt used an ELMO (document camera) to model how to brainstorm, illustrating her thought process using a graphic organizer. After allowing the students to brainstorm in their groups, both teachers circulated around the room to hear each student's writing ideas. Then, Mrs. Yost modeled how to draft a personal narrative using the organizer with the drawings Mrs. McCourt drew. The digital recordings allowed me to listen to students' side conversations, observe the teacher's techniques, and capture the teacher's one-on-one conversations with students while the other teacher was modeling.

These two videotaped lessons amounted to one hour of instruction. I also digitally recorded the students working during independent, conferencing, and sharing time. These recordings provided data concerning how students interacted with each other, identified which students sought teacher help, and designated which students liked to share their work. The digital recordings captured verbal and nonverbal actions of both the students and teachers. During transcription I was able to select scenes and isolate instances to code and review in detail. The five DVD discs remain filed in a cabinet and a copy of each recording was saved to an external hard drive.

Additional Documents

In addition to the student art/writing samples, fieldnotes, and video tapings, I sought other sources of information. To obtain a holistic perspective of the summer writing camp I collected several types which supported the interviews and fieldnotes. These documents include:

- Internal documents (teachers' notes to the children about their writing);
- External communication (letters sent home and to community agencies);
- Student records (district CRT scores, report cards, demographic data);
- Working documents (student art/writing samples to include their writing journal, drawings, and final published pieces);
- Teacher lesson plans; and
- Digital photographs (taken from field experiences, students' art work, students' writing, classroom setting, students working, and instructional material).

The collection of additional documents provided information about the logistics, resources, atmosphere, and background student information of the summer writing camp. These materials provided factual information to support the fieldnotes and interviews collected during the case study.

I gathered rich data from the documents, observations, interviews, and visual recordings. Each data source provided a single perspective of observation. There were two main purposes for data collection in this study. First, I intended the data collection to focus on understanding how the cognitive developmental stage of writers provided indication of their writing and artistic stages. The second purpose of the data collection was related to the design and execution of the research itself. This data could form the basis for future studies and help others continue toward a greater understanding of the effects of visualization on writing. Those design related data points included: fieldnotes, my personal reflections, lesson plans, and interviews with the teachers. During this study, I sought to connect information gleaned from the research questions while remaining receptive to the possibility that new information may emerge. Table 3.7 designates the alignment of research questions, data collection, and data analysis.

Table 3.7. Research Question, Data Collection, and Data Analysis

Research Questions	Data Collection	Data Analysis
<p>How does the use of visualization embedded in the writing process influence struggling learners in a kindergarten through fourth grade summer writing camp?</p>		
<p>What types of instructional methods, activities, and techniques engage children in visualization during the writer’s workshop?</p>	<ul style="list-style-type: none"> • Student interviews • Small group interviews • Teacher interviews • External documents • Artifacts 	<ul style="list-style-type: none"> • The initial and focus coding (learning to see, opened eyes) of interviews, videotaped lessons, and fieldnotes.
<p>How does visualization influence potential effects in the individual writing scores of the Six-Trait Analytical Model (Spandel, 2004)?</p>	<ul style="list-style-type: none"> • Observational fieldnotes • Teacher interviews • Lesson videotapes • Art/writing samples • Artifacts 	<ul style="list-style-type: none"> • Assessed selected students’ pieces with Six-Trait Analytical Model (Spandel, 2004) rubric. • Recode data using sub codes for Six Traits. • Focus code interviews, lesson plans and view and code fieldnotes.
<p>How do the students’ writing and art stages reflect the stage of cognitive development of the writer?</p>	<ul style="list-style-type: none"> • Observational fieldnotes • Teacher interviews • Lesson videotapes • Art/writing samples • Artifacts 	<ul style="list-style-type: none"> • Analyze five selected students’ pieces for each project. • Analyze students’ cognitive and art development stages and writing levels. • Focus coding of interviews, lesson plans, video tapes, and fieldnotes.
<p>How do students and teachers view potential connections between art and writing?</p>	<ul style="list-style-type: none"> • Student interviews • Small group interviews • Teacher interviews • External documents 	<ul style="list-style-type: none"> • Initial and focus coding (perception) of interviews, videotaped lessons, and fieldnotes which focused on student and teacher perceptions.

Data Analysis

In keeping with the tradition of qualitative research analysis, I reduced and organized the data to provide insight into how visualization embedded in the writing process may help struggling learners increase their Six-Trait scores. I systematically searched and arranged documents, transcripts, fieldnotes, and other sources of collected data to determine the findings of the research. The rich data collected were organized, broken down, coded, synthesized, and examined for patterns in an effort to move past the verbose pages of description and produce a discernable product (LeCompte & Schensul, 1999).

I implemented the procedures found in the Data Analysis Spiral (Huberman & Miles, 1994) to analyze the data. First, I collected data in the form of interviews, field observations, and artifacts. The data were stored both in paper files and digitally. At this stage, I began to use a qualitative research program recommended by Bogdan and Biklen (2003) called HyperRESEARCH™, 2.8. This program allowed me to manage files and consolidate the results of the coding process. After I transcribed all interviews and fieldnotes, I used the comment function in Microsoft Office Word 2007 to write reflections (see Appendixes D1, D6, and D7). I converted these data sources into a text file for use in Notepad. These were subsequently identified as source files in HyperRESEARCH™ (see Appendix E1) and would be the foundation for all coding. I then created separate cases for each file in HyperRESEARCH™ (see Appendix E2), and I transcribed and labeled them according to their original source name. Once complete, I was ready to begin the coding process. As my coding evolved, I created individual codes in HyperRESEARCH™ (see Appendix E3) and assigned each detailed code their definitions. The definitions are further detailed in the Initial and Focused Code section of Chapter 3. I then returned to each case in HyperRESEARCH™ I created earlier in the process, reviewed the transcripts of the text file associated with each case, and assigned the codes to specific blocks of text (see Appendix E4). HyperRESEARCH™ allowed me to manipulate the coded data in many ways. I coded and re-coded data for *perception*, *learning to see* and *opened eyes* codes, sorted coded text according to my own criteria, determined code frequencies both graphically and statistically, and produced printed lists of all data associated with specific codes. Huberman and Miles (1994) suggest researchers count the frequency of codes.

Using HyperRESEARCH™, I reduced the data to answer the overall and subsequent research questions. Some codes were narrowed further by creating subcodes. I interpreted the data by reviewing it as a whole and searched for deeper meanings.

I present the data analysis in the subsequent two chapters. Chapter 4 contains an individual analysis of the student art/writing samples. The discussion is divided according to field experience in a narrative format to provide rich descriptions of the visual experience, mini-lessons, representative student art/writing samples, and selected comments from student and teacher interviews.

Chapter 5 provides a holistic analysis of all 19 student participants. The analysis addresses students' stages of artistic development, Six-Trait scores, writing levels, cognitive stages of development and how the students and teachers perceived visualization in the writing process. The data analysis is presented in mixed graphic and narrative form to help portray visualization embedded in the writing process may help struggling learners in a summer writing camp for students in kindergarten through fourth grade. Data analysis was a fluid concept and began with the first observation, interview, and artifact collection. Table 3.7 aligns data collection and data analysis plans and illustrates my qualitative methodology to gain a deeper understanding of the research questions.

Initial Coding

I reviewed the students' drawings and writings in order to determine codes (Bogdan & Biklen, 2003). This coding strategy helped sort the data according to the descriptors. Coding enabled me to make sense of the data (Lincoln & Guba, 1985). Defining each code made it easier to code each piece of data. The first step required me to identify my initial codes (Loftland & Loftland, 1995). I analyzed student art/writing samples and applied the initial codes I created for writing, artistic, and cognitive categories (see Appendix D8). As I reviewed art/writing samples, I coded the data by identifying how each piece was categorized in either Piaget and Inhelder's (1969/2000) cognitive development stages, Lowenfeld and Brittain's (1975) artistic developmental stages, and writing levels according to the Six-Trait Analytical Model (Spandel, 2004). The specific definitions for the initial coding categories are detailed in Chapter 3 in subsequent sections titled: analysis of artistic developmental stages, Six-Trait Analytical Model (Spandel, 2004), analysis of writing levels, and analysis of cognitive development stages. Figure

3.1 presents a visual representation of the relationships between the initial coding categories to provide greater clarity.

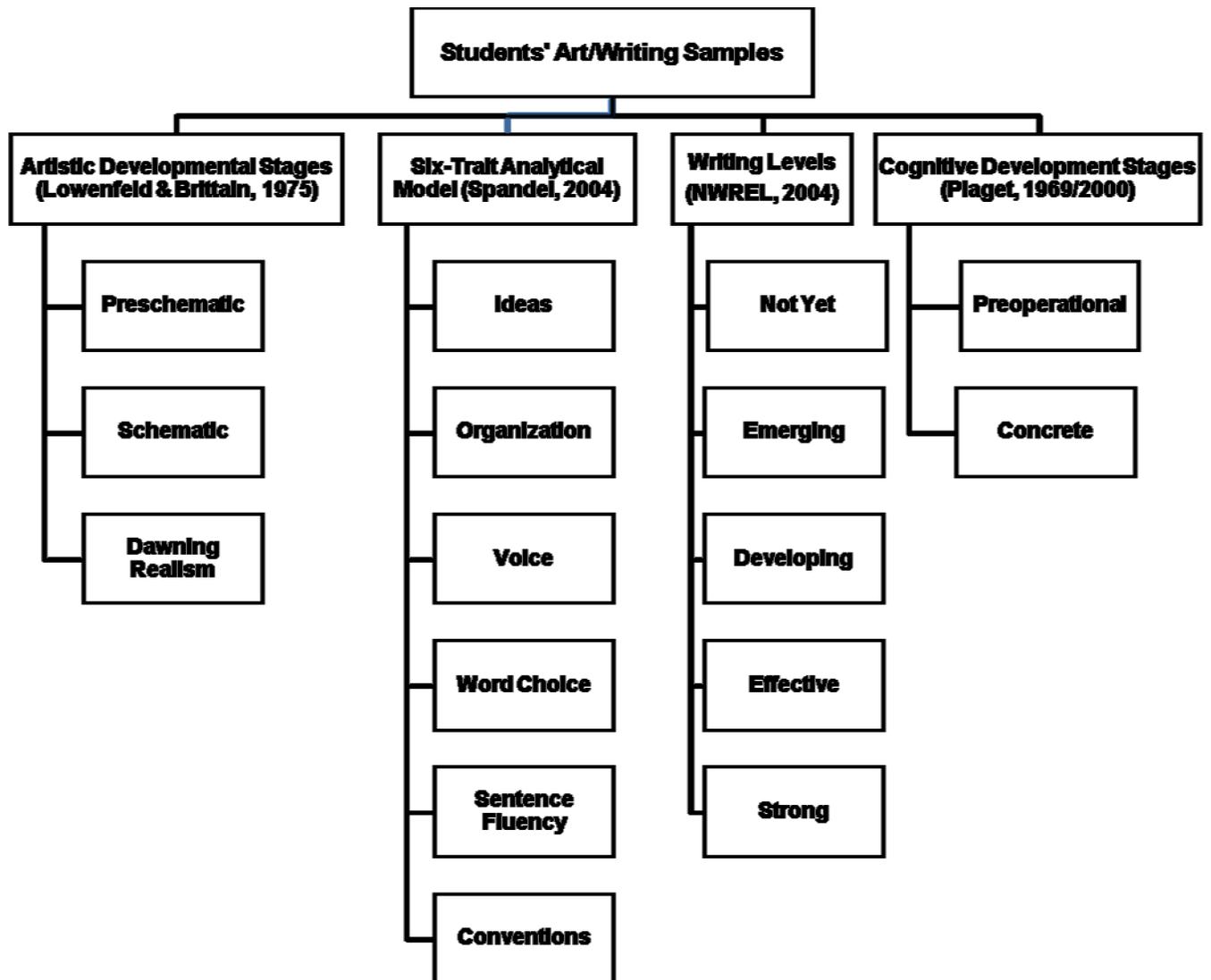


Figure 3.1. Initial Coding Categories

Focused Coding

After initial coding of student art/writing samples, I began the focused coding (Loftland & Loftland, 1995) of fieldnotes and interviews using categorical aggregation (Stake, 1995) to search for meaning in the data. Figure 3.2 illustrates the categorical aggregation of the focused codes. I developed focused codes from the repeated review of these data sources (Bogdan & Biklen, 2003).

I culled for instances in both student and teacher comments, and in my fieldnotes which indicated students *perceived* themselves as either “good” or “bad” writers based on their past experiences, their ability to spell, and their handwriting skills. The students also *perceived* themselves as “good” and “bad” artists. I uncovered these comments in my fieldnotes and student interviews. Through the course of the summer writing camp, students were exposed to visualization techniques intended to help struggling learners. As students learned to incorporate these techniques, they *learned to see*. I also found teachers needed to model for students how to see their visual environment through pictures, graphic organizers, and charts. The students used visual tools to help reinforce visualization embedded in the writing process. Once the students grasped these concepts, they were willing to change their methods of using the writing process leading them to greater *flexibility of thinking*.

Teacher interviews and observational fieldnotes revealed the primary teachers had different *perceptions* of the students as artists and writers versus the intermediate teachers. Rereading the observational notes, I noticed one teacher commented how summer writing camp “*opened her eyes*” to new methods of teaching writing. All the teachers commented on their willingness, or lack thereof, to change to new methods of instruction during their interviews which showed varying degrees of *flexibility of thinking*. The coding procedure is depicted graphically in Figure 3.2. The analysis of the focused codes is detailed in Chapter 5 and further discussion is included in Chapter 6.

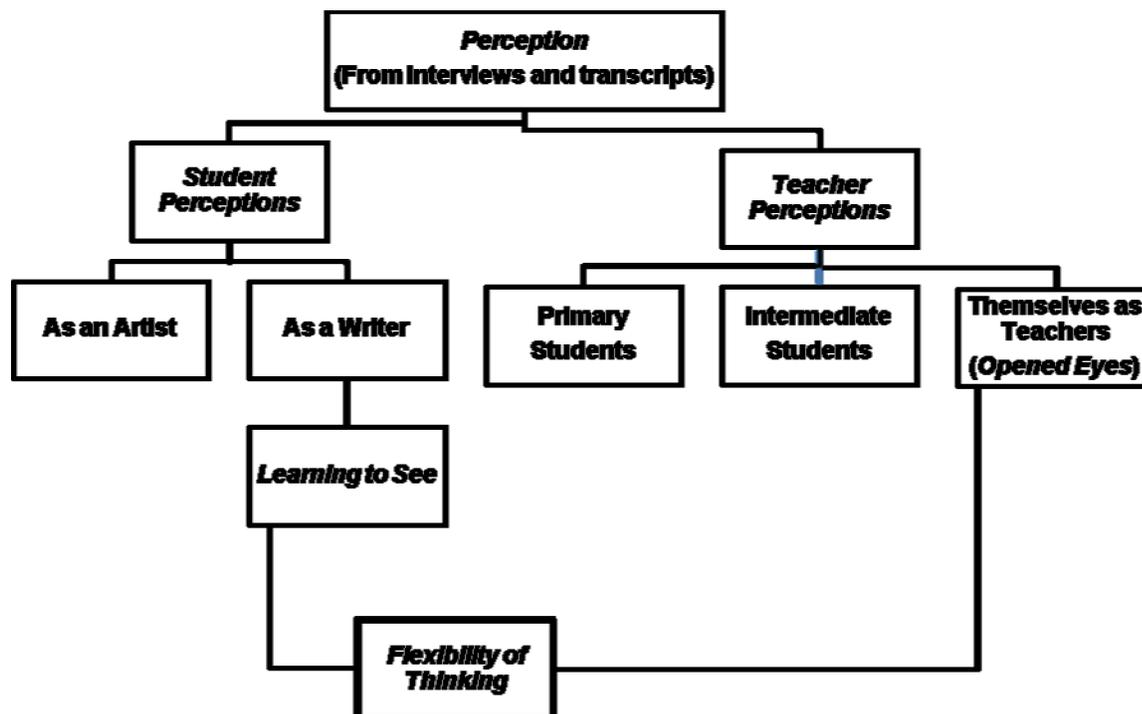


Figure 3.2. Focused Code Methodology

Fieldnote Analysis

Once all fieldnotes were typed in the two-column format, I read through the observations. I highlighted parts of the text I deemed relevant, interesting, or valuable to the study and added my reflections in the right-hand column. I read through all comments from the fieldnotes in chronological order, identified certain repeated words and phrases, and identified the code *perception* in both interviews and fieldnotes. From the *perception* code, I found three other codes began to emerge. These three additional focused codes, *learning to see*, *opened eyes*, and *flexibility of thinking*, helped me gain a greater understanding of possible responses to the research questions. Again, I coded the fieldnotes using HyperRESEARCH™, 2.8 and generated a frequency report (see Appendix E5) which graphically depicted the total amount of data assigned to each code.

Artifact/Document Analysis

I collected a large number of artifacts from students as well as from teachers. These artifacts included writings, drawings, student art/writing journal entries, and notes written between students and teachers, all of which were analyzed and coded. Most of the artifacts were either digitally photographed or color photocopied for cataloguing, which allowed students to take their original work home.

These artifacts were coded using initial codes. The district's writing CRT was collected and used to provide the base line for the qualitative data revealed in this study. However, the district could not provide the writing CRT scores for one of the students. Therefore, I evaluated his or her first journal entries with the Six-Trait Analytical Model (Spandel, 2004) to provide the base line for his or her writing. Writing CRT scores for all kindergarteners in the district were not available because the district does not require the CRT for this grade level. I evaluated the kindergartener's first journal entries with the criteria from the Six-Trait Analytical Model (Spandel, 2004) to provide their base line writing assessments. The district was able to provide scores for all first through fourth grade students.

Each of the 19 selected students in the writing camp completed a total of four writing and art pieces in response to the field experiences. The final versions of the four writing pieces were evaluated using the Six-Trait Analytical Model (Spandel, 2004) and coded to determine the writing level. Art pieces accompanying each of the four writing pieces were coded using Lowenfeld & Brittain's (1975) stages of artistic development.

A final art and writing piece, which served as the culminating assessment from each student, was collected and evaluated. I analyzed student art/writing samples from both the primary and intermediate camps. One teacher from both the primary and intermediate camps also independently evaluated all the final pieces to provide reliability. We used the Six-Trait Analytical Model (Spandel, 2004) and assigned final scores based on the methods described in more detail in the Six-Trait Analytical Model Analysis section of Chapter 3. I independently assessed the final art pieces using the initial stages of artistic development codes from Lowenfeld & Brittain's (1975) stages.

Video Analysis

I recorded individual and partner interviews with a digital video camera so I could replay images and conversations concerning visualization embedded in the writing process. I looked for student behavior, presentation of their drawings and written texts, and interactions between both the teacher and student, and between students in small groups. Video recordings revealed specific information regarding students' perceptions of visualization in the writing process. I used both the original (see Appendix D2) and the revised (see Appendix D3) interview questions for the students and a different set of interview questions (see Appendixes D4 and D5) for the teachers to record answers, mannerisms, and behaviors. I noted whether the students participated and remained engaged and commented on their verbal cues, nonverbal cues, cognitive thought processes, and their physical appearances. I transcribed 16 videos totaling 10 hours of observational data (see Appendixes D6 and D7).

In addition to video recorded interviews, I analyzed two video recorded lessons which showed visualization embedded in the writing process. I captured the room design for the whole group lesson, small group lessons, collaborative and independent work. I observed how students reacted to the lesson by watching their level of engagement, participation, and communication with each other about their drawings and writings, and their independent work. Again, I used the four focused codes to analyze the observational data which included video transcriptions. These codes helped identify *perceptions* and techniques used to teach and implement visualization embedded in the writing process.

Analysis of Artistic Developmental Stages

Analysis of the art created by students during the writing process is noteworthy to this study. In the beginning of camp, I instructed the teachers to give each student a blank piece of white paper and require the students "draw a man" (Goodenough, 1926) to the best of their ability. These drawings were the base line for the students' stages of artistic. In addition to this initial artwork, each student's drawing for each of the four written pieces during the summer writing camp and final art/writing piece were analyzed using the stages developed by Lowenfeld and Brittain (1975). These stages of artistic development outline the degree of artistic understanding of the individual student. Analysis of the students' drawings was important because it painted a verbal picture of the student's artistic knowledge and abilities to visualize.

More importantly, the creation of art was a motivational tool and scaffolding strategy for struggling learners. Although Lowenfeld and Brittain (1975) describe five stages of artistic development, I concentrated on three of the five stages related to the students' ages. These stages are:

1. Preschematic Stage. It is this stage where the student makes his or her drawing look representational. Figures are elemental and drawn haphazardly on a page.
2. Schematic Stage. The student's drawings show details making the figures recognizable. Objects are drawn on a horizontal base line and colored realistically.
3. Dawning Realism. These drawings are much more detailed than previous drawings. Often the drawings will symbolize the student's environment instead of representing objects. Students will attempt to show objects three-dimensionally.

Six-Trait Analytical Model Analysis

The four student writing pieces written in response to a field experience in addition to the final writing product were assessed using the Six-Trait Analytical Model (Spandel, 2004). The primary camp students' writings were assessed using Spandel's (2004) *Young Writer's Rubric* (see Appendix D11) and the intermediate camp students' writings were assessed using The Northwest Regional Educational Laboratory's *6+1 Trait Rubric* (NWREL, 2004) because of the developmental age of the students. Spandel's (2004) writing level titles which corresponded to the numeric (1-5) assessments for each trait are different. For purposes of this study, I used NWREL's (2004) names for the levels.

Teachers in the early 1980's developed these analytic scoring systems as a way to gain a more holistic view of students' writing abilities. Thus, it is essential the specifics of this rubric be discussed. NWREL (2004) developed six essential qualities to define strong writing. These qualities were: Ideas, Organization, Voice, Word Choice, Sentence Fluency, and Conventions. Later the +1 quality was added for Presentation which assessed how the published piece appeared on the page. This study will not address the Presentation trait for two reasons. First, the district where the study occurred did not assess the trait. To maintain consistency with other district practices, this trait was excluded from the study. Second, the artwork, which would normally be assessed in terms of the Presentation trait, was consistently evaluated against

Lowenfeld and Brittain's (1975) stages of artistic development. The six traits evaluated during the study were:

1. Ideas. The idea is clearly stated and developed.
2. Organization. The piece flows in a logical sequence.
3. Voice. The reader can hear the writer's tone and style.
4. Word Choice. The author uses vivid words including similes and metaphors to get the meaning across.
5. Sentence fluency. There is a combination of short and long sentences, and they flow nicely throughout the piece.
6. Conventions. Students use grade-level spelling, punctuation, and grammar in writing.

Although six traits are included in Spandel's (2004) model, the district evaluated certain traits at certain grade levels. To maintain consistency with current district assessment standards, kindergarten and first grade students' writing was evaluated for Ideas, Word Choice, and Conventions traits. Second grade students' writing was assessed for Ideas, Organization, Word Choice, and Conventions traits. Third and fourth grade students' writing were assessed on all six traits: Ideas, Organization, Voice, Word Choice, Sentence Fluency, and Conventions.

Analysis of Writing Developmental Stages

Analysis of student writing was essential to fully understand the role of visualization in the writing process. The age and ability of the participants of the summer writing camp varied and the writing levels reflected that disparity. Therefore, district writing CRT scores, the four writing pieces produced during the summer writing camp, and the final culminating writing assessment were assessed and eventually coded using the Six-Trait Analytical Model (Spandel, 2004). As mentioned earlier, a student's grade level determined which traits were assessed. Spandel (2004) created a rubric for primary writers (see Appendix D11) and this was used for students in kindergarten and first grade to assess individual traits. The intermediate camp used the NWREL (2004) rubric to assess the individual traits (see Appendix D12). NWREL (2004) stated it is possible for students in all grades to receive high scores for their writing because good writing can occur at any grade level. Traits were scored on a scale from 1 to 5. If a score fell between two whole numbers, it was rounded to the nearest whole number (ex. 2.5=3). Once the

individual trait scores were assigned (1-5), all scores were averaged. This average score was rounded to the nearest whole number and corresponded with a writing level (see Appendix D9). These levels were: *Not Yet*, *Emerging*, *Developing*, *Effective*, and *Strong*. This method of assessing individual trait scores, determining their averages and corresponding writing levels is consistent with NWREL's (2004) and the district's methods of evaluation. These writing levels and their corresponding whole number scores are:

1. Not Yet (1) – Student makes marks on paper, uses art to convey message, reads own writing, invents meaning, writer not showing any control.
2. Emerging (2) – Writer uses words and pictures to express ideas, uses imitative/borrowed print to create signs, likes to come up with personal ideas for writing, isolated moments hint at what the writer has in mind.
3. Developing (3) – Student uses text/art to create interpretable messages, has clear main message/idea expressed, can reread text shortly after writing, and needs revision.
4. Effective (4) – Student creates clear message via text or text plus art, uses multiple sentences to add detail, connects images/text to main idea, creates images that show detail, creates writing that is fully decodable by reader, strengths outweigh weaknesses, small amount of revision.
5. Strong (5) – Writers create clear, detailed message through text/art, use multiple sentences to enrich ideas or extend story, may revise by adding detail, show control and skill in this trait. (Spandel, 2004)

Within each level there is a grade level continuum based on spelling and idea development. Those factors were considered when assessing the individual trait scores.

Analysis of Cognitive Development Stages

One of the questions I wanted to understand was how a student's writing level and stage of artistic development reflect his or her stage of cognitive development. To start this process, I needed to identify which cognitive development stage each student was classified in by using Piaget and Inhelder's (1969/2000) stages as a framework. Two important concepts were used to

determine each child's cognitive level: egocentrism and spatial relationships. By analyzing each participant's level of cognitive development, a clearer view of how the child in each grade level (K-4) thinks about writing and drawing may result. Piaget and Inhelder's (1969/2000) stages are related to age; thus, the participants' ages (6-10) required only two of the four cognitive stages be used as codes.

1. Preoperational Stage - At this stage the operation originates in action and in an organized manner. Language is developed and communicated through speech and other activities such as drawing and playing by pretending (Piaget & Inhelder, 1969/2000).
2. Concrete-Operational Stage - At this stage, the student can think in abstract terms and has the ability generalize from previous experiences (Piaget & Inhelder, 1969/2000). (For this case study, I refer to this stage as 'Concrete' to prevent confusion between the previous stage because the similarity of the full names.)

The concept of egocentrism is central to Piaget's theory of intelligence (1926). This concept concerns the child's awareness of his or herself. By using Charles Brainerd's (1978) synopsis of Piaget's egocentrism, I estimated the cognitive stage of each student based on their writing and drawing pieces. Preoperational Stage students were identified with predominate self-focus in their writing. Key words which indicated this self-focus were "I" and "me." Concrete Stage students were identified by an external focus in their writing. The consistent lack of personal pronouns such as "I" and "me" showed a shift from the egocentric language of the Preoperational Stage and were consistent with the awareness of relationships between objects which is characteristic of the Concrete Stage.

The second characteristic used to determine the students' cognitive development stage was his or her projection of spatial relationships in their drawings. Piaget and Inhelder (1969/2000) assert Preoperational Stage children are typically unable to locate drawings in space relative to each other. Knowing this, I analyzed each student's drawings focusing on his or her representation of figures and their relationships in space with each other. Students who consistently represented figures and objects out of scale with each other and independent of any known horizon in their drawing were classified as Preoperational Stage students. Students who consistently showed an understanding of the scale of objects relative to each other and placed

objects on consistent horizons or in relation to a central point were classified as Concrete students.

These concepts of spatial orientation are consistent with Lowenfeld and Brittain's (1975) description of spatial relationships in their own artistic developmental stage theory. During the analysis of the students' art and writing, it was not uncommon for students to exhibit indicators of both stages. This typically signaled the student was transitioning between the stages as they developed higher cognitive functions. This transitional stage was therefore referred to Preoperational/Concrete.

I analyzed multiple forms of data to include videotaped lessons, student and teacher interviews, and collected student work. Students' art and writing samples were analyzed to determine their stage of artistic development and writing level. The student's stage of cognitive development was identified based on two principals: egocentrism within the writing and special relationship within the drawing. Depending on the student's use of first person point of view and his or her ability to draw objects in relation a student could be identified as Preoperational, Preoperational/Concrete, or Concrete.

Establishing Trustworthiness

I established trustworthiness to provide credibility for the research by gathering information from multiple sources (Creswell, 1998; Merriam, 1998; Yin, 1994). Lincoln and Guba (1985) offer the naturalist researcher concepts such as credibility, transferability, dependability, and confirmability to help the inquirer convince his or her audience that the findings of the study are notable. Techniques like prolonged engagement, persistent observation, member checks, peer debriefing, thick description, and triangulation establish trustworthiness (Lincoln & Guba, 1985). I used five of these procedures to establish trustworthiness for this qualitative case study which exceeds Creswell's (1998) recommended utilization of two of the aforementioned procedures, to add strength to the qualitative research.

Prolonged Engagement and Persistent Observation

I observed 3 hours a day, for 3 ½ weeks in the classroom during the study for a total of 54 hours of observation. During this persistent observation, the writing camp solely focused on writing; therefore, I observed the entire instructional time. Although summer school was a new experience for me, I previously taught elementary school for six years. Prior to teaching, I was a writer and editor and thus extremely familiar with the writing process. I have a natural appreciation for art and integrated it in my classroom lessons many times to reach visual and kinesthetic learners and to increase motivation. I taught at the school where I conducted the research, and I perceived I had a strong, professional rapport with the staff at the school and the professional respect of the district's Curriculum and Instruction department. Most importantly, I taught several of the students who attended the summer writing camp and they felt comfortable with me observing and asking them questions. As Lincoln and Guba (1985) suggest, prolonged engagement between the participants and the researcher establish a relationship of trust. Prolonged engagement and persistent observation are techniques I incorporated in this case study to add credibility, and therefore, were key factors in establishing trustworthiness.

Rich, Thick Description

With a background in feature writing, I intended to write a vivid, detailed description depicting my observations in order to paint a picture for the readers. Descriptions of contextual features such as the learning and socio-economic environment of the community, district, school, and classroom were needed to visualize the images of the summer writing camp. Descriptions of the student participants are detailed enough to illustrate their writing levels. Descriptions of how teachers perceived students as writers and how students perceived themselves as writers were captured through their own words and comments. The techniques used to teach children to use visualization in the writing process were described in sufficient detail so anyone reviewing this study can understand and perhaps replicate the teachers' actions. This transferability may enable the techniques detailed in this study to be transferred to other settings (Erlandson, Harris, Skipper, & Allen, 1993). Through rich, thick description, my observations are revealed in a narrative manner which enables the reader to visualize the actions, techniques, and methods observed in the summer camp writing workshop. The reader should perceive familiarity with the

students, teachers, environment, instruction, and school setting. Thus, rich, thick description helps establish trustworthiness.

Peer Review/Debriefing

I conferred with my major professor to ensure the information gathered through observations, interviews, and videotapes were portrayed in an accurate and truthful manner. In addition, a fellow professional colleague who recently completed her doctorate served as an external member and checked the method and progression of my data collection and analysis (Creswell, 1998).

After I coded the data, I worked with my colleague to establish intercoder reliability. Lombard, Snyder-Duch, and Bracken (2002) state, “Intercoder reliability is the widely used term for the extent to which independent coders evaluate a characteristic of a message or artifact and reach the same conclusion” (p. 589). During our initial meeting, we reviewed my initial and focused codes

I assembled a sample consisting of two separate types of data: transcriptions and student art/writing samples. The transcript samples included 4 days of fieldnotes, 2 student-partner and 1 individual student interviews, and 1 teacher interview. This set of transcriptions comprised 20 percent of the transcribed data for this case study. I did not provide a transcript of a mini-lesson, because I deemed it would be too difficult for someone who did not observe the context of the lesson to fully understand. In addition to the transcripts, I provided my colleague with a 20 percent representative sample of the students’ art/writing samples. This consisted of 15 student art/writing samples: five from the fishing experience, five from the nature center experience, and five from the final writing product.

My colleague was confused between two codes: *learning to see* and *flexibility of thinking*. After I conferred with her, I refined these two codes’ definitions for clarity. *Learning to see* was revised to a student’s ability to learn how to see their environment by using visual tools. My colleague’s initial understanding of this code was it related to the student’s environment independent of the visual tools. *Flexibility of thinking* was clarified to how teachers and students changed their mental states about the writing workshop and incorporating visualization. My colleague’s initial understanding of this code concerned only teachers.

Once my colleague returned the coded transcripts and student art/writing samples, I reviewed the results and compared them with my coded versions. For each of the cases in the sample, my colleague applied initial codes (for the student art/writing samples) or focused codes (to the transcripts) according to methodology described in this chapter. I determined the frequency of each code within the student art/writing sample or transcript and totaled the number of instances for the entire sample. Appendix D13 displays the results of the coding frequencies for every student art/writing sample or transcript included in the intercoder reliability peer review. I used both sets of coded data to determine a percent agreement. To determine the percent agreement, I used Holsti's (1969) method which Neuendorf (2001) stated is the "preferred method" of calculating percent agreement when two coders code the same data. Table 3.8 shows the percent agreement for this study.

Table 3.8. Percent Agreement for the Study

	Perception	Learning to See	Opened Eyes	Flexibility of Thinking	Art Stage	Writing Level	Total
A	50	31	15	21	12	12	141
N_E	53	42	15	28	15	15	168
N_L	56	39	17	21	15	15	163
PA_O	91.7%	76.5%	93.8%	85.7%	80.0%	80.0%	85.2%

According to Holsti's (1969) method, percent agreement is calculated with the formula: $PA_o = 2A / (N_E + N_L)$. In this equation, "A" is the number of times my colleague and I coded the same data identically, "N_E" is the total number of codes I assigned to the data sample, and "N_L" is the total number of codes assigned by my colleague. I calculated the percent agreement for each of the four codes: *perception*, *learning to see*, *opened eyes*, and *flexibility of thinking* and the initial coding categories for the stages of artistic development and writing levels. The overall percent agreement for the study was calculated using Microsoft Office Excel 2007 and determined as 85.2%. According to Neuendorf (2001), "coefficients of .90 or greater would be acceptable to all, .80 or greater would be acceptable in most situations" (p. 145). Having the peer

reviewer code 20% of the total data collected resulting in a percent agreement of 85.2%, thus providing enhanced credibility of the case study.

Clarifying Researcher Bias

I believe visualization in the writing process is important due to my own classroom teaching experiences. I sought to gain a deeper understanding of this process and how visualization embedded in the writing process may influence struggling learners. However, I recognize my past experiences and beliefs may influence interpretation of the data. This perspective is what Richardson (1994) referred to as, “a deepened, complex, thoroughly partial understanding of the topic,” (p. 522) also known as “crystallization.” The term crystallization is Richardson’s metaphor for “reconceptualized validity” which is the attempt to gain a deeper understanding of a question and determine believable understandings of observations (Wolcott, 1990). I collected multiple sources of data including fieldnotes, interviews, and artifacts from multiple students and teachers in an effort to provide triangulation of the data. By admitting my beliefs about the power of visualization in the writing process and providing multiple sources of data, I hoped to reinforce the credibility and dependability of this case study.

Member Checks

I involved the summer camp writing teachers in this study to help review student work samples. To help establish further credibility, I sent each teacher a draft of the Third Field Experience – Nature Center from Chapter 4. The review by the teachers of this preliminary draft helped establish greater credibility of the case study (Lincoln & Guba, 1985). This review included a narrative descriptions of the context, the primary and intermediate camp mini-lessons, analysis of the representative student art/writing samples, and the comments and analysis of the additional student participants.

In addition, participating teachers were allowed to review their videotaped interviews and written observations of the study for accuracy of the raw data. In a further effort to create reliability, one primary and one intermediate teacher each assessed the final published pieces using the methodology described earlier. The primary teacher and I assessed the writing pieces together, discussed the scores, and determined the final averaged scores. Due to time constraints, the intermediate teacher scored the writing pieces for the intermediate students by herself. I provided examples of scored writing pieces from NWREL (2004) to help guide her in assessing

scores. Then, I scored the pieces without looking at her assigned scores. I compared our scores to ensure we were using the Six-Trait Analytical Model (Spandel, 2004) correctly, because evaluating writing may be subjective. If an individual trait score was more than 2 points off (i.e. a 2 for Ideas from one scorer and a 4 from the other scorer), I gave the paper to an independent third party to assess. This is a common practice between teachers and is endorsed by the district to help resolve discrepancies and ensure the integrity of the assessment methods. The peer analyzer taught and scored upper elementary papers for the past two years. There were only two instances in which the third teacher was needed to resolve a scoring inconsistency. Member checks are considered essential in strengthening a study's credibility (Lincoln and Guba, 1985).

Summary

I used a qualitative case study design to gain a deeper understanding of visualization embedded in the writing process, its role in students' writing levels, the types of activities which reinforce its use, and the perceptions of students and teachers. Throughout this study, I acted as a participant-observer by immersing myself in the daily routines, procedures, and instructional periods of the summer writing camp and its participants. Data were collected through fieldnotes, interviews, and student artifacts. The initial analysis established a base line assessment of each student's artistic and cognitive stages and his or her writing level. During the summer writing camp there were four field experiences prompting a writing and art piece for each event. These four pieces were also analyzed with focus coding. At the end of the summer writing camp, a final art/writing piece was collected and analyzed from each student participant.

Chapter 4 presents the analysis of the student art/writing samples in a narrative format and includes descriptions of the context, the primary camp mini-lessons, analysis of the representative kindergarten through first grade student art/writing samples, the intermediate camp mini-lessons, analysis of the representative second through fourth grade student art/writing samples, and a general analysis of the additional student participants. This descriptive analysis is discussed for each of the art/writing pieces including the final piece. Embedded within the narrative analysis in Chapter 4 are vignettes of the students in the case study. Some findings are suitable to present in a table for the reader to easily understand. Careful attention was given to

the detailed presentation of the environment of the summer school to provide a protocol for replication for educators.

Chapter 5 presents a holistic analysis of the summer writing camp and highlights numerous findings. First, I present the base line analysis of each of the 19 student participants' artistic development stages, individual Six-Trait scores, and their assessed writing levels. Next, I provide the analysis of the final art/writing pieces for each of the 19 participants' artistic development stages, individual Six-Trait scores, writing levels, and cognitive stages of development. This provides the ability to document any contrast between the students' base line and final assessments. I continue the holistic analysis by delving deeper into the artistic development stages, the individual Six-Trait scores, and the writing levels in an effort to gain a greater understanding of how visualization embedded in the writing process influences struggling learners. Then, I present a visual and narrative discussion of how students and teachers view potential connections between art and writing. I conclude Chapter 5 with a discussion of the focused codes concerning *perception*, *learning to see*, *opened eyes*, and *flexibility of thinking*.

CHAPTER 4 - Student Art/Writing Sample Analysis

In this case study, I researched how struggling learners in grades kindergarten through fourth use visualization embedded in the writing process. I wanted to gain a deeper understanding of the connections between a student's artistic and cognitive developmental stages and a student's writing level through the use of visualization in the writer's workshop.

The following questions provided the framework for this case study:

How does the use of visualization embedded in the writing process influence struggling learners in a kindergarten through fourth grade summer writing camp?

Specific subquestions include:

1. What types of instructional methods, activities, and techniques engage children in visualization during the writer's workshop?
2. How does visualization influence potential effects in the individual writing scores of the Six-Trait Analytical Model (Spandel, 2004)?
3. How do the students' writing and art stages reflect the stage of cognitive development of the writer?
4. How do students and teachers view potential connections between art and writing?

Students were recommended by their classroom teachers to attend summer school to improve their writing skills. I selected five of 19 students, ranging from kindergarten through fourth grade, and analyzed their writing and art work in-depth. This representative group covered all races, genders, and grade levels. To describe the summer writing camp, this chapter includes rich data from observations, interviews, artifact collection, and analysis of the representative students' work samples. I analyzed students' artwork using Lowenfeld and Brittain's (1975) stages of artistic development; which are Preschematic, Schematic, or Dawning Realism. I assessed the primary writing camp (K-1) students' writing pieces using Spandel's (2004) Six-Trait Analytical Model and the intermediate (2-4) writing camp pieces using the NWREL (2004) 6+1 rubric. These individual trait scores were averaged to determine a corresponding writing level for each student. These writing levels were Not Yet, Emerging, Developing, Effective, and

Strong. Once the stages of artistic development and writing levels were determined, I used characteristics of both the art and writing samples to assess the students' cognitive development stages. The classification of each student's cognitive development stage was based on Piaget's (1926) concepts of egocentrism and spatial relationships. Students were assessed as either Preoperational or Concrete developmental stage learners. The results of this sequence of analyses are presented in narrative form and interwoven with artifact samples and tables to help the reader visualize the results.

The Context of Summer School

Students from one Midwestern district attended a summer writing camp held at a single elementary school, located near a military base, for 3 ½ weeks of writing instruction. The summer school day lasted from 8:30 a.m. to 11:30 a.m. from June 6, 2007 to June 29, 2007. Three rooms were allotted for the writing camp, and each room was decorated to resemble an outdoor campsite complete with tents, faux camp fires, and stuffed animals. These visual aids transformed the standard classrooms into inspiring writing solaces. Two rooms were designated for instruction, while the third was used for students' independent writing in tents.

I purposefully selected 19 of the 32 students who attended the summer writing camp to participate in this case study, to create a diverse population across gender, grade level, and attendance. Three teachers taught the primary writing camp totaling 15 students—8 kindergarten and 7 first graders. Of these 15 primary students, 10 were selected to participate in the case study. Two teachers taught the intermediate writing camp which consisted of 17 students - 9 second, 2 third, and 6 fourth grade students. Nine of the 16 intermediate students were selected to participate in the case study. Furthermore, 5 of 19 students were selected as a representative group based on grade level, gender, race, attendance, and social nature of the student.

I conducted in-depth analysis of these representative students for each field experience or major project from the summer writing camp. The representative group included Kendrick, Brittany, Jose, Jacob, and Beyonce. Kendrick was quiet, but happy African American boy entering first grade. Brittany, a biracial student with divorced parents, was entering second grade. Jose was an artistic, Hispanic boy entering third grade. He received ELL services throughout the year because Spanish was his primary language. Jacob was an imaginative, biracial student

entering fourth grade and enjoyed video games. Beyonce was a willful, yet introspective, biracial student entering fifth grade during the coming school year.

Summer School Design

The camp intended to provide all student participants with similar field experiences to serve as a springboard to develop writing topics. Each week, students ventured on field experiences such as fishing at a nearby pond, hiking a prairie conservation, visiting a local nature center, or touring the neighborhood fire department. These community-based field experiences provided meaningful opportunities for students to learn about their environment while developing writing ideas. Teachers took numerous photographs with digital and disposable cameras to capture the students' experiences to remind them of details of the field experiences. Students subsequently used these photographs as a way of brainstorming. Students drew in their art/writing journals, and then wrote about their drawing using narrative style or technical labels depending on their interest and ability. Students shared their writings and artwork with each other through peer reviewing and author's chair. After three weeks, students choose their favorite experience and developed the idea through the writing process. This final piece was shared with the community during a culminating summer school exhibition.

First Field Experience - Fishing Trip



Wen I ceched a Fish Mr. M Tock off the Fish it felt slimey. And I Felt happy.

Win I thro the Fish in the water it Sit ther for a menet. It swemed away.

— Keenan (2nd Grade)

On the third day of summer writing camp, Friday, June 8th, students gathered in the big classroom with two camping tents and the lawn chair which served as the author's chair. Students crowded around Mrs. Buchannon as she read a special book she brought from home called *Fishing With Dad* (Rosen, 1996). In this book, she read about bait, lures, bobbers, and lines; which provided the necessary background information and vocabulary for the day's planned activities. She called students' attention to a page full of word choice . . . *I feel the line zig, zag, bounce, bows, points down . . . the line feels like a guitar strumming . . .* The book served as a "touchstone" text (Nia, 1999) for future word choice lessons.

The 5 summer writing camp teachers walked the students to a nearby community pond and pulled a red, radio flyer wagon, which carried art/writing journals, pencils, tubs of worms, a first aid kit, weights, and hooks. None of the teachers considered themselves expert anglers, nor had ever previously taken a class on a fishing fieldtrip. A teacher's husband, Mr. M., dressed in a khaki fishing vest and hat with hooks and lures sticking out, met the anxious group at the pond with a tackle box and a couple extra rods.

The day was warm and sunny. The pond was circular shaped with a fountain spouting water in the middle. Rocky embankments separated green grass from murky water. Each teacher was assigned a small group of students to supervise. Students laid their poles down on the grass and waited patiently for adults to tear apart the long night crawlers for their hooks. Within five

minutes Jacob caught his first fish and it was celebrated with a photograph. Later, Beyonce caught a fish as well. After fishing for about an hour, teachers packed materials while students reflected in their art/writing journals about the experience. This fishing experience motivated many to write and draw about catching their first fish. However, not all journal entries were about fishing. Some students chose to focus on other objects they observed during the field experience.

Primary Camp Mini-Lesson

Both primary and intermediate teachers conducted mini-lessons using the high interest subject of worms as their focus on Monday, June 11th. The primary teachers split the students into three groups for center rotations. Each center focused on a type of writing using worms as inspiration. One center made worm snacks with Mrs. Sykes and focused on writing a how-to recipe. She first listed materials students needed for the recipe. After assembling materials, students helped her write, *Get cup with a spoon. Put the milk in you have to stir it up. Get way down the bottom. Add gummy worms. Top with crushed Oreos. Eat!*

The second center was worm touching with Mrs. Buchanan. Students said to Mrs. Buchannon, *Can we get our journals out and take a picture.* At this center students focused on describing words. Mrs. Buchannon asked *What does it feel like?* Students responded, *Cold, skinny.* Some students were apprehensive to touch worms and poked them with sticks. Many students made faces of disgust. Some students embraced the worms, held them in their hands, and in wonderment watched the worms. As students held or touched the worms, they said words like, *squishy, soft, dirty, and gummy.*

The third primary teacher, Mrs. Pullman, taught a mini-lesson on perspective; which in this lesson, was the worm's point of view. To help students visualize themselves as worms, Mrs. Pullman told them they were going to pretend to be worms. She led the small group outside, had them lie down on concrete, and look up at the sky.

Mrs. Pullman: *Now I'd like you to open your eyes, what do you see Look up, I see a leaf, I see . . .*

Student: *Bugs.*

Mrs. Pullman: *Bugs up in the air? Okay, I kind of see some bugs.*

Student: *Tree branches.*

Mrs. Pullman: *Tree branches, thank you. I see tree branches. I see leaves. I see sky.*

Student: *A butterfly.*

Mrs. Pullman: *Roll over on the concrete to experience how it feels.*

Student: *Bumpy.*

Mrs. Pullman: *Bumpy, good.*

Brittany: *Hard. It hurts on the ground.*

Mrs. Pullman: *It hurts, not soft, very good.*

After a couple minutes of imagining life as worms, Mrs. Pullman took the students inside and had them close their eyes and think what it was like to be a worm. When students opened their eyes, they took turns sharing what they saw and felt as a worm. These observations were added to the teacher-made worm word chart. One student wanted to add *tree branch* to the chart based on the ground-level view he just witnessed. Mrs. Pullman modeled the spelling and enlisted the students' help.

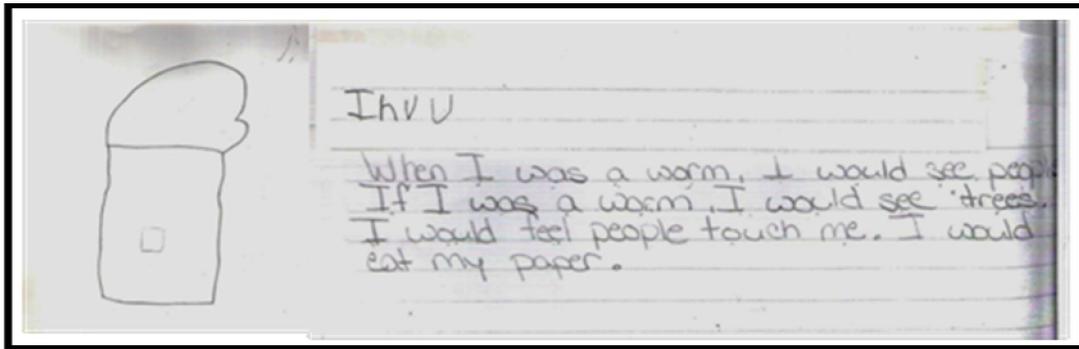
Mrs. Pullman: *Tree branches, I saw tree branches too. I see that I have "tree" already on here [word worm] so I am just going to copy "tree" and then "branch" B-R-A-N-C-H.*

Student: *Tree BR-AN-CH.*

Mrs. Pullman: *Very good, I like how she sound segmented that. BR-AN-CH.*

The mini-lesson concluded with a word wall in the shape of a worm for students to look at and refer back to when they wrote. Students were to draw a picture in their art/writing journals and then compose an expository piece describing worms.

Representative Primary Students



Art/Writing Sample 4.1. Kendrick's Fishing Trip

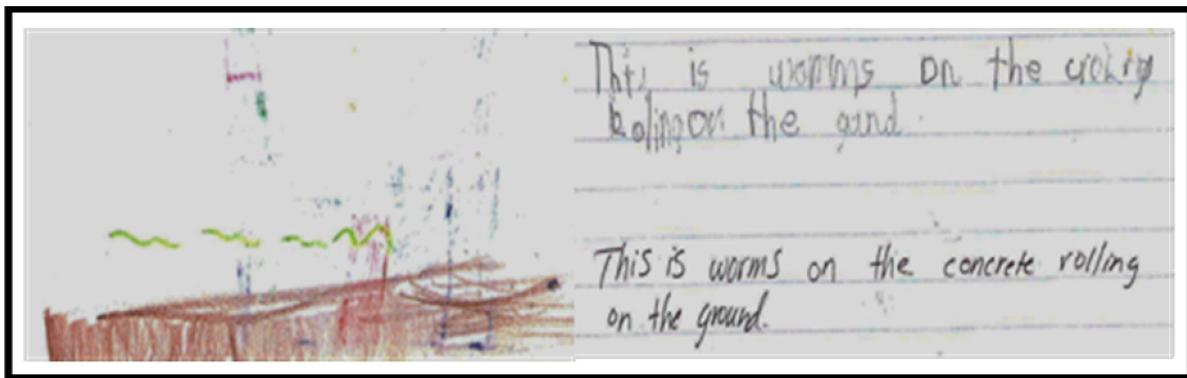
Kendrick's base line assessment confirmed his summer school teacher, Mrs. Pullman's, perceptions of his low writing ability. She combined this knowledge with her previous observations of Kendrick last year and formed greater understanding of his abilities to help her as his future first grade teacher. Mrs. Pullman encouraged him to draw what he remembered from her mini-lesson about visualizing himself as a worm. Kendrick did not journal during the field experience and Mrs. Pullman realized he needed more support than other students. He drew a tree from a worm's eye view (Art Sample 4.1), which recreated the mini-lesson experience with Mrs. Pullman. Many students commented on the size and appearance of surrounding trees. The class added the word *tree* to the word wall worm.

Kendrick's drawing was created in pencil and had traits of both **Preschematic** and **Schematic** stages of artistic development. The original drawing was close to the paper's base line and was oriented in an up and down manner. This is consistent with students in the Schematic stage. The lack of additional items or discernable details in the drawing suggested a basic schema of a tree and is indicative of the Preschematic stage.

When Kendrick first attempted to write independently, he created a letter string, *I hv u*, which suggested an attempt at constructing a sentence (Writing Sample 4.1). Knowing he would need assistance, Mrs. Pullman sat next to him and asked him to describe his drawing and writing. Kendrick said he drew a tree and wrote *I have worms*. Mrs. Pullman told Kendrick to tell her what he wanted to write and she'd write it for him. The remaining portion of text is Mrs. Pullman's transcription of Kendrick's verbalized journal entry.

I used Spandel's (2004) beginning writer's rubric (see Appendix D11) to assess the three traits used by the district for K-1 assessments. Kendrick's Idea level was assessed as a 1 on the 5-point scale because he made marks on paper and could dictate a story. His Organization was scored as 1 based on his ability to dictate and create an elemental, single picture to express his story instead of using two or more pictures as required for a score of 2. His Conventions score was assessed as 2 because he created letters which faced the correct way, wrote left to right, and capitalized the letter "I." His overall writing level was determined as **Not Yet** because the average score for all three assessed traits was 1.3. This meets the range of a 1 to 1.4 for this writing level.

Kendrick showed characteristics of Piaget's (1969) **Preoperational** cognitive development stage based on his drawing's spatial and his writing's egocentric content. His drawing indicated a lack of spatial relationship specifically between the size of the tree trunk and size of the foliage. The writing, including the portion dictated to Mrs. Pullman, showed a clear "I," thus an egocentric focus.



Art/Writing Sample 4.2. Brittany's Fishing Trip

Brittany recalled her mini-lesson experience of rolling on concrete like a worm to write this piece. She drew four green, squiggly worms almost floating above the brown concrete sidewalk with crayons (Art Sample 4.2). This drawing was analyzed as **Schematic** because the worm's color represented colors found in nature. She colored the concrete brown to create a contrast with the white paper. Another Schematic trait of the drawing was the use of the horizon as a base line for the worms on the sidewalk.

Brittany independently wrote *This is worms on the crokig roling on the gand* (Writing Sample 4.2). Brittany received a 3 for Ideas due to her ability to use words and art to create a clear main message in one sentence. For Organization, her writing was scored a 3 because the image and text complemented each other, and her writing was focused. Her Conventions score was also assessed as 3. Brittany began her sentence with a capital letter and used lower case letters consistently. The absence of a period prevented the writing from being scored a 4 for Conventions. However, she had spaces in between her words and spelled several sight words correctly. She also wrote from left to right. With an average trait score of 3, Brittany's writing level was assessed as **Developing**.

Brittany showed characteristics of a student in the **Concrete** stage of learning. Her writing did not show an egocentric focus because she described the picture instead of writing from her own perspective or in terms of herself. The spatial relationships of the object drawn in the picture were reasonably to scale. The worms she drew do not seem to touch the concrete, but rather floated above it. This indicated Brittany understood proper order, specifically which object should be placed on top.

Intermediate Camp Mini-Lesson

At the intermediate camp, Mrs. Yost brainstormed with the class. She proceeded to tell the class:

I have a story to tell. I do not like worms and I had to tear them apart for the kids because the kids did not want to touch them. You know you cannot put a big fat heavy worm on your hook. I pulled it apart and all this red gunky stuff flew on me and my hands. I decided not to look at it and just pull. I had to put him on the hook and sometimes you have to double the worm up. If I had to write a story today I would have to write about the long, thick worm.

Modeling how to visualize her idea, Mrs. Yost drew how she took a whole worm, pulled it apart, secured the worm on a hook, and cleaned her hands in four steps. One of the students identified Mrs. Yost's modeling as putting ideas in order.

Student: *You could put it in order. You could put the whole worm first, then pulled him apart, and then put the worm on the hook.*

Mrs. Yost: *What is that called?*

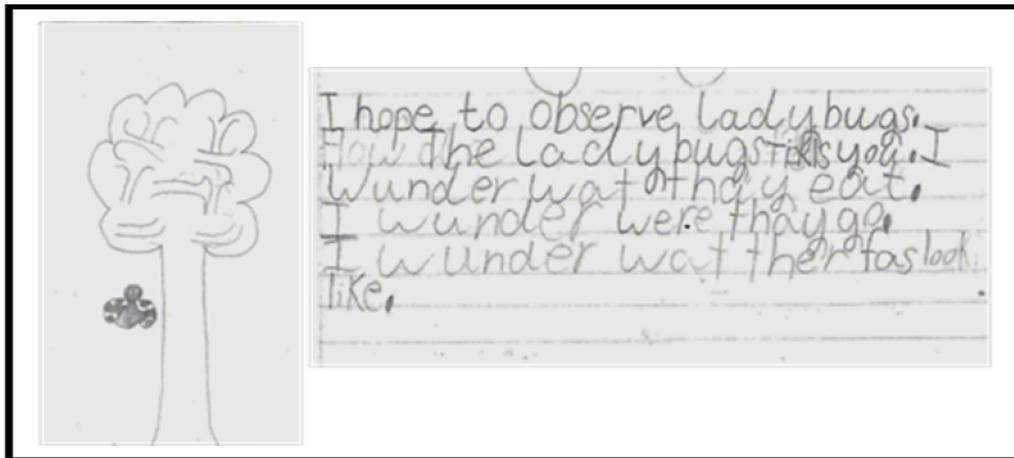
Student: *Organizing.*

Mrs. Yost: *Good. Or sequencing.*

Mrs. Yost showed students how the numbers she wrote next to her drawings could be turned into sequencing words like *first*, *next*, and *finally*. Then she released the students to write and draw their personal narratives. Mrs. Yost counseled with students about brainstorming, organization, and sentence fluency through visualization.

Both intermediate teachers conferenced with the students one-on-one. They allowed students, who were working in their cooperative groups, to look at the bulletin board containing digital photographs. These visual aids helped students refine their writing ideas or examine how something looked. As students worked they shared their drawings and writings with each other, fostering a community of learners within the intermediate class of the summer writing camp.

Representative Intermediate Students



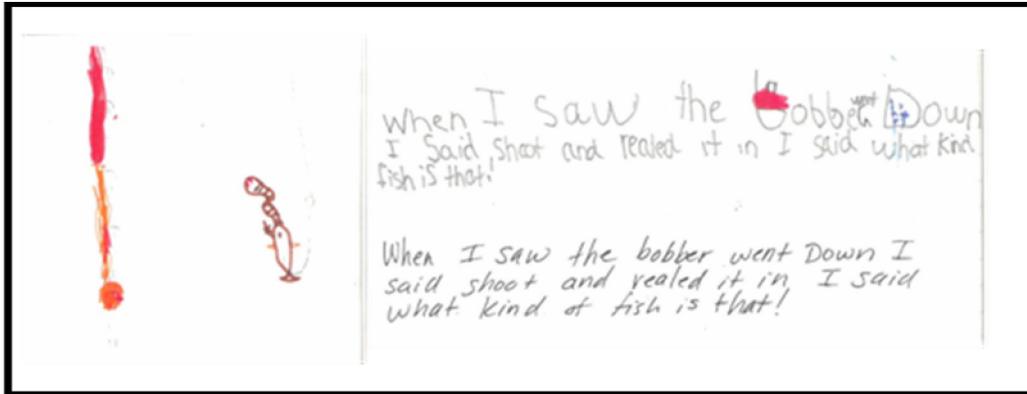
Art/Writing Sample 4.3. Jose's Fishing Trip

Jose chose to write about ladybugs. While he did not catch any fish, he did have a ladybug land on him. This drawing was sketched in pencil. I analyzed the drawing and assessed it as **Schematic** because the tree sits on a horizon or base line. The ladybug is shown flying up

towards the tree with its wings spread open (Art Sample 4.3). He shaded the body of the ladybug except for two small circles representing eyes. Wings were detailed with whole and half circles. The tree was drawn with an attempt to depict individual branches.

Jose wrote *I hope to observe ladybugs. The ladybugs tickles you. I Wunder wat thay eat. I wunder were thay go. I wunder wat her fas look like* (Writing Sample 4.3). Jose was only assessed for Ideas, Organization, Word Choice, and Conventions due to his grade level and the district's criteria. He received a 3 for Ideas because his topic was fairly broad. He received a 2 for Organization because he wrote a general, but inquisitive text about observing a ladybug. He began his piece with a broad introduction. However, he did not write an identifiable conclusion. The connection between *The ladybugs tickles you*, and *I wunder watt hay eat*, was not smooth and was confusing. His Word Choice was scored as a 3 because his word choice was basic and correct, but he did write interesting words like *observe*, *wonder*, and *tickles*. His overall Conventions were not distracting enough to make the text difficult to interpret and were scored as 3. Jose was an ELL student and spelled many words phonetically such as *wunder* (wonder), *thay* (they), and *fas* (face). The word "observe" is spelled correctly because it was on the board as part of their brainstorming. He began each sentence with capital letters and ended each sentence with periods. There were small spaces in between the words. With an average score of 2.8, he fell in the range of a **Developing** writer.

Jose's art and writing showed characteristics of a student in the **Concrete** stage of learning. The spatial proportions of the lady bug with respect to the tree were within reason. The ladybug flying up to the tree showed an understanding of up and down. However, it was difficult to use his writing sample to fully understand his cognitive development stage. He used "I" to express himself in his writing which showed an egocentric focus, or signs of a Preoperational learner. He could have written this piece from the third person point of view describing the ladybug. However, this journal piece reflects his personal writing. Assessment of Jose's writing and drawing point to a student transitioning between **Preoperational** and **Concrete** stages of cognitive development.



Art/Writing Sample 4.4. Jacob's Fishing Trip

Jacob depicted a close-up view of a hooked worm in a fish's mouth (Art Sample 4.4). The remaining part of the fishing line was not on the page. The viewer must imagine the line and the end of the fishing pole. Jacob drew a detailed fishing pole which consisted of a handle, reel, and rod. He drew in pencil first then outlined and colored his picture with markers. At first he wanted to color his fish red. He used the color red for the fins, but outlined the rest of the fish in brown. He originally wanted to use his favorite colors to draw instead of using colors which represented nature. However, a teacher had a conversation with him.

Jacob: *I am going to draw my fish red because it is my favorite color.*

Teacher: *If it really happened do you think you should draw the color it was?*

Jacob: *Yes.*

This is a **Preschematic** artistic stage characteristic. His drawing also had **Schematic** features. The worm was larger than the fish, and the hook was not drawn to scale—but rather overlapped the fish, and entered its side. Jacob drew what he thought was most important about the event—another predominately Schematic characteristic. The fishing pole pointed up, and the hook pointed down. This showed some degree of spatial awareness. Both fish and worm are pointed up, but the hook is not near the fish's mouth. However, the fishing line traveled through loops on the pole indicating special awareness.

Jacob wrote about his personal experience of catching a fish (Writing Sample 4.4). He scored a 3 for Ideas because his idea was broad and, using his schema of fishing, he focused his writing on the experience of catching a fish. He scored a 2 for Organization because he began the

piece with an interesting introductory sentence which grabbed the reader's attention. However, he did not include sufficient details or a conclusion to warrant a higher score for the Organization trait. He received a 3 for Voice by engaging the reader when he wrote *I said shoot . . . !* Jacob utilized the vocabulary word, "bobber" to describe the action of catching a fish. However, most of his words are ordinary. He received a 3 for Word Choice because the language resembled what his first thoughts were at the time. He scored a 2 for Sentence Fluency because parts of his writing invite prosody. However, the few sentences he wrote made it difficult to understand how the text flowed. Jacob also began his writing with a capital letter and ended with an exclamation point; however, he did not consistently use capital letters or ending punctuation. He also spelled sight words correctly. Overall, Jacob received a 3 for Conventions. His final averaged score was a 2.8, which placed him at the **Developing** writing level.

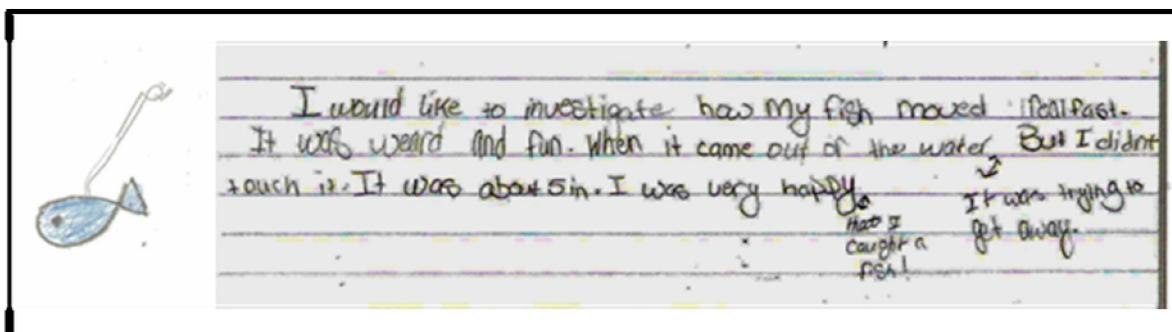
Jacob's art and writing in this sample illustrated some characteristics of a child in the Preoperational cognitive development stage. Although the fish and pole are appropriately scaled, the hook and worm attached to the fish were out of proportion. These diverging characteristics in the drawing straddle Concrete and Preoperational stages. However, his writing was clearly focused on himself. Although this could have been written as a personal narrative in which an "I" focus would be appropriate, in this sample, all action was still centered around Jacob. This is indicative of a writer in the **Preoperational** stage.

When asked which drawing showed more of his thinking, Jacob opened his art/writing journal to this picture. When Jacob explained his drawing to me, his friend patted him on the back to recognize his achievement of catching the fish. Jacob said:

It is showing all my thinking because when I saw the fish I felt happy I caught a catfish. I've never touched a fish before usually I am not the one catching fishes, my grandma, my grandpa, my brother are the ones usually catching the fish.

When asked why he drew the fishing pole up close he commented, *Because when I saw that fish I didn't want to hold it, but I had to hold it.* This statement indicated the act of holding the pole with a fish dangling on the end was an important moment to him. I asked him why he wrote the

word “bobber” but did not draw one. His neighbor pointed at his paper and said, *It should be right there*. Jacob agreed, but did not revise his drawing.



Art/Writing Sample 4.5. Beyonce's Fishing Trip

Beyonce caught a fish during the field experience and chose to write about it. The drawing was completed with pencil and crayon and showed a basic concept of a fish (Art Sample 4.5). The elemental fish was not to drawn scale with the fishing pole, but she included some components of the pole. The fishing line was attached to the top portion of the fish, instead of the mouth, as if it were caught with a hook. Details of the pole combined with naturalistic details of the fish indicate the **Schematic** stage of artistic development. Although the fish was not drawn to scale, which would indicate the **Preschematic** stage, this was the first fish she ever caught and probably meant a great deal to her. Mrs. Yost, asked her to add more to her picture. She walked Beyonce to the digital photograph of her holding the fishing pole with a fish on the end, and showed Beyonce how big a smile she displayed. However, Beyonce elected not to draw herself in her picture.

The writing piece was clearly about catching a fish (Writing Sample 4.5). Beyonce’s Ideas score was assessed as a 3 because she began to define her topic based on her experience. She generally stayed on topic, but the writing was not sufficiently developed with supporting ideas. She received a 3 for Organization because she wrote basic introduction and conclusion sentences. However, the lack of transitioning made it confusing to follow and at times unclear. Beyonce wrote her piece in a conversational tone which connected with the audience. She divulged a personal detail like . . . *I didn’t want to touch it* . . . which resulted in a score of 3 for Voice. Her language was basic and her word choice was functional. She used familiar words like *happy* to describe her feelings and her resulting score for Word Choice was 3. Beyonce wrote

several sentences but did not write connecting words which made the sentences read in a choppy, disjointed manner. Her sentences were not all alike and did show variety in sentence structure. She received a 3 for Sentence Fluency. Beyonce began sentences with capital letters and ended with periods and her spelling was mainly correct. She also indented before writing her paragraph. These factors combined for a score of 4 for Conventions. It is important to note she revised her writing and added two more sentences by using arrows to insert them where she thought they belonged. Her final score average to 3.2; which identified her writing level as **Developing**.

Beyonce wrote predominantly in first person—characteristic of the **Preoperational** stage. She wrote three sentences with the fish as the subject instead of *I*. This showed characteristics of a student transitioning to the **Concrete** stage. She drew the fish larger than the pole which was not a correct representation of the relative scale between the two objects. She drew the orientation of the pole with the handle pointed up and the line pointed down. Again, she showed characteristics of a student transitioning from Preoperational to Concrete stages.

Table 4.1 illustrates the 5 selected students’ artistic and cognitive developmental stages and writing levels. This is a visual representation of the preceding narrative data. Some students showed characteristics of both Preoperational and Concrete stages which is consistent with Piaget’s (1926) notion of a gradual transition in cognitive development.

Table 4.1. Artistic, Writing, and Cognitive Analysis of the First Field Experience

Student	Grade	Developmental Stage/Level		
		Artistic	Writing	Cognitive
Kendrick	K	Preschematic	Not Yet	Preoperational
Brittany	1	Schematic	Developing	Concrete
Jose	2	Schematic	Developing	Preoperational/Concrete
Jacob	3	Schematic	Developing	Preoperational/Concrete
Beyonce	4	Schematic	Developing	Preoperational/Concrete

Additional Students

Although the previous section focused on the 5 representative students, observations of 14 other students who participated in the study need to be considered. Discussion of these selected students begins to provide a holistic picture of how visualization embedded in the writing process may help struggling learners in a summer writing camp.

Writing and drawing pieces from the primary group showed varied interests and abilities. A first grade girl, Sierra, drew herself at the fishing pond with a sad face. She wrote she wanted to catch a fish, but did not. A kindergarten girl, Andrea, drew a picture of herself at the pond but did not include any writing. Another kindergarten, Destiny, girl wrote she had worms in her room and one kindergarten boy, Chris, drew a picture in crayon of himself fishing by the pond and wrote *I w fishing*.

The small group with Mr. M., the expert fisherman, wrote and drew pieces different than the rest of the intermediate students. A third grade girl in this group drew a detailed picture of the pond with labels and wrote about how the fish felt. This was prompted by her experience of touching the fish when a student caught one. In addition to allowing students in his small group to touch the fish, Mr. M. pointed to all the parts of the catfish. This inspired a fourth grade girl to draw and label all parts of catfish.

Other students not in Mr. M.'s group drew fish as large as their art/writing journal pages. A second grade girl with Attention Deficit Disorder drew a huge fish and colored it like a rainbow. She called it her rainbow fish which mirrored the book, *The Rainbow Fish* by Marcus Pfister (1992). Jaime, a second grade girl drew a picture of the fish looking out of the water and wrote a compare and contrast piece of how fish and worms felt. Keenan, a second grade boy who caught a fish, examined the photograph of himself with the catch. He then drew a picture of himself fishing and his writing described how he caught the fish. Adam, a fourth grade boy believed his fishing drawing showed a lot of his thinking, *because I usually don't draw as much. . . . I wanted to show more detail*. He wrote *It was cool to almost catch a fish. But when I saw it take my worm I was mad!*

The fishing experience inspired various journal entries. Each student experienced something different at the pond, and the entries reflect this variance. Kindergarten students struggled with writing in their art/writing journals. Students in the intermediate summer writing

camp tended to write first and then draw. Overall, as students progressed in age and grade level, the art and writing typically showed more depth and detail.

Summary of First Field Experience

The fishing field experience provided motivation for students to write. Teacher mini-lessons and conferences with students provided modeling and structure for the students before being released to write independently and freely. Students chose what to write about and shared their writing and their drawing with each other. Students learned to observe their visual environment to develop their schema.

Mrs. McCourt shared the comments of one summer school bus driver with me. This driver said whenever he drove by the pond, students yelled, *That is where we went fishing*. Mrs. McCourt concluded, *Usually experiences are going to be the things kids are going to remember or anybody would remember. It's not going to be necessarily the things you do in the classroom but something really different*. The fishing field experience was a memorable experience.

Second Field Experience – Prairie Conservation



I saw a bridge it was wobbly. I saw some water it sownd Shhh. It was light brown.

— Tyra (1st Grade)

On Tuesday, June 12th, during the second week of summer school, both primary and intermediate writing camps conducted a guided hiking tour of a prairie conservation. During the trip, the skies were cloudy with a light, misting rain falling. The students piled out of the school bus wearing their red, camp T-shirts. Three docents met the campers outside the bus. The students were separated into three groups each led by a teacher and a docent. The docents told the students the rules of the prairie, *Do not touch wildlife. Be careful of the muddy part of the trail. Poison ivy has three leaves so don't touch or go near it. Lizards, skinks, and snakes are in the grass so stay on path and you'll be okay.*

Almost immediately a female docent, who wore jeans and a striped, button-down, linen shirt covered by a khaki vest and adorned with a nature conservation button, knelt down and pointed. From beneath her beige hat and sunglasses, the docent said, *See. What is that over there?* The students leaned forward and squinted their eyes. A first grade girl shouted *A turkey!* The docent whispered, *Yes, it is a Tom, or a boy turkey.* She led the group along a gravel path where turkey foot prints were left in the mud. Soon, students were engulfed with trees, shrubs, and prairie grass dotted with wildflowers.

The docent stopped in front of a wooden footbridge, which did not have a hand railing. She told students the creek's name and pointed out erosion where a flood a couple of years ago had washed away the original bridge. The students assembled in single file and carefully crossed the bridge. Under the bridge was a running stream and rocks. Some of the students seemed scared and held each other's hands. A kindergarten boy would not cross unless his teacher held on to him. A couple of the older students yelled, *Don't fall. This is cool.*

After everyone safely crossed the bridge, the docent pointed out flowers such as Butterfly Milkweed, yellow Coneflower, and the red-stemmed Indian Hemp Dog. Rain drops fell, but the hike continued. As the students walked the trail, they crossed a second bridge with a rope railing to grasp. The bridge bounced up and down as students trampled across scaring the younger students as it swayed. Showing her hesitation to tread across the bridge, one second grade girl put her fingers in her mouth while another hand held on to the rope.

Once the students got to the other side of the creek, the docent told everyone to stop and listen for a wobbler and a sparrow. Then, a big tractor zoomed by with piles of sand to help stop erosion from the creek, and this forced the students to stand in the wet, tall grass. As the sky turned dark, and before the first roll of thunder sounded, the docent pointed to a 150 year old

cottonwood tree. The rain came down hard and fast as the students walked back over the two bridges to the bus. The campers thanked the docents and traveled back to school.

Primary Camp Mini-Lesson

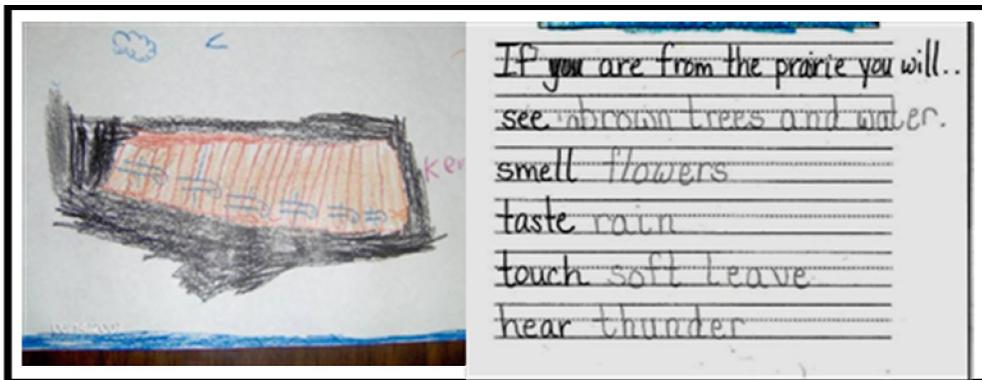
The next day, Wednesday, June 13th photographs from the field trip were posted on bulletin boards in front of each class. Students came in and looked at the bulletin boards and discussed the pictures. They recalled how scary the bridge was. Mrs. Buchannon, a primary teacher, began the day's activities by reminding students about the site they visited the day before. She told them to look at the wall of pictures for a hint and said; *Today we are going to draw some of the things we saw at the prairie.* Students shouted out answers like, *turkey, frog, river, tree, a swing away bridge.* To begin, Mrs. Pullman had students close their eyes and remember what they saw. She conducted a think aloud and said, *I remember walking over the bridge, and it was going up and down a little. I remember when we were walking in the squishy mud. I remember trees.* Students closed their eyes and Mrs. Pullman asked them to make a "mind movie," a term the students were familiar with from reading, to help them visualize. She told the students they were going to draw their favorite scene or memory from their hike the previous day. One kindergarten boy said he was, *thinking about the scary bridge.* Once the 11" by 14" white drawing paper was passed out, students had a chance to begin drawing. It was apparent many of them were drawing the bridge. Mrs. Sykes instructed a kindergarten student to look at the photograph of the bridge to help him remember details of the bridge and its surroundings. Many students drew the bridge in the middle of the paper without drawing the surrounding foliage or water.

After the students finished their artwork, Mrs. Buchannon told them they were going to learn about descriptive words, and she engaged them with a personal anecdote about how she dressed. She asked her son if she should wear the blue shirt or the striped shirt. The colors were Mrs. Buchannon's descriptive words for her shirts. Mrs. Buchannon told the students she found a book for them to help with describing. She began to read *If You're Not From the Prairie* (Bouchard and Ripplinger, 2002), a poetic text which uses the 5 senses to describe the prairie. Mrs. Buchannon had the students rub their hands together to make the sound grass makes when wind blows a little bit harder. Mrs. Buchannon read a couple more pages and asked, *Can you describe a tree for me?* A first grade girl responded, *Hard.* Kendrick said, *Trees are brown.*

Kendrick's cousin in first grade said, *The bark is hard*. Mrs. Buchannon said she took pictures of trees because they were *old, brown, and gnarly*.

After reading the book, Mrs. Pullman and Mrs. Sykes taped large charts which resembled eyes, a nose, a mouth, an ear, or a hand on the bulletin board. The teachers called on students to help them write describing words to match each sense by using their experiences from the prairie. Students shared, *Tree was hard. The sky was blue and gray. There were birds chirping*. Once the charts were filled with descriptive words, teachers handed students a piece of paper that said, *If you are from the prairie you will hear . . . smell . . . see . . . touch . . . taste*. Students completed the poetry assignment using the word wall. The students shared their pictures and writings of their favorite part of the field trip to the prairie with each other. The local library agreed to showcase their final writing and artwork from the prairie experience. These published pieces were mounted on the wall at the local public library for everyone to view.

Representative Primary Students



Art/Writing Sample 4.6. Kendrick's Prairie Trip

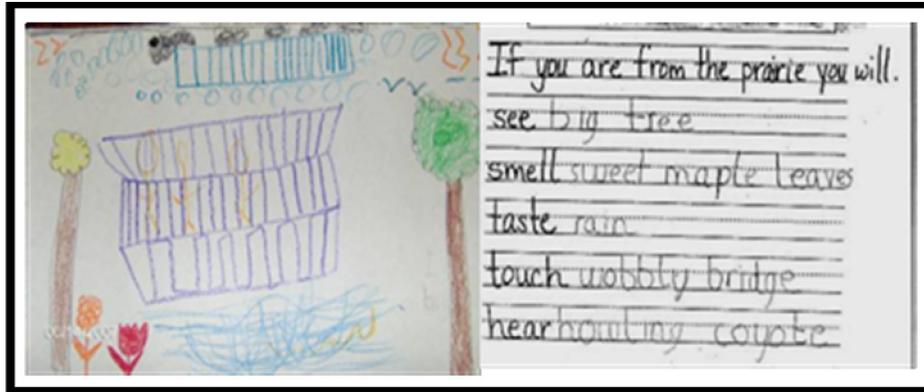
Like many students, Kendrick drew a bridge depicting water below (Art Sample 4.6). His bridge had six primitive characters, with discernable heads and arms, which were lying on their side relative to the drawing's orientation. The characters were basic representations, but did not show any motion. The background of the drawing contained elements of the sky such as clouds and a simple bird. The bridge appeared to float in space and was not attached to any grounding structure or the horizon as represented by the water. These elements of Kendrick's

drawing showed **Preschematic** classification. The exaggerated size of the bridge relative to the page and other objects in the drawing indicated an emotional attachment to the bridge from the field trip. The bridge's size, when combined with the simple circle and line figures, is a typical indicator of a drawing from a Preschematic stage student.

During the post-field trip independent writing activity, Kendrick sat with Mrs. Pullman who helped him use charts the class made to describe the prairie (Writing Sample 4.6). As with the first field experience, Kendrick dictated his thoughts to her and she scribed his words. Mrs. Pullman scribed for him for two reasons. First, she wanted to show Kendrick how to spell words through phonemic segmentation; and second, her involvement was a time saving measure so she could continue to assist other students in class.

I analyzed Kendrick's writing piece and for Ideas he received a 1 because he dictated to Mrs. Pullman, used art to convey a story, and recognized print had significance. Kendrick also received a 1 for Organization due to his reliance on Mrs. Pullman dictation and use of the scaffolded writing tool. He scored a 2 for Conventions based on his ability to properly write his own name left to right with all letters facing the correct direction. He pointed to capital and lower case letters. His scores averaged to 1.3 classifying his writing level as **Not Yet**.

Kendrick's showed characteristics of a **Preoperational** learner. The people shown on the bridge were small compared to the actual scale of the bridge itself. In reality, two children could not walk abreast on the bridge but the drawing indicates this could be possible. In addition, the orientation of the characters showed an inability to grasp three-dimensional representations because it had the characters lying down along the direction of the bridge. Both characteristics indicate Preoperational stage thinking. The writing cannot be evaluated for Preoperational or Concrete traits because it was not independent work, but rather prompted by the scaffolded writing tool.



Art/Writing Sample 4.7. Brittany's Prairie Trip

Brittany drew the bridge with the rope railing centered in between two trees (Art Sample 4.7). The first bridge without a railing was shown at the top of the paper. She struggled with the three-dimensional representation of the bridge railing. She drew three people walking along the bridge and colored water underneath. Two flowers without green stems and leaves were included next to the tree. The sky line was dark and filled with black clouds. Brittany drew flashes of lightening in the top right and left corners and blue circles in the sky represented rain. There were two elemental birds next to the tree on the right. Brittany's drawing showed signs of the **Schematic** stage. She showed a base line in her drawing by portraying the water, flowers, and trees on the ground. The bridge which crossed over the water was not drawn touching the ground. A drawing in the Schematic stage normally represents three-dimensional qualities of space, and Brittany's bridge with the hand railing is a manifestation of this quality. The bridge drawn at the top of the page represented the first bridge she crossed. Incorporation of the sky line is also a characteristic of a Schematic stage drawing.

Brittany described her experience at the prairie independently (Writing Sample 4.7). She used the word wall to help her with spelling. Instead of writing she saw a tree, she wrote the adjective *big* which helped the reader visualize. She received a 4 for Ideas because she connected four of the sentences with her drawing, wrote fully decodable text, used more than one word to describe what she saw, smelled, touched, and heard at the prairie. She received a 3 for Organization because the drawing reflected her writing and stayed on the topic of describing the prairie. Brittany scored a 3 for Conventions because she correctly used lower case letters, had spaces in between words, spelled sight words correctly, and wrote left to right. Her average Six-Trait score was a 3.1 which classified her writing as **Developing**.

Brittany's work contained characteristics of a learner in the **Concrete** stage. From a spatial perspective, Brittany attempted to progress to drawing in three-dimensions as shown by railings on the bridge. Additionally, the flowers and trees were drawn in relative scale to each other. Both aspects of Brittany's drawing indicated she was in the Concrete stage. As with Kendrick's sample (see figure 4.6), Brittany's writing consisted of words written on the scaffolded writing tool and was difficult to classify as either Concrete or Preoperational.

Intermediate Camp Mini-Lesson

The day after the field trip, Wednesday, June 13th, the intermediate students talked with table partners about what they saw at the prairie. Mrs. Yost announced the day's mini-lesson topic was comparing two objects to create a simile. She modeled how she observed a 150 year old tree and compared the brown bark to dead grass. Students began to share what they saw and tried to create similes.

Haley: *A turkey is fast*

Mrs. McCourt: *Fast as what? What can you compare it with?*

Jose: *Cheetah . . .*

The students shared their similes with their partners.

Mrs. Yost began the second mini-lesson with a visual tool, called a sentence amplifier, designed to help students elaborate. She instructed students to use the sentence amplifier and develop longer and stronger sentences. Mrs. Yost showed the class Jonah's, a second grade boy, picture and how he only drew about the poison ivy.

Mrs. Yost: *He chose one topic to write about.*

Student: *He wrote about poison ivy.*

Mrs. Yost: *He wrote one really good descriptive paragraph about poison ivy.*

Jonah read his paper out loud and inserted a word he missed. Mrs. Yost used the sentence amplifier to help elaborate the sentence. She turned the sentence amplifier to "why" and asked,

Mrs. Yost: *Why was the grass wet?*

Jonah: *Because it was raining.*

Jonah added this detail to his writing and Mrs. Yost chose one more student to model the sentence amplifier. She chose a second grade girl to share her work and commented on the orange flowers the girl drew. Mrs. Yost then turned the sentence amplifier to “what” and asked,

Mrs. Yost: *What kind of flowers?*

Alison: *Butterfly milk weed. I also drew a cat’s claw flower, six poison ivy plants with three leaves each, the 150 year old oak tree, and a bridge.*

Mrs. Yost turned the amplifier to “why” and asked,

Mrs. Yost: *Why did we go over the bridge?*

Alison: *To cross the water.*

Mrs. Yost: *Can you add the water?*

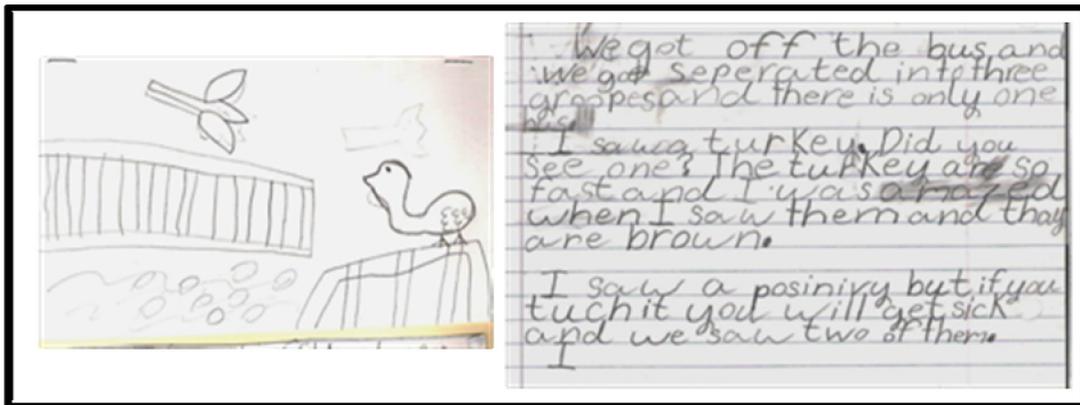
Alison: *Yes. Can I read my story?*

At the end of Alison’ story Mrs. Yost asked her what color the flowers were. Alison answered, *The pom poms are purple. The butterfly milkweed is orange and black.* Mrs. Yost told the class, *Instead of saying, ‘I saw lots of flowers,’ Alison is going to revise and say, ‘I saw orange and black flowers called Butterfly Milkweed.’*

After modeling using the sentence amplifier to see more details, Mrs. Yost released students for independent writing. Students were instructed to write a descriptive, personal narrative. She provided each student with a sentence amplifier. The sentence amplifiers were intended to encourage students to write more elaborate sentences and create a mind movie. She also handed each student a manila folder. Inside the folder on the left hand side was a half sheet of white paper for students to draw their favorite animal they learned about at the prairie conservation. Below the white paper on the left side was a half sheet of lined paper. The students were instructed to write their first draft, or “sloppy copy,” on this half sheet of paper. A whole sheet of lined paper was stapled to the right hand side of the folder. Students were to write their

revised copy on this sheet. Teachers encouraged students to write interesting words and describe their experience. Mrs. Yost stated after she pulled student samples to discuss and worked with students individually, she believed visual tools helped students with sentence structure. Jose told Mrs. Yost after using the sentence amplifier, *It is getting easier and easier.*

Representative Intermediate Students



Art/Writing Sample 4.8. Jose's Prairie Trip

Jose drew several items he observed in pencil (Art Sample 4.8). He drew representations of a foot bridge, a poison ivy leaf, rocks, and a turkey standing on a structure. During the independent drawing time, Mrs. Yost asked Jose if he drew the bridge they walked across and inquired what was under the bridge. He responded,

Jose: *A river.*

Mrs. Yost: *I am not sure I see that on your drawing. Do you want to add that?*

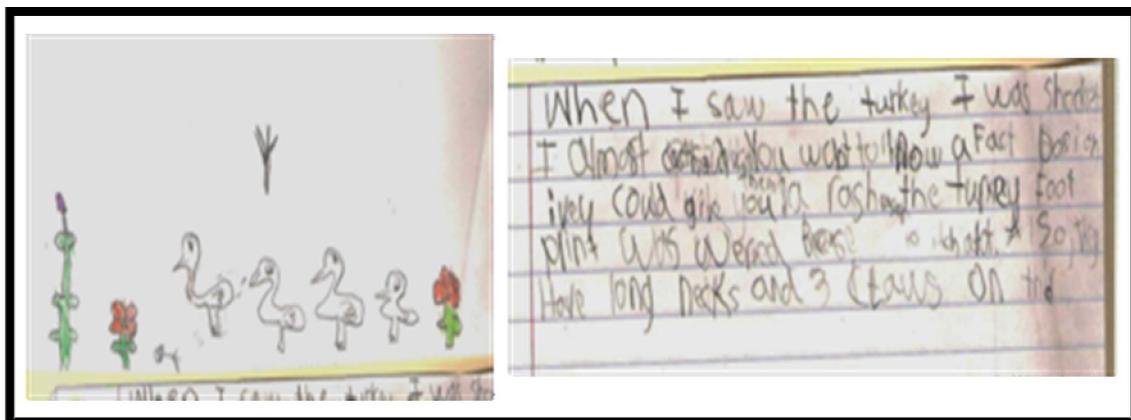
Jose: *Okay.*

After drawing water under the bridge, he added a turkey. Despite the haphazard appearance of objects in the drawing, which is a **Preschematic** trait, it appeared Mrs. Yost's intervention may have changed Jose's initial focus from the bridge to other objects, which he subsequently included in his drawing. However, details he included such as planking on the bridge, the presence of the three leaves of the poison ivy plant, and turkey feathers all show emergence of

recognizable detail which is a definitive **Schematic** characteristic. Therefore, Jose's drawing in this sample was be classified Schematic.

Jose wrote about objects he saw along his hike on the prairie (Writing Sample 4.8). Jose's score for Ideas was assessed as a 3 because his topic was broad. Despite not providing the setting, his writing did provide other details which supported the topic. His Organization score was assessed a 2 because there was a lead, but no conclusion sentence and connections between ideas were absent. Although his final draft did not discuss the bridge depicted in his drawing, his initial draft stated, *crost* (crossed) *two briges* (bridges) *and I saw a river*. His Word Choice score was a 2. Words were non-specific and lacked details necessary to help readers visualize the topic. The Conventions score for this sample was also assessed a 3. He began each sentence with capital letters, usually included periods, attempted paragraphing, spelled most words correctly, and used a question mark appropriately. These scores averaged to a 3.2 which placed him in the **Developing** level of writing.

Cognitively, Jose's sample showed characteristics of both **Preoperational** and **Concrete** stages of thinking. His writing contained many egocentric references, but Jose did include a number of sentences which were focused on objects and observations outside himself. He attempted to connect with the audience with the phrases *Did you see one?* and *I saw poisin* (poison) *ivy but if you tuch* (touch) *it you will get sick*, and *I saw a turkey. Did you see one . . . I was amazed*. Spatially, Jose showed more Preoperational thinking due to the scale of the objects in relation to each other. The poison ivy leaf was depicted the same size as the turkey and both were disproportionately large when compared to the bridge.



Art/Writing Sample 4.9. Jacob's Prairie Trip

Jacob drew several wild turkeys in a row, a tall iron weed, two wildflowers and a turkey track in pencil (Art Sample 4.9). Then, he used colored pencils to color in the foliage. Jacob's art showed characteristics of a **Schematic** drawing. All objects were drawn in appropriate size relationship to each other. He used a base line to show ducks and flowers were all located on the ground. The color he used for flowers represented nature—another Schematic trait. A final Schematic characteristic was the turkeys which were discernable and had expressive eyes.

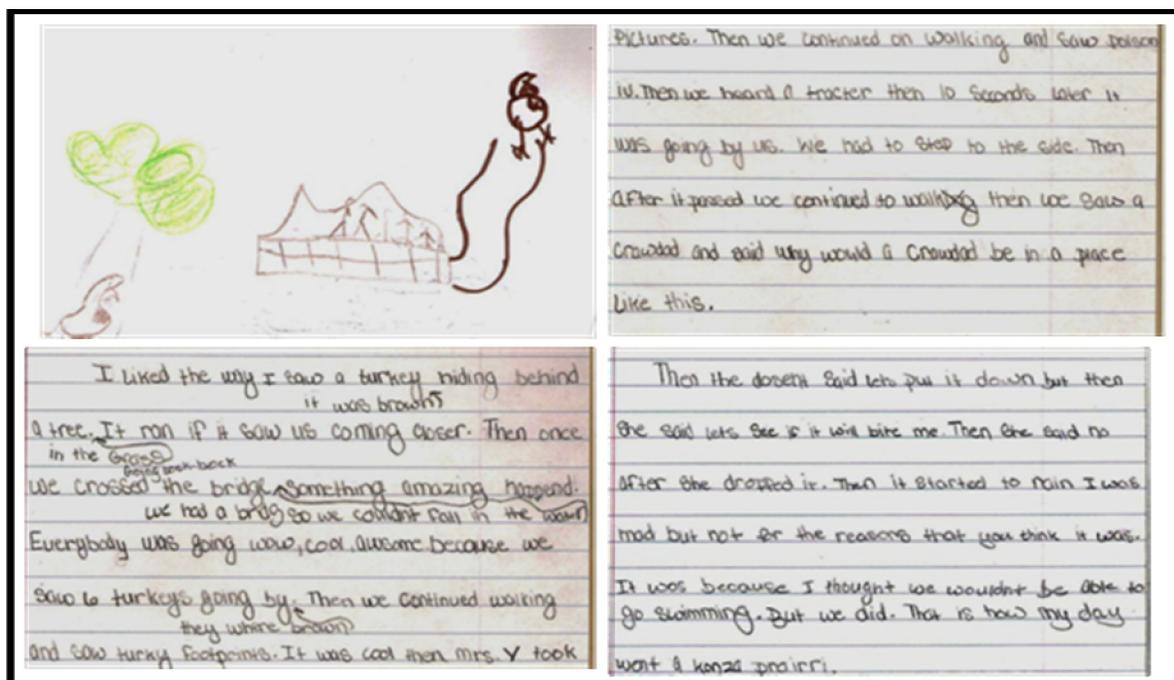
Jacob wrote about his observations from his hike (Writing Sample 4.9):

*When I saw the turkey I was shocket (shocked) I almost cacthaup
(caught up)to them You want to know a Fact posion ivey (ivy)
could give you a rash or sor (sore) to itch a lot also the turkey Foot
print was weried (weird) Also, they Have long necks and 3 claws
on them.*

He scored a 2 on Ideas because he began to narrow his topic, the idea was general and basic enough the reader had to infer because of absence of details. For Organization he scored a 1. There was no clear sense of direction in the paper and connections between turkeys and poison ivy were absent. Jacob received a 3 for Voice because he connected to the audience when he wrote, *When I saw the turkey I was shocked . . . you want to know a Fact posion (poison) ivey (ivy) could give you a rash or a sor (sore) to itch a lot.* He expressed his personal thought about the turkey foot print calling it *weird*. He scored a 2 for Word Choice because he chose basic, simple language like the word *long* to describe a turkey neck instead of comparing it to another object and creating a simile. He did attempt to show expression in his language with the word *shocked*. Jacob's writing received a 2 for Sentence Fluency because his sentences were difficult to follow. He completed his sentence on the line below because he added details after using the sentence amplifier. Sentences did not all begin with the same word. However, readers had to hunt for clues to connect sentences together. Jacob did not use capital and lower case letters correctly or consistently, he also did not attempt to write paragraphs. He spelled common sight words correctly such as *saw . . . long . . . when*. However, some of his spelling made it difficult for readers to understand such as *cacthaup* for caught up. As a result of these characteristics, the

writing received a 2 for Conventions. His averaged Six-Trait writing score was a 2 and the writing was assessed at the **Emerging** level.

Jacob's art and writing for this piece showed traits of a **Concrete** and **Preoperational** learner. His drawing shows characteristics of a Concrete learner. Objects he drew were in relation to each other with respect to position and size. Objects were drawn on a base line represented by the ground, which indicated the ability to identify up and down. His writing shows traits of a Preoperational learner because it was mostly written in first person and described objects he observed on his hike to the prairie.



Art/Writing Sample 4.10. Beyonce's Prairie Trip

Beyonce drew a scene consisting of students crossing the bridge with the rope railing, a turkey hiding behind the tree, and a turkey running away from the bridge (Art Sample 4.10). Her drawing had **Schematic** characteristics. She drew the turkey and tree on the ground, or base line, and the turkey's size was drawn in proportion to the tree. She drew water underneath the rope-handled bridge and depicted five people crossing. Squiggly lines connecting the bridge to the turkey attempted to show movement. Both turkeys showed fine details such as their gobblers, beak, eyes, and three claws.

Beyonce wrote about her encounter with a turkey both before and after she crossed the bridge (Writing Sample 4.10). Beyonce received a 3 for Ideas because she wrote about a topic and used her knowledge from the experience. The topic was broad because it described her whole day hiking. Beyonce received a 3 for Organization. She attempted an introduction, but her conclusion did not tie up loose ends in her story. She transitioned between ideas and the paper's organization supported the topic of her experiences at the prairie. Beyonce attempted to revise her writing by adding detail after using the sentence amplifier. Her writing scored a 3 for Voice because she included readers in her experiences by using *we*. She expressed her opinion with the phrase *it was cool*. Her writing seemed sincere, but did not connect strongly with the audience. Beyonce's writing received a 3 for Word Choice because she used words like, *amazing*, *cool*, *wow*, and *awesome* to express her excitement. However, she did not attempt to incorporate any figurative language such as similes. Beyonce's sentences were not redundant and began differently which helped her obtain a score of 3 for Sentence Fluency. Some of her sentences invited expressive oral reading like . . . *something amazing happened!* For Conventions, she scored a 4 because she consistently used capital and lower case letters correctly, correctly placed commas, concluded her sentences with periods, and indented to create a paragraph. She spelled most of her words correctly. Her average Six-Trait writing score was 3.1—which placed her writing in the **Developing** level.

Beyonce showed signs of **Concrete** and **Preoperational** learning stages for two reasons. First, her artwork highlighted her understanding of space, orientation, and proportion. The drawing of a base line showed her understanding of horizon. The turkey running from people was depicted with squiggly lines which traveled up and away. This visual detail illustrated her understanding of orientation and direction of travel. The turkey was drawn in proportion to the tree and people were drawn to proportion to the bridge. The fleeing turkey seemed larger than the people because it was exaggerated. However, Beyonce showed Preoperational characteristics due to the egocentric tone of her writing. She wrote in both first person singular and plural which portrayed events in relation to her.

Table 4.2 shows the five students' artistic and cognitive stages and writing level for their pieces created in response to the prairie conservation experience. These stages show slight differences from their previous writing experience. Kendrick, Brittany, Jose, and Beyonce maintained their art and writing levels. Beyonce's and Jacob's work seemed more reflective of

the Concrete stage of learning. However, Jacob’s writing dropped to a lower level despite his demonstration of Concrete stage of learning characteristics.

Table 4.2. Artistic, Writing, and Cognitive Analysis of the Second Field Experience

Student	Grade	Developmental Stage/Level		
		Artistic	Writing	Cognitive
Kendrick	K	Preschematic	Not Yet	Preoperational
Brittany	1	Schematic	Developing	Concrete
Jose	2	Schematic	Developing	Preoperational/Concrete
Jacob	3	Schematic	Emerging	Preoperational/Concrete
Beyonce	4	schematic	Developing	Preoperational/Concrete

Additional Students

The additional 14 students who participated in the study drew and wrote about their personal experiences after traveling the trails of the local prairie conservation. The images were thematic and consisted of various structures, flora, and fauna the students encountered in this visually-rich environment.

The primary camp teachers focused writing instruction on the sensory aspect of the experience and encouraged students to write in terms of the five senses. Chris, a kindergarten boy, drew a bridge horizontally across the page in pink. He represented people in red because they wore red shirts during the field experience and drew blue clouds at the top and blue water at bottom of the page. Andrea, a kindergarten girl, depicted a red sky with blue, pink and purple rain drops. Miley, a first grade girl, drew her bridge across the page in green with blue color band inserted to represent water. She drew the rope railing next to the bridge. Meredith, another first grade girl, drew a detailed bridge in brown and black, a blue sky, and an orange and yellow sunset. These drawings predominately showed Preschematic characteristics.

Tyra, a girl entering second grade, told me her favorite drawing was the bridge because, *You can see all the brown shells in the water.* She was one of two students who did not have to use the scaffolded writing sheet to compose her written experience at the prairie. She wrote *At the Prairie I saw a catarpiler (caterpillar) it was light brown with red spots. and I saw a (bridge) it was wobbly. I saw some water it sownd (sound) shhhhhh it was light brown.*

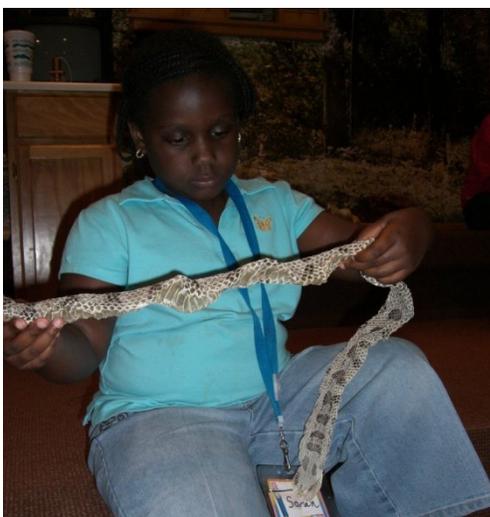
All students used the sensory word wall, constructed the day after the field experience, to help describe their observations of the prairie in terms of the five senses. Haley, a second grade girl, drew big, orange flowers with red around the edges. Another second grade girl, Jaime wrote *what* for the word *with* and then changed the word to *white*. A teacher wrote the letters *wh* and *t* and told the Jaime to guess the vowel. The teacher also noticed she wrote *plats* for *plants* and helped her phonemically stretch the word to hear all of the sounds in the word *plant*. Jonah, a second grade boy, struggled with accurately drawing a poison ivy plant, and consequently, his writing was void of any details about the plant. Shannon, a third grade girl, drew objects on a horizon, including a large tree, with detailed branches and labeled it a *150 year old tree*. This third grader's writing was also written in plural, first person describing the beginning of the trip to the moment the students arrived until they returned to school.

Zena, a fourth grade girl, produced a very detailed, expressive drawing which was replete with labels for most objects she depicted such as, . . . *ballerina flower . . . cat flower . . . craw dad . . .* and *blueberry tree*. Her writing mirrored the details she depicted in the drawing including the sentence *the hackleberry tree . . . felt unusually hard, bumpy and unsmooth*. Avril, another fourth grade girl, incorporated a simile by comparing the cat's claw flower to cheerleading pom poms. Donisha, a fourth grade girl, wrote the simile *a cencopin tree had leafs that looked like puzzle piece*, and represented this sentence with a jagged leaf falling from the tree in her drawing. The only students who attempted to include similes in the intermediate writing camp were fourth grade girls. These students correspondingly had the most detailed drawings. It appeared these intermediate students were motivated to write about the variety of flowers and trees and the boys seemed equally fascinated with the poison ivy and turkeys. Almost every student recounted their observations in both their drawing and writing.

Summary of Second Field Experience

The hike on the prairie filled the students' senses with different sights and sounds. Students learned new vocabulary to describe nature. Although students left their hike early due to bad weather, their spirits were high. I sat next to Jacob on the bus ride back to school, and he told me, *Writing camp is cool because I see some people from last year.* I asked him what his favorite part of camp was and he responded, [the prairie] *was the most fun, because of the butterfly milkweed.* I questioned him about drawing to see if it helped him. He replied, *Drawing helps me write, to get a picture in my head. Drawing is like imagination, and drawing helps me remember a lot.*

Third Field Experience - Nature center



I saw a anuconds at the nashr senr and tush it.

— *Sierra (1st Grade)*

The summer writing camp teachers brought all students to a local nature center during the third week of summer school on Friday, June 15th. When scheduling the field trip the teachers asked for a conservationist to show the students the scariest, ugliest, and weirdest animals in hopes of capturing the students' interest and provide motivation for them to write.

Once the students entered the nature center, the camp separated into the primary and intermediate groups. The intermediate group followed a care taker into the exhibition room

which was formed like a theater. The big orange steps leading to the stage served as seats for the students. The young male caretaker welcomed the students to the “Unhuggables” presentation and asked the students if they knew what that meant. The students responded, *Pests, disgusting, creepiest, and scary!* Pleased with their answer, the caretaker elaborated with a smile, *The animals that will be discussed are: roach, spider, scorpion, snake, and vulture.*

First, the caretaker defined what invertebrate and vertebrate meant, and then, he introduced the Madagascar Hissing Cockroach. Donisha and Brittany knew Madagascar was an island on the south of Africa. The caretaker passed the roach around, and three students held it in their hands. The caretaker then transitioned to insects. He asked how many legs insects had to help build the students’ background. The students shouted, *Eight legs and six legs.* He told the students arachnids had eight legs. He pulled two cages out. One was filled with a big, black, hairy tarantula and the other contained a tan, pinching scorpion. The caretaker explained that, *a tarantula eats bugs and shoots hairs off to scare its enemy. A scorpion has a tail, stinger, modified pedulars, glows under black light and can be found under rocks, in southern Kansas. They get rid of pests as they have chewing mouth parts.* Then, he pulled the tarantula out of its cage and held it in his hand. Jonah squealed and sat at the furthest step possible, covering his eyes.

The caretaker put the insect and spider away and showed the students a pillow case. He slowly pulled out a black and white striped California King Snake. The students’ eyes widened and several of them opened their mouths in amazement. The caretaker explained how the snake ate other snakes by opening its jaws, and it could eat something three times larger than its own head because the bottom jaw disconnects. He held the snake, and walked around to all the students so they could touch it or help hold it. Several students held it in their hands, and some poked a finger at it. A couple of students said, *No thank you.* The snake wrapped its body around Jonah’s finger. Brittany thought it looked like a milk snake. The caretaker agreed with her and commented on her observation.

Finally, he put the animals away and went into another room. He told the students not to leave because he had one more special animal to show them. A couple of minutes later, he returned with a cage containing a huge, black and brown Turkey Vulture. The students said, *Wow! Cool!* The caretaker took the bird out of its cage. The vulture had talons, and the caretaker held it with his leather glove. While he was holding the bird he said, *The Turkey Vulture eats*

dead animals and that is why they are bald and don't have feathers on their head because they stick their head in animals. Another interesting fact is it poops on legs to stay cool. The students responded with grimaces and curling up their noses and lips. Then, the bird stretched its wings to its full wingspan of about four feet. The caretaker explained, *Vultures spread their wings to let the sun warm him up. Turkey vultures use smell as self-defense. It throws up when it gets scared. His favorite food is mice and he eats the tail first.*

While the intermediate group was in the exhibition room, the primary students wandered around the learning center on a scavenger hunt. There were animal pelts for them to touch, animal tracks to make, and ferrets, owls, and prairie dogs to observe. The students enjoyed the prairie dogs because they had an elaborate plastic tube tunnel system and they would run from one spot to the next. In another corridor of the nature center was the still-life portion of the museum. The students were instructed to find the animals and plants which lived under water. One still-life display consisted of the animals that live above ground such as deer, ducks, foxes, and rabbits.

After both camps experienced the “Unhuggables” exhibition, the caretaker escorted them outside to the cages. It was feeding time and a bobcat was pacing in his cage. The bobcat jumped from perch to perch and then circled around the door. The caretaker opened the door to the bobcat’s cage, placed food in its bowl, and freshened up the water. After observing the bobcat, it was time for the students to return to school.

Primary Camp Mini-Lesson

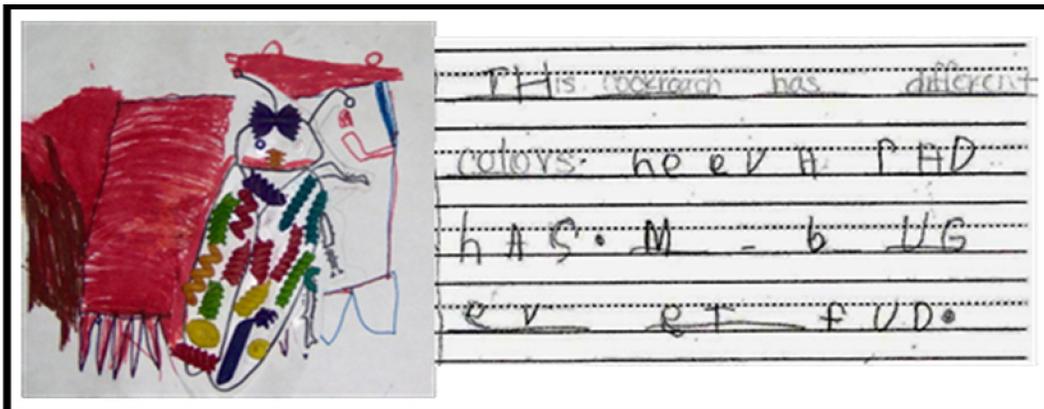
On the next instructional day after the nature center experience, Monday, June 18th, teachers in both the primary and secondary camps posted photographs from the events including pictures of all the animals. The primary writing camp teachers asked the students to draw their favorite animal in their art/writing journals and write why they like it during their free write time. Many of the students went to the blackboard and reviewed the pictures. Some students even asked to take the photographs back to their seats to look at while they drew. Brittany took the picture of the black and white King Coral Snake to her writing area and drew her picture exactly like the photo. She told me her drawing showed a lot of her thinking because she colored it well. She said she liked this picture the most because, *The zoo keeper had to hold it so it wouldn't crawl off.* After a couple of students shared their journal entries, Mrs. Pullman read two selected

poems from *Scranimals* (Prelutsky, 2002). The book provided examples of how to mix an animal with another object to create a new creature. This concept became the basis for student ideas for their writing and art.

Mrs. Sykes gave the lesson for the primary camp. First, she invented a new animal name: Snake-a-roni. She modeled how to glue pasta on the board. Then, each student chose their own media and animal to make their new “scranimal.” Students were actively engaged, and their imaginations flourished under the freedom. Mrs. Sykes reminded the students they learned about various animal habitats at the nature center. She instructed the students to draw detailed habitats for their new scranimals. Students added houses, cages, plants, food, and various details of the environment they observed at the nature center. Once complete with their scranimal drawings, they shared their final creations with each other.

The next day, the primary students wrote three describing sentences about the scranimal they created. After re-reading their own work, students shared their work with a partner and one of the primary teachers approved their final draft. The students attached their fictional writing next to their scranimal on individual poster boards. As a final community exercise, the students enjoyed the author’s chair and shared their final creation while reading their writing.

Representative Primary Students



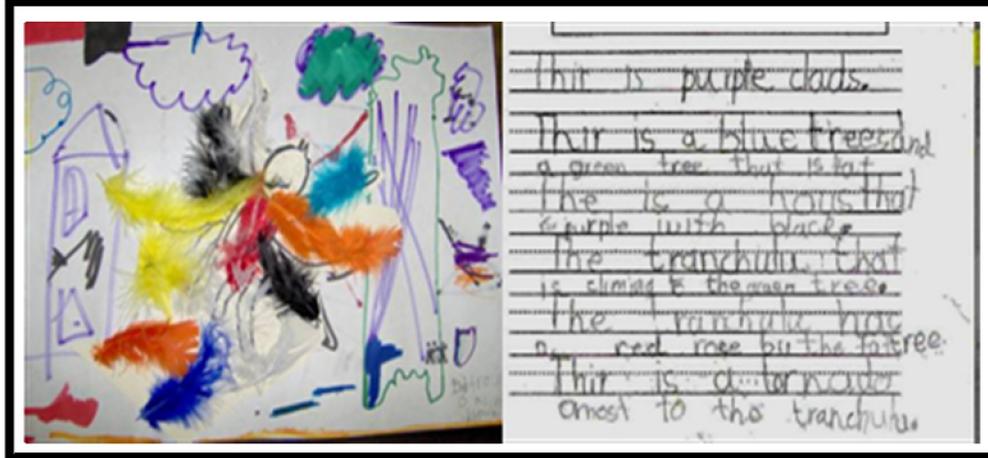
Art/Writing Sample 4.11. Kendrick's Nature Center Trip

Kendrick was enraptured by the hissing cockroach. He selected it for his scranimal because, . . . *I saw it. I carried it in my hand.* He elected to decorate his cockroach with multicolored pasta and Kendrick noted this art project was easy for him because of the gluing (Art Sample 4.11). The red rectangle shape next to the bug was the *door he comes in and out.*

The red coloring next to the door represented the cockroach's house. He drew another roach, using markers, next to his pasta roach. Both roaches showed eyes, noses, and mouths which were oriented towards the viewer instead of being shown in an anatomically correct location. Kendrick added an orange sun in the top right corner of the page. Kendrick's drawing showed characteristics of a **Preschematic** piece. Although, he drew the sun at the top of the page, the house and door were drawn perpendicular to the roach. The roach was shown with eyes and a mouth and two circular objects represented the wings. However, Kendrick did not draw the legs.

Kendrick wrote more than half of this piece independently (Writing Sample 4.11). He sat with a teacher at first and orally described his bug. She drew lines replicating the amount of words he verbalized and started the first sentence for him. It read *This cockroach has different colors. He even has red house. My bug even eat food.* His writing received a 3 for Ideas because he used art to create a decodable text and expressed his idea in one more than sentence. His writing received a 2 for Organization because his picture and text corresponded and stayed focus on his idea. For Conventions, Kendrick's writing scored a 2 because he wrote two sight words correctly, created letters facing the correct way, wrote left to right, and put a period at the end of his writing. The averaged Six-Trait score was a 2.3 which fell in the range of an **Emerging** writer.

Kendrick showed elements of **Preoperational** stage thinking. Although his writing was written in third person, he was instructed to do so. His journal entry about the nature center read, *I like snake*—which still showed an egocentric focus to his writing. Another aspect of a Preoperational stage thinker is the lack of ability to relate objects related to each other in proper proportional, space, and size. The door was drawn next to the bug and the house is drawn on top of the door. The bug Kendrick drew was the same size and general shape of the black line master. The orientations of both bugs' faces were drawn so the viewer could see the eyes and mouth. This makes it look as if the head is twisted while the legs are facing down towards the ground.



Art/Writing Sample 4.12. Brittany's Nature Center Trip

Brittany chose the black line master of a spider (Art Sample 4.12). She glued feathers on the spider and drew in marker. She illustrated a purple house for the spider to lie in and a green and purple tree to the right of the spider. There was a purple tornado shown to the right of the tree. Brittany included blue and purple clouds at the top of the page. The drawing showed characteristics of the **Schematic** artistic development stage. Although Brittany selected colors for the tree and clouds which were not representative of nature, she did create discernable shapes and objects. Additionally, Brittany's representation and orientation of the house and the spider in an up and down manner pointed to the Schematic stage assessment.

Brittany described the art lesson conducted by the teachers in response to the field experience. *Teachers gave us a black piece of paper. I glued feathers on it and colored. Then we got sheets. I wrote the title and wrote. Looked at my paper and saw clouds. I put that first.* Comparison of her art and writing reveal many common details between the two. Brittany's drawing helped her conceive the sentences she wrote because it helped her brainstorm and draft ideas. She wrote many sentences which described her artwork (Writing Sample 4.12):

Thir (There) is purple clads (clouds). Thir (There) is a blue trees and a green tree that is fat the is a house that is purple with black. The taranchula (tarantula) that is climing (climbing) to the green tres (trees). The taranchula (tarantula) has a red rose by the fat tree. Thir (There) is a tornado almost to the tranchula (tarantula).

Brittany's Ideas score was assessed as a 4 because she connected her text to her image, used multiple sentences to describe her picture, and wrote text which was decodable by the reader. Her Organization score was a 3 because she stayed focused on her artwork, and her images and text corresponded. This piece received a 3 for Conventions. Brittany used correct capital and lower case letters consistently, included spaces between her words, spelled several sight words correctly, and spelled phonetic versions of harder words like *tranchula* for tarantula. Her averaged Six-Trait score was 3.3, which placed this piece in the **Developing** writing level.

Brittany showed characteristics of both a **Preoperational** and **Concrete** developmental stage learner. She drew clouds in the sky creating a sky line. The tree, spider, and house were drawn on the base line while the tornado was drawn in the air. Brittany showed understanding of up and down in her illustrations by the proper orientation of the spider and house. These are all **Concrete** stage indicators. Although the size of the spider, house, and tree were not proportional, the size of the spider was predetermined by the black line master given to her. She chose to position the spider, house, and tree with a landscape paper orientation instead of a portrait style orientation on the paper. A portrait orientation would have allowed her to draw a taller house or tree. These are **Preoperational** stage traits. Her writing focused on the objects drawn in her picture. Her journal entry composed after the nature center field trip consisted of a picture of the hand and the snake and read, *The zoo person hade a snake in her hand that I tushed*. She began her writing in third person, a characteristic of a concrete learner, instead of beginning with the phrase *I touched* . . . The field experience to the nature center and touching a snake motivated her to write on two separate occasions.

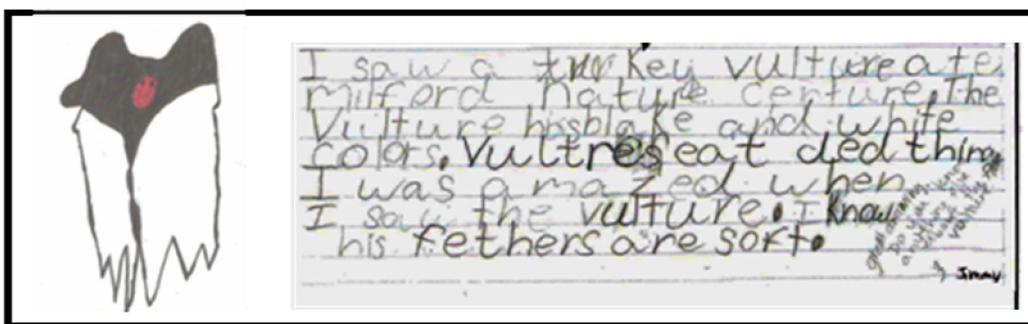
Intermediate Camp Mini-Lesson

The intermediate camp also used the book *Scranimals* (Prelutsky, 2002) to model descriptive writing. Mrs. McCourt displayed *Scranimals* on the ELMO (document camera), and shared the text and illustrations with the students. She read "Bananaconda" and Adam commented, *It wraps around its prey and squeezes it to kill it*. Mrs. McCourt said, *Think about the king snake and how it wrapped around Jonah's finger. He said it did not really hurt, but an anaconda is really long and it would hurt*. She pointed out, *Notice how the author uses long, long fellow because he is so long. What does sly mean?* Adam replied, *Sssneaky*. Mrs. McCourt agreed with Adam and moved on to the word *slither*. Cody, a second grade boy, demonstrated to

the other students what *slither* meant. He slithered on his the floor. After reading another poem and defining vocabulary, Mrs. McCourt instructed the students to *take the scranimal you visualized in your mind and write it on the paper*. She demonstrated by drawing a lizard and an elephant and combined them to create a lizarphant. Then, she gave the students time to draw the two animals they wanted to combine to create a new animal. As with the primary mini-lesson, the intermediate students shared their drawings with each other. A couple of students moved to the tents in the room to share their pieces. Then, Mrs. Yost called everyone back to look at the ELMO while she read *Avacododo*. Mrs. Yost, asked, *What two things make this animal?* Donisha, a fourth grade girl, replied, *Avocado and a dodo bird*. Mrs. Yost continued to review vocabulary words such as *ungainly*, *biological*, *cranium*, and *remain*. Adam, a fourth grade boy, knew the word *cranium*, and Donisha knew the word *biological* meant birth mother. The students then brainstormed strong, descriptive words they could use to describe their scranimal and shared their thoughts with each other.

Mrs. Yost decided the playful, descriptive mini-lesson provided enough time for the students to start thinking creatively. She informed the students the day's writing response to the field experience at the nature center was descriptive writing. The students were encouraged to write words which described their experience so the reader could visualize the details in their mind.

Representative Intermediate Students



Art/Writing Sample 4.13. Jose's Nature Center Trip

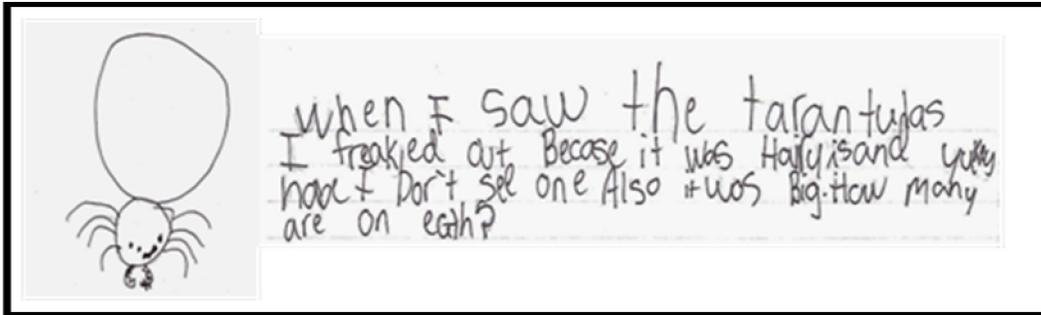
Jose drew a turkey vulture which dominated most of the page in his journal (Art Sample 4.13). When I approached Jose, he informed me the vulture *was black and white and he ate dead*

things. When afforded the opportunity to describe his favorite animal from the nature center, Jose selected the turkey vulture.

Jose was fascinated with the vulture and drew the bird with a pencil. He then outlined the animal and colored the wings with a black marker and the head with a red marker. His artwork showed elements of a **Schematic** stage drawing. The colors Jose chose for the bird were the same colors as the bird he observed at the nature center. He even drew the end feathers in a zig zag manner to illustrate the silhouette the feathers created.

Jose wrote *I saw a turkey vulture at the Nature Center. The vulture has black and white colors. Vultures eat dead things. I was amazed when I saw the vulture. I know his feathers are soft* (Writing Sample 4.13). For the Ideas trait, his writing received a 3. Jose narrowed his topic to the vulture, but it was still broad because he discussed the vulture in general. Jose also seemed to write this piece by drawing on his experience with the phrase *I know his feathers are soft*. For Organization, his writing received a 3. All sentences supported the topic. The first sentence served as an introductory sentence. However, the reader was left without a concluding sentence. His writing received a 3 for Word Choice because Jose chose the word *amazed* to describe his experience. The other words were basic and familiar such as *black and white colors*. The Conventions score was assessed as a 3. He began each sentence with a capital letter and each sentence ended with a period. The spelling errors did not distract the reader and most words were capitalized correctly. Jose's averaged Six-Trait score was a 3 which classified his writing as **Developing**.

Jose wrote from his point of view most of the time. There were two sentences in his piece that were written in third person *The vulture has black and white colors*, and *Vultures eat dead things*. This illustrated a shift in Jose's thinking away from predominately egocentric writing. His artwork was drawn in an appropriate scale as indicated by correct proportions of the vulture's wings and head. The non-egocentric writing and the proportional vulture in the drawing were indicative of a **Concrete** stage thinker.



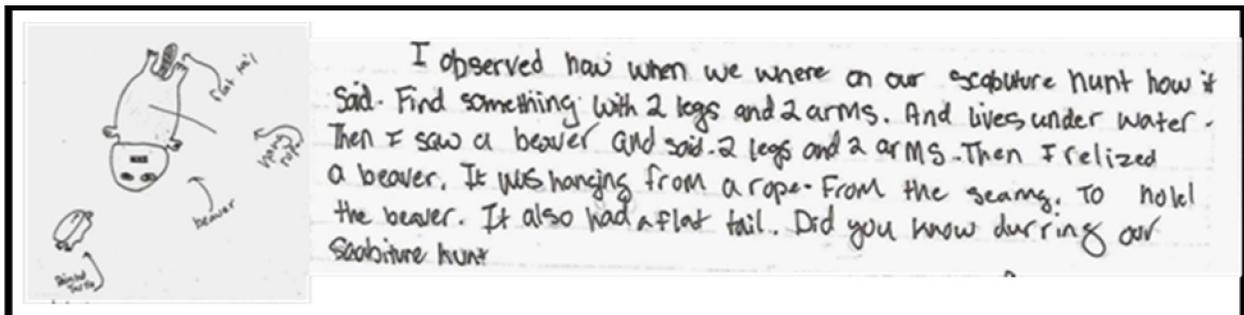
Art/Writing Sample 4.14. Jacob's Nature Center Trip

Jacob shared his fear of spiders with me. He said the scariest animal he saw at the nature center was the tarantula. Although he was afraid of spiders, he told me he wanted to, *Draw a ton of spiders to get over my fear*, so he created a pencil drawn spider (Art Sample 4.14). His artwork showed characteristics of a **Schematic** artistic stage drawing. With simple lines and shapes, Jacob drew a recognizable spider. He even depicted two of the three dominant body parts of the spider. Jacob's spider was complete with two jagged teeth, eight circular eyeballs, and eight legs.

Jacob wrote about his phobia of spiders (Writing Sample 4.14). His writing read *When I saw the tarantulas I freaked out Because it was [has] hairy hairy legs and yukey nose. I Don't see one Also it was Big. How many are on eath [earth]?* His piece received a 3 for Ideas because the topic was narrowed to the spider although it still remained broad. He attempted to support the topic with sentences such as *It was big*, but he did not write with much detail. This piece scored a 3 for Organization. He began his piece with an interesting introduction *When I saw the tartulas I freaked out because it has hair legs and yukey nose*, and he even attempted to write a conclusion. All of his details supported the topic of the tarantula. Jacob wrote with Voice, and received a 4. The first sentence shared a personal moment with the reader. He attempted to connect with the audience again when he wrote *I don't see one*. This phrase read as if he was in conversation with the reader. For Word Choice his writing was scored a 3. His words were familiar and he did write *freaked and yukey* which made his language more colorful. He was assessed a 3 for Sentence Fluency. He did not begin the sentences with the same words, but the lack of transition leaves the reader confused. For example, *I don't see one Also it was Big*. Jacob's writing received a 2 for Conventions. His spelling was mostly correct; and although Jacob used ending punctuation correctly most of the time, he did not use capital and lower case letters consistently.

All these combine to an average Six-Trait score of 3.2 which placed him in the **Developing** writing level.

Jacob demonstrated characteristics of a student transitioning from **Preoperational** to the **Concrete** cognitive stage. His spider was drawn to proportion and all major body parts are in the right locations which are traits of a **Concrete** learner. His writing showed his reaction and thoughts about the spider, but most sentences were written in first person which is characteristic of a **Preoperational** learner.



Art/Writing Sample 4.15. Beyonce's Nature Center Trip

Beyonce drew a scene from the underwater still-life display at the nature center with a pencil (Art Sample 4.15). This artwork contained characteristics of the **Dawning Realism** artistic development stage. She drew the beaver swimming under the water which was an exact depiction of the still-life scene from the nature center. The tail was pointed up towards the water and Beyonce portrayed the texture of its fur by using overlapping lines. The beaver's head and limbs were drawn proportionally to its body. She even added a turtle swimming towards the surface, which was drawn smaller and contained details like toes, circles on the shell, and the two humps on the underside of the shell.

She chose to recall and write about the scavenger hunt (Writing Sample 4.15). Beyonce's piece received an Ideas score of 4. She stayed on topic. This was evident because the paragraph she wrote focused on a specific event during the trip and each supporting sentence provided details for that idea. The piece was organized with an introductory sentence and an attempted closing sentence. This warranted a score of a 4 for Organization. The sentences flowed together with connecting words like *and*. For Voice, this paragraph was scored at 3 because Beyonce wrote in an informal, conversational manner and connected to the audience with phrases like *Did*

you . . . and *I said . . .* Beyonce used words like *observed* and *realized*, but most of her language was basic. The score for Word Choice was a 3 because of the absence of figurative language. She did however, write transition words such as *then . . .* to help form connecting sentences. Every sentence did not begin the same way which resulted in a Sentence Fluency score of 4. Beyonce began each sentence with a capital letter, but she did not use ending punctuation correctly or consistently. She did spell sight words correctly, but she did not spell more challenging words such as “scavenger” and “ceiling” correctly. Thus Beyonce’s writing was assessed as a 3 for Conventions. Her averaged Six-Trait score was a 3.4, classifying her writing level as **Developing**.

Beyonce showed characteristics of a **Concrete** learner with her art and writing pieces from the nature center experience. Her drawing showed objects drawn proportionally to each other and used a base and sky line as a point of reference. Although this piece was written in first person, her writing focused on the event of finding an animal on the scavenger hunt. She described the beaver using the details provided in the clue on the scavenger hunt instead.

Table 4.3 shows the five students’ artistic and cognitive stages and writing level for their pieces motivated by the nature center experience. These stages show slight differences from their previous writing experience. Kendrick increased his writing level from before. Beyonce’s art level increased since her previous piece. The students in first grade through fourth grade all portray characteristics of a student in the **Concrete** stage of thinking.

Table 4.3. Artistic, Writing, and Cognitive Analysis of the Third Field Experience

Student	Grade	Developmental Stage/Level		
		Artistic	Writing	Cognitive
Kendrick	K	Preschematic	Emerging	Preoperational
Brittany	1	Preschematic	Developing	Preoperational/Concrete
Jose	2	Schematic	Developing	Preoperational/Concrete
Jacob	3	Schematic	Developing	Preoperational/Concrete
Beyonce	4	Dawning Realism	Developing	Preoperational/Concrete

Additional Students

Discussion of the additional selected students is warranted to gain a deeper understanding of how the nature center field experience may have helped the other selected students draw and write. Each student drew and wrote about something that was meaningful to them from the experience.

Andrea, a kindergarten girl created a new type of bug.

Andrea: I like my sunflower seeds [drawing] and I made my cockroach from sunflower seeds and the grass. Orange and purple and black. My cockroach is made of flower seeds.

Researcher: Why did you color the grass different colors besides green?

Andrea: Because he lived in the grass with orange and blue and green.

Researcher: There is orange and blue grass too?

Andrea: Yeah, and black and red.

Researcher: So this is all grass, all these different color?

Andrea: Yes.

This conversation showed how a student who drew Preschematic pictures did not represent the objects with the appropriate colors found in nature.

Tonya flipped through her journal and pointed to her favorite drawing. She ran her fingers across the snake and said, *I got a snake in my hand. I like snakessss*. The snake was a rainbow snake with many colors. However, she chose the spider and seeds to create a new animal inspired by *Scranimals* (Prelutsky, 2002). She wrote *My spider is covered with seeds. My spider lives in my house. I killed my spider. My spider was bad*.

Meredith, a girl in first grade, created a scorpion covered in sunflower seeds. She colored an area around the scorpion brown to represent the dirt from its habitat, but she left white space to show the scorpion was hiding on a rock. She wrote *The scorpion lives in the brown (dirt). The scorpion is covered with seeds. The scorpion has black eyes*. She said she wrote the sentences after looking at her picture.

Sierra, a girl in first grade, said her favorite drawing was of the spider that lived in Hawaii because she was able to use her imagination. She claimed her favorite writing was the response to the nature center field experience because she held the snake. She wrote *I say (saw) anaconda at the nature center and it . . . I touched it*. She said she knew to color it black and white from the photograph of the snake on the board in the classroom and, *because it is kind of like he is a prisoner and he's like in jail*. Sierra said, *The drawing helped me so I could remember. First, I draw, and then it helped me with my words because so I can look at it then I can write. I can think about what I can write*.

Tyra, a first grade girl, chose the black line master of the bird and affixed sunflower seeds to it with glue. She depicted the bird standing inside a cage next to a feeder. She wrote *My bird is a black bird. My bird has a red house and a blue door. My bird likes to eat a ton of seeds. He ate so many his feathers turned to seeds and he couldn't fly anymore because they were too heavy*. Another first grade girl who decorated the vulture with feathers wrote, *my vulture is sift. He has ble ees. He has lots of feathers*.

During an interview with Kendrick, who is in kindergarten and one of the five representative students, and Keenan, his brother in second grade, they both noticed they drew the same black and white California King Snake from the nature center. Keenan wrote *I saw a California King Snake. It felt so soft and squishy. It was black and white*. Kendrick wrote *I like snakes*. Keenan said he remembered thinking in his head *The snake felt soft and squishy*. He also

said he recalled staring at the vulture for a long time and studying it because he was . . . *going to come back and start writing. Because every time we go to a field trip we write about we did.* His drawing of the vulture showed a red head and spread wings. Keenan claimed this was his favorite drawing, *Because all I had to do was draw the cage and his wings, his red head, his nose, his fur on the edges and Jose and Alex. I know Alex wasn't there, but I just drew him.* He inserted his friend Alex, who was not at the nature center, into the drawing and story line. Then, Kendrick interrupted,

Kendrick: *Why don't he have legs?*

Researcher: *He doesn't have any legs? Well, let's look at his legs. How many legs does he have?*

Kendrick: *Three.*

Researcher: *Three legs, Keenan tell him what it is.*

Keenan: *I was just drawing his bottom.*

Researcher: *Oh, the third leg is his tail feathers.*

Kendrick was correct when he stated birds do not have three legs. This observation showed Kendrick's schema and spatial awareness of his brother's drawing. Keenan was not the only second grade boy to draw the vulture. Jonah also depicted the turkey vulture with black-tipped feathers and great detail. Haley, a second grade girl, shared her drawing and writing. She wrote about two snakes, and then, she revised her drawing to reflect the two snakes after realizing she had originally drawn only one.

Summary of Third Field Experience

The students wrote daily in their art/writing journals and had already published two lengthy writing pieces. After visiting the nature center, both camps wrote a piece about animals. The primary camp created a new animal by gluing pasta, beans, sunflower seeds, or feathers to an outline of a spider, scorpion, turkey vulture, cockroach, or snake. The primary students then wrote three sentences describing their new animals. Creating these animals provided a tool to help the students visualize details and write more descriptive sentences. Meanwhile, the intermediate camp, inspired by the book *Scranimals* (Prelutsky, 2002), combined an animal and

another object to create their own creatures. The students then wrote descriptively about their new animals.

Mrs. Pullman commented the students used their picture inspired by their nature center visit to help write words. From her perspective as a teacher, Mrs. Pullman asserted, *You could look at their words and see exactly what they're talking about in their picture.* Mrs. Pullman noticed a difference in the students' writing abilities since the prairie writing activity. She said *For the bug activity the students had to come up with the three sentences themselves where with the prairie writing, they just had to come up with words. That was only a couple of days away from each other.* After the nature experience, Mrs. Sykes said it was one of her favorite activities and believed it was the students' favorite as well. She believed the black line masters of the animals, the use of different media to create their own animals, writing three sentences that described their animals, and the habitat it lived in all contributed to making it a successful activity. She commented:

I think they respond well to the art being integrated because it really helps them focus their writing. I really think that was their best piece. I mean I modeled my snake and then Angela modeled the three description words for theirs and made them sit with them in their laps and then they came up with description words they could describe them.

She ultimately attributed the success to being able to see animals and used the experience to create their own.

A student drew a picture of the bobcat she saw at the nature center. The pen drawing included the cage with the bobcat on the top of a wooden structure or platform. Mrs. McCourt commented:

The drawing was fantastic, very detailed. It had the water dishes, the toys, the trees, the platform. But when I asked, 'Where was the bobcat in the cage?' she didn't have any words for the platform

structure and I thought that was really interesting. Here they are drawing things but there are no words for these things.

During interviews and observations, several students commented that observing the animals at the nature center or the pictures on the board helped them draw in their journal. Students also started to express how the field experience and photographs helped them write.

Fourth Primary Field Experience - Fire Department



I saw a ploe The fire fighter and the fire trucks.

— Grant (1st Grade)

The primary camp visited a local fire station on Wednesday, June 20th where the students received a firsthand tour of the facilities and equipment. While the primary camp conducted this fieldtrip, the intermediate camp took the opportunity to focus on writing narratives with a beginning, middle, and end.

Mrs. Buchannon's husband is a fireman and arranged for the local fire department trip. Towards the end of third week of camp, the primary camp rode a bus to the fire department on a hot, sunny summer day. Students were encouraged to wear their red Camp Imagination t-shirt, hats, and sunscreen. Once the students arrived at the fire department, they were excited and chatty. An on-duty fireman met the students in the foyer of the department and conducted a tour for the students. He showed the students where the firemen and women exercised, slept, and ate.

The students were unaware the firemen slept and ate at the fire department. One student asked to spend the night and another inquired as to where a fireman's family slept.

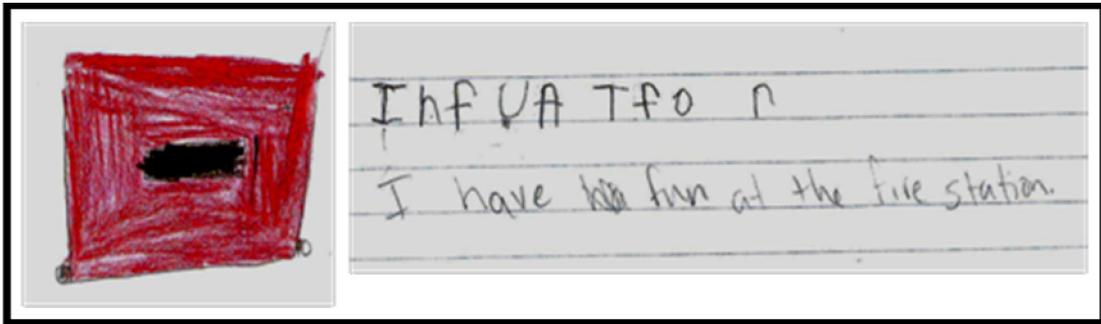
Then, the students were able to crawl in an ambulance as the fireman talked about all its parts. The students showed respect and a little trepidation as they sat in silence listening and watching intently. One boy gasped when the fireman showed them intravenous tubes. Next, a couple of the firemen and women demonstrated how to slide down the pole. Almost all of these students asked to slide down the pole, but they were told only trained firemen and women could because it is dangerous. To calm the students, a fireman brought a big pile of clothes and put them on the ground. He explained how his uniform kept him safe from the smoke and fire. He went through the parts of the uniform as he donned each one and described how each piece works together to create a fire resistant panoply. The fireman even talked through the gas mask and told the students not to be afraid of him. The mask scared some of the younger students. One of the kindergarten boys even held onto Mrs. Buchannon. A student was invited to put the uniform on to see how heavy it was and what it felt like. Almost all the students volunteered and a first grade boy was chosen. The uniform was big and hung on him and the boy laughed and said, *It is hot*. Finally, the students were shown each part of the fire truck including the hoses, axes, lights, and alarms. The tour concluded with a group photograph in front of the fire truck.

Primary Writing Camp Mini-Lesson

The day after the trip to the fire station, the primary camp teachers prompted the students to describe their favorite part of the experience to create a personal narrative. The teachers reviewed the photographs of the fire department with the students. These pictures included a fire truck, a firewoman sliding down the pole, a fireman putting his gear on, and the ambulance with the students sitting in it. Students were encouraged to look at the pictures and discuss what they intended to draw and write about with each other. Once the directions were given, the students moved about the room and chose a quiet spot to concentrate. Some students wrote at desks while others sat on the floor. After the students drew their pictures, Mrs. Buchannon created a word wall for them to refer to help spell words. The students wanted to know how to spell words specific to the field experience such as *fire department*, *pole*, *mask*, and *ambulance*. Mrs. Buchannon instructed the students to write at least one sentence describing their picture.

Teachers moved around the room and provided one-on-one help to students. At the conclusion of the writing time, students shared their journal entries in the author's chair.

Representative Students



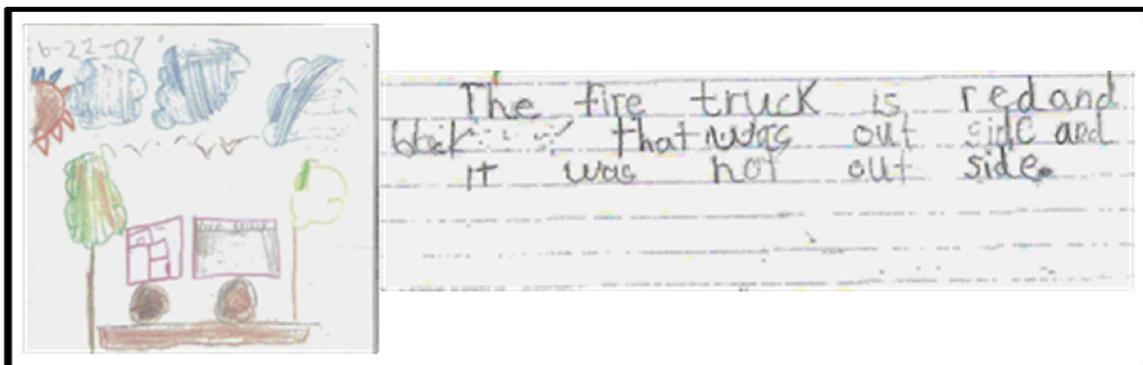
Art/Writing Sample 4.16. Kendrick's Fire Department Trip

Kendrick drew the rolling bed from inside the ambulance (Art Sample 4.16). The black shape represented the bed, and the red rectangle surrounding the bed was the ambulance. At the bottom of the red rectangular shape are two wheels. He said he drew the rolling bed because it was warm. He described his favorite part of the field trip as *When I went inside the truck*. Kendrick commented in his interview when he drew this representation of the ambulance, he had a *Picture in my head*. His drawing showed **Preschematic** features. He drew elemental shapes representing the ambulance and the rolling bed. The colors Kendrick chose to represent both the ambulance and the rolling bed were not accurate. He portrayed the ambulance in the middle of the page and not anchored to a base or sky line. The most notable Preschematic characteristic this drawing showed was how Kendrick drew the interior, the rolling bed, and the exterior, at the same time. This style of representation is called *X-ray* (Lowenfeld & Brittain, 1975), and it is a compensation for a student's inability to draw three-dimensional objects.

Kendrick wrote the sentence which accompanied his representation of the ambulance independently (Writing Sample 4.16). This writing received a 3 for Ideas because he used words and pictures to express the topic. Kendrick also wrote a clear sentence and could reread the sentence shortly afterwards. This piece was scored a 2 for Organization. He created one picture, but his writing did not describe what he drew. His journal entry was assessed at a 2 for Conventions. He created letters that faced the correct way and capitalized the pronoun "I." He did not put a period at the end of the sentence, but he did write from left to write to create his

message. His average Six-Trait score was assessed as a 2.3 which identified the writing as **Emerging**.

Kendrick showed characteristics of a **Preoperational** learner with the writing and art samples following the field experience at the fire department. He wrote in first person about his experience at the fire department instead of describing what he observed from a third person perspective. His picture was drawn as if the viewer was standing at the back of the ambulance looking through the doors. The wheels of the ambulance were not in proportion to the truck itself. The picture did not contain detail of the seat he sat on or any of the equipment inside the ambulance.



Art/Writing Sample 4.17. Brittany's Fire Department Trip

Brittany drew a red and black fire truck on a road, sandwiched between two trees (Art Sample 4.17). She wrote *fire truck* on the second half of the truck. In her background, Brittany drew an orange sun, blue clouds, and black and brown birds flying in the sky. This drawing contained several **Schematic** characteristics. First, the drawing sat on a defined base line. Second, the drawing showed trees, a road, and the wheels of the truck on the same plane at the bottom of the page. The colored objects were drawn and colored realistically. She drew objects in proportion and relation to each other such as showing the trees were taller than the truck and the wheels on the truck were large. She left a blank space in between the red cab of the fire department and the back cab which holds the equipment. This feature was an attempt to show the compartmentalization of the ambulance.

Brittany wrote about the fire truck she observed parked outside the fire station (Writing Sample 4.17). The students sat outside on the grass in the sun while they listened to the fireman

describe the truck. Her writing depicted this experience *The fire truck is red and black that was out side (outside) and it was hot out side (outside)*. This piece was scored a 4 for Ideas because she wrote a clear message to accompany her art and the writing was fully decodable. Brittany described the fire truck and how it felt outside to support to her idea. The text received a 3 for Organization. Brittany’s writing remained focused on her message. Her writing reflected a balance between details about the truck and details concerning the weather during the field experience. Brittany’s journal entry was received a 4 for Conventions. She consistently used capital and lower case letters and correctly and wrote from left to right. Although her sentence structure was not smooth and correct, she spelled every word correctly and put a period at the end of each sentence. The run on sentence , . . . *red and black that was out side and it was hot out side . . .* showed Brittany had difficulty applying the proper punctuation. The piece received an average score of 3.6. Her writing stage was assessed at the **Effective** level.

Brittany exemplified characteristics of a **Concrete** learner. First, her drawing showed proportional and appropriate spatial relationships. The trees were taller than the truck and shown in proportion to the large wheels on the truck. The objects drawn are purposefully placed on the paper to illustrate one tree in front and behind the truck. Her writing was written in third person and therefore, was not egocentric. She described an object, the truck, and the weather without using herself as the subject.

Table 4.4 shows the two students’ artistic and cognitive stages and writing level for their pieces motivated by the field experience to the fire department. These stages show slight differences from their previous writing experience. Kendrick maintained his writing level of Emerging. Brittany increased her writing level to Effective. For this piece she showed solely Concrete learning attributes.

Table 4.4. Artistic, Writing, and Cognitive Analysis of the Primary Field Experience

Student	Grade	Developmental Stage/Level		
		Artistic	Writing	Cognitive
Kendrick	K	Preschematic	Emerging	Preoperational
Brittany	1	Schematic	Effective	Concrete

Additional Primary Students

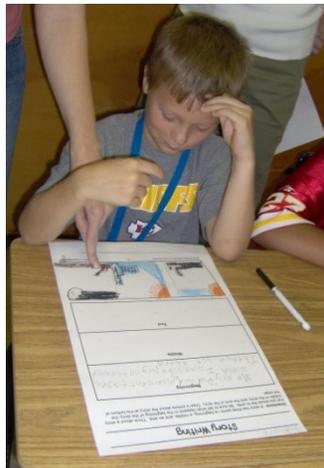
Sierra, a first grade girl, shared a drawing of the pole and wrote, *I saw a Ploe (pole). The fire figrs (fighters) sid (slid) don (down) the Ploe (pole).* Mrs. Pullman said, *I could picture the fireman go down the pole.* Then, several other students shared their observations of the pole.

Miley, a kindergarten girl, shared how she went to the fire station and saw a pole. Meredith, a first grade girl, shared she saw a pole in the middle of the fire trucks, and the firemen slide down very fast. Mrs. Buchanan commented on her word choice *slides down very fast. We can see it our mind.* Meredith enjoyed the field experience to the fire station the most and said, *This was her favorite drawing because it was colorful.*

Summary of Fourth Primary Field Experience

The field experience to the fire department was educational and exciting. The students learned about equipment the firefighters used and how firefighters help people. The students internalized the sights of the fire department. The digital pictures reviewed the day after the field experience helped the students recall details of the fire station. Their drawings reflected images such as the truck, pole, mask, and ambulance. All the students wrote an accompanying message with their art, and most students were eager to share their work.

Fourth Intermediate Experience - Favorite Summer Activity



It helps me think of things to write because I can look at the picture and actually know what to write before I start writing on a piece of paper.

— Adam (4th Grade)

The students in the intermediate writing camp did not attend a fourth field experience. The teachers felt many of the students had already been to the fire department, and they wanted the students to have more time to develop a personal narrative with a beginning, middle, and end. The objective of this fourth intermediate writing lesson was to have the students manipulate water colors and develop a narrative around their artwork.

Intermediate Writing Camp Mini-Lesson

Mrs. Yost began the day with a mini-lesson on beginning, middle, and end with the students. Then, she used the ELMO and modeled completing a graphic organizer with the beginning, middle, and end parts of the book. She wrote one sentence in each box with the help of the students.

Mrs. Yost and Mrs. McCourt brainstormed with the students about their favorite summer activities. The teachers charted these ideas on the board for everyone to view and Mrs. McCourt gave the mini-lesson on writing a clear beginning, middle, and end. She used the ELMO to project a beginning, middle, and end graphic organizer and modeled how to use the organizer as an author instead of as a reader. After she asked the students to divide their paper in thirds, she modeled how to label each third *beginning*, *middle*, and *end*. Then, Mrs. McCourt said:

Now, I am going to choose one thing to write about and then, you are going to be choosing your own thing when I am finished.

[pointed to butcher paper on board titles ‘Summer Activities’] *I am going to look at the summer activities that we brainstormed about.*

I am going to choose one of my favorite activities, swimming.

She read the list of activities and decided swimming was the event she knew most and could write about with authority. She moved back to the ELMO and said, *I am going to think, what do I do at the beginning when I get ready to go swimming?* The students shouted, *Bathing suit!* She drew a bathing suit, flip flops, towel, sun screen, money, and her swimming pass in the box labeled beginning. Then, she modeled how to develop the middle part of the drawing. She thought out loud, *I get to the middle part, which is going to be the most exciting part. That is*

when I'm actually swimming. I'm in the water, I'm having fun. I go off to the diving board and I jump off the diving board, and I get up on that slide and go on the slide. She drew the pool, slide, herself jumping off the diving board, and several children in the pool swimming. She explained, *I am going to go off the diving board, and down the slides, and swimming. Now, I need to draw me. I'll draw me swimming. No, I think I will draw me in the most exciting part and that would be the diving board.* Mrs. McCourt completed the drawing by drawing in the end box. She drew herself hanging up her towel and swim suit and even included the bathroom door to represent her taking a shower. The students agreed with her ending so she pointed to each picture in the boxes and read her story out loud. She then released the students to complete their drawings and the students were instructed to draw the beginning, middle, and end of their favorite summer activity to prepare for their writing piece.

Mrs. Yost delivered the writing instruction. She began by writing the beginning. She asked the students to help her start writing. One student said, *First.* Mrs. Yost responded:

I really liked that you used the word 'first' because it is a sequencing word. It tells me the order of how I did things. So I am going to put the 'first' up there so, this is my sloppy copy, it's okay, it's not my final draft. 'When I was getting ready to swim first I got my bathing suit, towel, lotion, money, and swim card.'

A student noticed Mrs. Yost omitted sandals from her written description and Mrs. Yost replied:

I left them out but that's okay. Remember, you can put them in. But if it is here [drawing box] then you need to put it here [writing box]. So, I've got to add sandals. I am going to put an arrow to remind me, 'don't forget my sandals'

Mrs. Yost reminded the students the middle section would be a new paragraph and the most exciting part of the story. She wrote *My favorite thing to do at the swimming pool is going off the diving board.* Then, she told the students what it was like on the diving board, *I like to go up to the edge and then spring* [Mrs. Yost jumped up and down]. *I like to go 'Whoop!' and do a*

flip. She finished the middle part by writing *I like springing off the edge and doing flips*. Mrs. Yost concluded with the ending, and said as she wrote *I am always tired at the end of a swim day. I walk home and hang up my towel and suit to dry. I shower so my hair doesn't turn green*. Mrs. Yost modeled how to review the writing. She mentioned to the student to make sure not to begin every sentences with the same word like "I." Then, she released the students to begin writing their own narratives, which depicted their favorite summer activities, and use their drawings to help them describe.

Several students moved to the tent area to write, and Mrs. McCourt sat in the tents with a group of 10 students. Although some students played with stuffed animals most were writing. Two second grade girls helped each other with spelling. Mrs. McCourt instructed students to write one sentence for each grade. Thus, those students entering third grader were required to write three sentences, fourth grader four, and fifth grade five. After students wrote for 20 minutes, several shared their drawing and writing. Students wrote about swimming, trips to Sea World, and playing in water sprinklers.

The next day, Mrs. Yost read the book *Zoom* by Istvan Banyai (1995). The beginning of the book showed a picture of a cruise ship and every time Mrs. Yost turned the page, the next picture zoomed in closer. By the end of the book, the students saw a picture of a boy reading a book on the cruise ship. Mrs. Yost told the students she picked this book because it focused on "zooming in" and noticing more details. She informed the students zooming was going to help them write details for the most exciting part of their story.

Mrs. McCourt modeled using water colors to paint the most exciting scenes, or the middle and the climax, of their stories. She painted herself jumping off a diving board. The students followed Mrs. McCourt's example and used water colors to paint the most exciting parts of their stories. This new medium demanded more student attention than other mediums, and the classroom was spontaneously quiet while they created their art with water colors. Painting the middle section of the stories and "zooming in" helped students write the most exciting parts of their stories. The students were learning to see more details to write.

Representative Intermediate Students



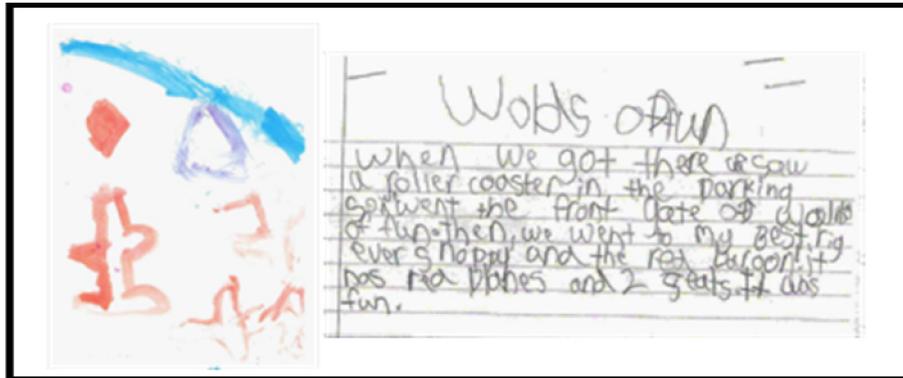
Art/Writing Sample 4.18. Jose's Favorite Summer Activity

Jose painted three slides from the local neighborhood pool where he swims (Art Sample 4.18). This drawing showed characteristics of a **Schematic** stage piece. The water painted at the bottom of the page provided the base line. The slides were painted in a curling pattern in an attempt to represent how the slides twist and turn. He painted himself in grey at the top of green slide. The colors used to paint the slides resembled the actual colors of the slides at the pool.

Jose described how it felt to venture down the slides (Writing Sample 4.18). This piece was scored at a 4 for Ideas because he focused his topic to sliding down the slides at the pool. He supported this idea with phrases like, *I felt amazing . . . it feels like if it was a dream*. He used his personal experience and provided details such as, *the green and dark blue (blues) are fast*. For Organization, this piece was scored as a 3. Jose attempted to write an introduction by leading into the topic with *I went down the three slid (slides) . . .* He also described how to actually go down the slide and land in the pool. However, his last sentence did not conclude or tie up loose ends. Jose's writing received a 4 for Word Choice because he used descriptive language like, *dark blue*, and *amazing*. He also wrote a simile . . . *it feels like if it was a dream*. I assessed this piece as a 3 for Conventions. Jose began each sentence with a capital letter and ended each with a period. He did not spell every word correctly such as, *slid (slides)* and *tuch (touch)*. His grammar and usage were not distracting to the reader. His average score was a 3.5—which classified this piece in the **Effective** writing level.

Jose demonstrated traits of both a **Preoperational** and **Concrete** learner with his art and writing for this project. His drawing showed Concrete cognitive stage characteristics because the slides and the human figure were drawn in proportion to each other. The water was drawn on the base line, which illustrated his understanding of top and bottom. His writing showed

characteristics of a Preoperational learner because he wrote primarily in first person. This egocentric focus may be attributed to the fact Jose is the subject of the writing and the events revolve around him.



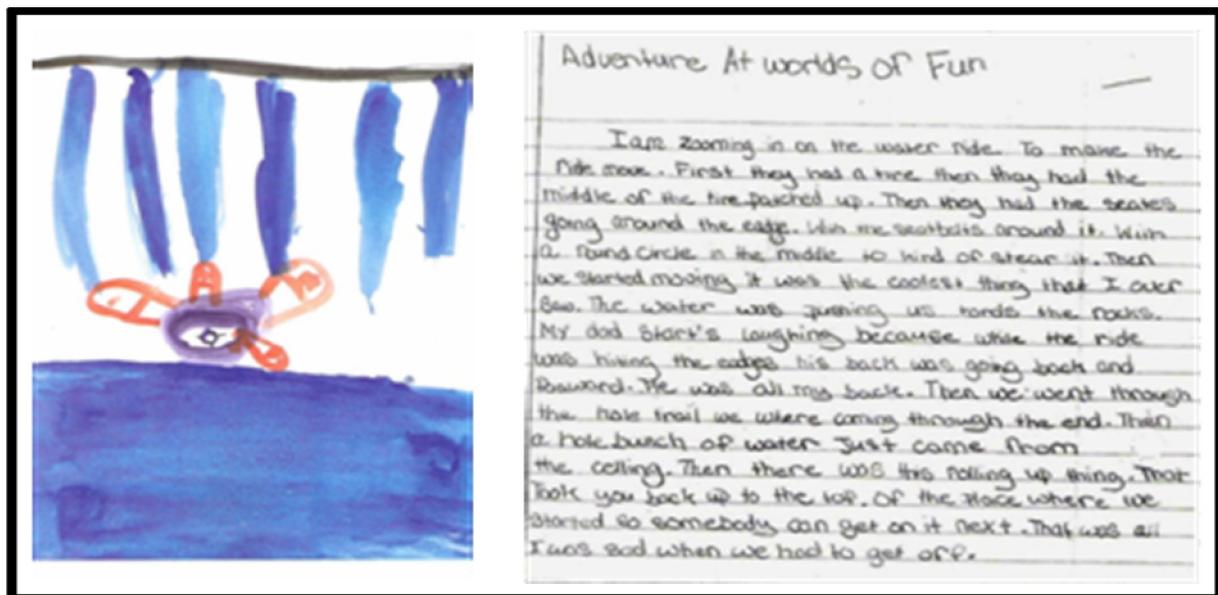
Art/Writing Sample 4.19. Jacob's Favorite Summer Activity

Jacob painted an amusement park attraction from his favorite theme park (Art Sample 4.19). He said, *I just imagine how I remember*, to help him draw. The blue line is the crane which held three orbiting planes. A purple triangle represented the cable which secured the planes and helped propel them. He painted three orange/red planes for park patrons to ride. This artwork showed characteristics of **Preschematic** stage of artistic development. The pole which held the planes was not drawn proportional to the planes themselves. The cable did not touch the planes, which indicated a lack of understanding of how the planes and cranes interacted in space. However, parts of his painting did represent **Schematic** features. The planes rotated, portrayed by the noses of the planes pointed in the same direction. This orientation indicates Jacob was aware of the clockwise rotation of the amusement park attraction. He also selected colors which resembled actual colors of the objects. Finally, the pole was drawn at the top of the page to indicate a sky line. Final assessment of Jacob's artwork places him between Preschematic and Schematic stages of artistic development.

Jacob wrote about his favorite amusement park attraction, *Snoopy and the Red Baron* (Writing Sample 4.19). This piece received a score of 3 for Ideas because Jacob chose to write about a ride in a theme park. He provided some support for the topic with phrases such as *it has red planes and 2 seats*, which left the reader wanting to read more. Jacob's writing was scored as a 3 for Organization. He did attempt to write a lead sentence to entice readers, and he

incorporated a concluding sentence at the end of his paragraph. He confused the reader with the phrase *When we got there we saw a roller coaster . . .* and then elaborated with, *Then, we went to my best rig (ride) ever snoopy and the red baron.* This writing entry scored a 3 for Voice. He attempted to connect with the audience by expressing his preference for the attraction. His writing seemed sincere and he included words like *we*. Jacob's writing received a 3 for Word Choice because he wrote in basic language with passive verbs such as *went*. He did use the adjective *red* to describe the plane. This piece scored a 3 for Sentence Fluency. The sentences are constructed completely and did not begin with the same word. He used the transition word *then* to help move the text from idea to idea. For Conventions this writing received a 3. He capitalized one beginning word and used ending punctuation consistently and correctly. He also used periods and an exclamation point. Additionally, almost all words were spelled correctly. Jacob received a 3 for all traits and his averaged Six-Trait score was also a 3. This classified his writing piece as **Developing**.

Jacob showed characteristics of a **Preoperational** and **Concrete** learner. His writing was egocentric, which is a trait of the Preoperational learner. His drawing showed up and down orientation which is characteristic of a Concrete learner. However, his artwork also showed traits of a Preoperational learner. The planes were not drawn proportionally to the cable or the crane which held the planes. The planes are drawn from an aerial view instead of a frontal view.



Art/Writing Sample 4.20. Beyonce's Favorite Summer Activity

Beyonce painted a water attraction from her favorite theme park (Art Sample 4.20). Her painting showed traits of a **Schematic** piece. The blue water at the bottom of the page served as a base line. The top of the page shows a waterfall streaming down. In the painting's center was a circular tube with four orange seats roughly proportional in size to the tube itself. In the center of the tube was a black steering wheel handle for passengers to hold. All objects were detailed representations of objects found at the park.

Beyonce's writing described the water attraction she experienced at a theme park during the summer (Writing Sample 4.20). I assessed this piece as a 4 for Ideas. She narrowed her topic to the experience of only one attraction at the theme park and wrote multiple supporting sentences. She drew upon her personal experience to write details like *Then they had the seates (seats) going around the edge*. Beyonce's writing received a 4 for Organization. She introduced her piece by telling the reader what she was *zooming in* to and finished the paragraph with a closing sentence describing how she felt. She started the piece as the attraction began, relayed to readers what to expect during the water attraction, and offered insight on how the water attraction ended. She also included a title for her piece. This writing scored a 4 for Voice. She expressed how she felt on the attraction with the phrase, . . . *it was the coolest thing I ever saw*, and *I was sad when we had to get off*. Beyonce's paragraph received a 3 for Word Choice. She used common language to describe her experience such as *a hole (whole) bunch of water*. She compared objects and created a simile and a metaphor. Many verbs were passive such as *was pushing* and *was hitting*. Her writing was assessed as a 4 for Sentence Fluency. Beyonce included transition words like *first* and *then* to move the text along. Her sentences did not all begin the same way, although she used *then* several times. The phrase . . . *it was the coolest thing that I ever saw*, invited expressive reading. The text scored a 3 for Conventions because Beyonce began each sentence with a capital letter and ended with a period. Beyonce did write some incomplete sentences and used an apostrophe incorrectly. However, she indented the first sentence to create a paragraph. Beyonce's average Six-Trait score was 3.6 resulting in an **Effective** level of writing.

Beyonce portrayed elements of both a **Concrete** and **Preoperational** learner. Her artwork was spatially correct. The spaces in between the waterfalls are approximately the same distance apart and she drew objects proportionally. The inner tube was smaller than the waterfall and the seats were large compared to the inner tube. This artwork highlighted the visible safety

features of the seat restraint system. Her artwork showed awareness of direction with the water flowing from the sky line down to the base line. Beyonce began her piece by writing in third person and described the attractions, features. In the middle of her piece she transitioned to writing in first person. She used third person to describe the ride, but she wrote in first person to describe her experience. These characteristics indicate Beyonce may be transitioning between the Preoperational and Concrete cognitive development stages.

Table 4.5 depicts Jose and Beyonce writing at the Effective level. Jacob retained his Developing writing level. All three students still continue to show characteristics of Preoperational and Concrete stages of cognitive development.

Table 4.5. Artistic, Writing, and Cognitive Analysis of the Intermediate Experience

Student	Grade	Developmental Stage/Level		
		Artistic	Writing	Cognitive
Jose	2	Schematic	Effective	Preoperational/Concrete
Jacob	3	Preschematic/Schematic	Developing	Preoperational/Concrete
Beyonce	4	Schematic	Effective	Preoperational/Concrete

Additional Intermediate Students

The additional students wrote about various topics. Jaime remembered Mrs. McCourt's writing criteria when she shared, *I'm going to fourteenth grade because I got fourteen sentences*. She explained her painting which resembled the teacher's model:

The pool, it cools me off when it is hot. This is the blue slide coming down. And then the green slide, well somebody is coming down it. Then, the dark blue is the water. This is me, me and my sister. This is me going underneath the waves and then Ryan is trying to get the green one. Hannah is right here swimming. Hannah, she is one of my friends, she is swimming around. This is

the diving board. And Riley just got done jumping off the diving board and swimming over.

Jaime added more, and she focused on a set of rings:

First me and my sister were playing with everyone else. We threw the rings as far as we can. My sister won all three rounds, I won one round. I felt happy. Me and my sister played with rings at the pool. We play . . . the pool color was blue. I have to ask my Mom if I could sometimes. There are four people in my family. It was so, so hot. I played with the rings. The end.

The students peer revised and peer edited with each other. One example of peer revision between a boy and girl, both in second grade, showed how they used artwork to help clarify what was written.

Jonah wrote *I am getting ready to ride my bike. I went so fast down a hill. I jumped off my bike before it crashed in a tree. It was fun. I had to walk back home. I didn't care. It was enjoyable.* Jonah clarified his writing with a conversation.

Jonah: *I changed it because the car and I ran into a tree. That is where I crashed.*

Researcher: *But you haven't crashed yet, you are up here.*

Jonah: *I know but. . .*

Jaime: *But he's coming down.*

Researcher: *It's coming down? But how could there be a fire before you crash?*

Jonah: *I don't know because when I ride my bike and it made a fire when it crashed.*

Jaime: *How about you, like, draw an arrow saying your bike is way down there and then the fire starts? Where is the tree then? This is your tree burning up right? And this is your bike up here. Then, you're coming down really fast, and then, you crash.*

Jocie, a fifth grade girl, commented “zooming in” to the middle part of her story was difficult because she had to . . . *figure out what she was wearing, I had to remember what she*

was wearing. I thought in my head, and then I had mine on too. I had polka dots and it was pink and yellow.

Students used the “zooming” activity to help focus on the exciting part of their narratives. Students drew the middle part of the narratives to help recall information and organize their writing.

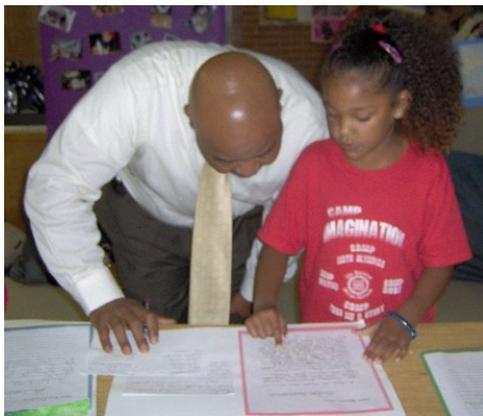
Summary of Fourth Intermediate Experience

Students chose to write about their favorite summer activity. A graphic organizer was incorporated to help organize the beginning, middle, and end of students’ narratives. Through teacher modeling and think alouds, the teachers instructed students on using the organizer. The teachers incorporated literature into the mini-lesson and demonstrated how to focus on the most exciting part of their story. Students used water colors to paint only the middle part of their narratives to help them “zoom in” on the narrative’s climax. Mrs. McCourt noted:

Watercolors are more difficult to get more detail because of the medium. However, it is a different type of medium to use also. So, kids could focus more on what they wanted to convey. When we did the watercolors, we gave them a short amount of time, about 15 or 20 minutes to do their picture. It was silent in the classroom for about the first 10 minutes, easily. When they had crayons, colored pencils or markers, there was a lot of conversation.

After the artwork, students wrote about their painting and welcomed the change to water colors. It appeared the students wrote about their favorite summer activity in greater detail than previous writings.

Final Summer Writing Camp Project



*I looked at my paper (drawing) and wrote a sentence
and then I wrote six sentences . . . It makes me feel proud.*

— Brittany (1st Grade)

The final writing piece was conducted over 3 instructional days during the summer writing camp. Each day was allocated for teachers to help students take a writing idea through the writing process. The objective of the final art and writing pieces was for each student to write several complete sentences about one idea.

Primary Writing Process

On Friday, June 22nd, the first day of the final writing project instruction, Mrs. Buchannon demonstrated how to look at photographs and use the drawings in student art/writing journals to visualize favorite camp experiences. First, each student selected their favorite camp memory. Then, the students shared the memory with a friend. Finally, Mrs. Buchannon instructed the students to sit in a circle so each student could recount their idea out loud to the group. This allowed Mrs. Buchannon to monitor all student ideas.

For the final art/writing piece, the primary camp teachers choose their own art medium which included: water colors, clay, scratchboard paper, crayons, and markers. Once they selected the art medium to represent their memories, Mrs. Buchannon grouped the students according to the art medium they selected. One teacher took the students who selected clay and showed them how to manipulate the medium to make a scene. Another teacher modeled using water colors to

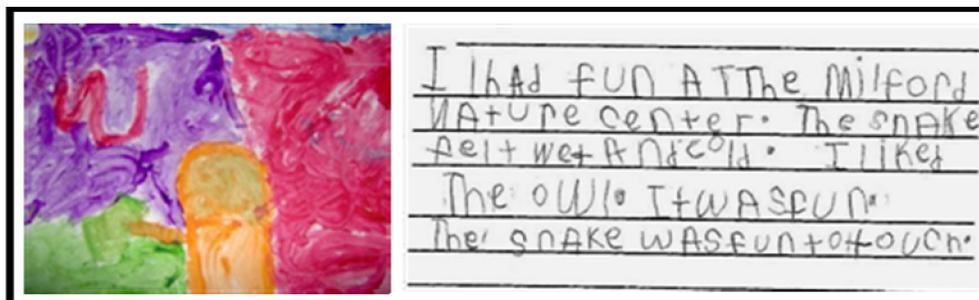
paint a picture, which subsequently helped the students paint. The third teacher worked with a group of students who choose the scratchboard paper as their medium. Using the scratchboard paper, the teacher demonstrated how to use a flat toothpick to scratch the paper and create a visual depiction of their favorite camp experiences. Once they completed the modeling exercise, the teachers showcased the completed art samples for students to view.

Next, as a whole group, the students helped Mrs. Buchannon make a word wall and incorporated words such as: *favorite, because, fun, interesting, learned, and artwork*. These descriptive words were available for students to include in their writing as they wrote sentences listing three details of their favorite summer camp adventure. Mrs. Sykes instructed the higher-ability students to include introductory and concluding sentences.

On Monday, June 25th, the second day of the final writing project, students revised their writing by rereading the three details and checking whether their art reflected those details. If the art did not correspond with the words, teachers discussed how to revise and modeled how to edit. Teachers met with individual and small groups of students to conference with them about the revision process. Students corrected their papers as they revised.

On Tuesday, June 26th, the third and final day, teachers modeled using nice handwriting and correct spelling. The teachers reminded students to incorporate at least three details why this was their favorite camp adventure. Students read their revised papers to partners. First grade students switched papers with kindergarten students to help with spelling. Each student met with a teacher for a final editing conference before publishing.

Representative Primary Students

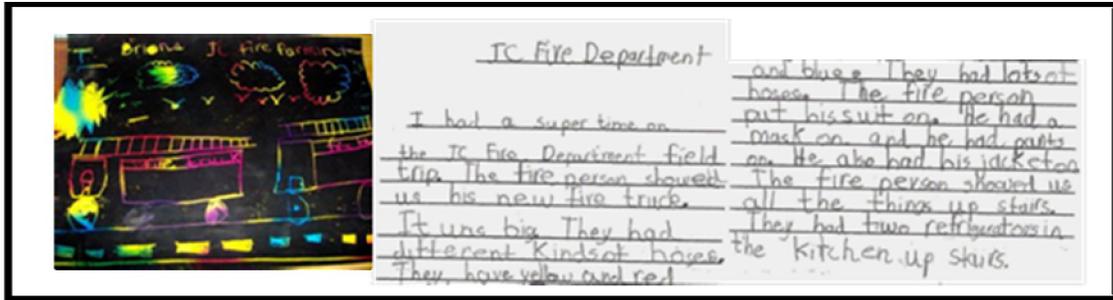


Art/Writing Sample 4.21. Kendrick's Final Project

Kendrick used water colors to paint himself and a snake to illustrate his favorite camp experience (Art Sample 4.21). This piece of art showed characteristics of the **Preschematic** stage of artistic development. Kendrick painted himself, the circular image, in orange and included a smile and two parallel arms. He painted the snake red and it looked as if it floated in space. The colors used were not representative of the objects found in nature, and Kendrick drew himself on the base line—characteristic of the **Schematic** stage of artistic development.

Kendrick wrote about his experience at the nature center when he touched a snake (Writing Sample 4.21). It read *I had fun at the Milford Nature Center. The snake felt wet and cold. I liked the owl. It was fun. The snake was fun to touch.* For Ideas, the writing received a 4. Kendrick created a clear message with art and words and composed multiple sentences to support his topic. With practice, Kendrick was able to reread his text during the final presentation at the high school. For Organization his piece received a 3. He did write an introductory sentence, *I had fun at the Milford Nature Center . . .*, but some of the sentences seemed out of order such as, *I liked the owl.* He attempted to conclude his personal narrative with the sentence *The snake was fun to touch.* Kendrick's final piece scored a 3 for Conventions because the spacing between words was inconsistent. With the help of a teacher, a peer, and a word wall, Kendrick spelled many words correctly. He wrote almost all his letters properly except for the *n* in *nature* but did not use capital and lower case letters correctly with consistency. His average six- trait score was a 3.3 which placed the writing in the **Developing** level.

Kendrick portrayed characteristics of both a **Preoperational** and **Concrete** learner during the final project. Kendrick showed trouble understanding spatial relationships when he painted the snake in the middle of the paper in relation to him. However, he did understand the sun belonged in the sky. The snake was not created in proportion to himself and the colors used symbolized emotion instead of reality. Kendrick wrote mainly in first person, and he described his emotional experience at the nature center in terms of himself, indicating Preoperational thinking. However, when he wrote how the snake felt, he described it in third person. This is a Concrete trait. Kendrick seemed to show traits of a learner in both the Preoperational and Concrete learning stages of development.



Art/Writing Sample 4.22. Brittany's Final Project

Brittany created her final art piece using scratchboard paper (Art Sample 4.22). This piece showed traits of the **Schematic** artistic development level. Brittany used a toothpick to etch the black overlay and created a colorful picture. She drew the road on the base line, which became the horizon, and the fire trucks were anchored to the road. There was a sun, clouds, and birds drawn in the sky line. She drew details like the horizontal ladder on top of the truck and wrote *fire truck* on the side of the vehicle. She etched a driver's door on the front cab of the truck, and the wheels were drawn in proportion to the truck. The colors were in-laid in the paper, so assessing her choice of colors for this picture is not applicable.

She selected her experience at the fire department for her final art/writing piece (Writing Sample 4.22). This piece was scored a 5 for Ideas because she chose a topic of personal interest and included several details to support the idea. She described the truck, uniform, and firemen's living quarters. Her artwork corresponded to the writing. Brittany's writing received a 4 for Organization. She composed a lead *I had a super time on the JC Fire Department field trip* to introduce her topic. However, Brittany did not include transitioning words to create a flowing text. She lacked a concluding sentence which prevented a higher assessment of 5 for Conventions. Therefore, she received a 4 for Conventions. Her average score, based on the individual, traits was a 4.3 which resulted in an assessed writing level of **Effective**.

Brittany showed characteristics of a **Concrete** learner with her final writing and art piece. The objects in the drawing were represented in proper proportions to each other and the objects were drawn relative to a base line. She displayed a non-egocentric focus with her writing because she wrote about her experience at the fire station mostly in third person. The only sentence written in first person was the introductory sentence.

Additional Primary Students

The primary camp final art/writing pieces ranged in topic from the fishing experience to the fire department experience. Students choose their own topic and created a piece of art with their choice of media. The kindergarten students created colorful pictures and wrote two to three sentences about their topics. Tonya wrote about her fishing experience and how Mrs. Pullman put the *slimey* worm on her hook to catch a big fish. Destiny described her experience at the fire department. She supported her topic with two sentences about the lights and ambulance. Andrea wrote about the nature center and a snake that was *big*.

The first grade students also provided variety in their writing pieces. Sierra drew the black and white snake she held at the nature center for her final piece and wrote how the snake felt and compared it to *a prisoner in jail*. Meredith, like Sierra, also wrote about the nature center. She recalled when she touched the snake and wrote *I like when the snake got on my finger*. Grant composed a piece about fishing and how the worm *felt soft*. The final pieces differed in ability and topic, and they showcased their ability to recall details of the field experiences and the writing mini-lessons conducted during summer writing camp.

Intermediate Writing Process

The teachers in the intermediate camp provided four days, from Friday June 25th to Thursday June 28th, for the second, third, and fourth grade students to brainstorm, draft, revise, edit, and publish their favorite writing camp experience. On the first day, the objective was for each student to brainstorm and draw three scenes from their favorite camp adventure to help to develop a story. Mrs. McCourt built upon the previous *zooming* art activity by integrating a technique she learned at an in-service. She modeled how to draw three pictures of the same idea and revise the drawing each time. She instructed students to fold a white piece of paper into quarters. Then, she instructed the students to draw a picture in one quadrant, revise the drawing in another quadrant, and repeat the process until all four quadrants contained drawings of the same object or event in increased levels of detail. For the fourth picture, the students observed all three pictures they drew and picked out the parts they like the most. The fourth drawing became the final revision, which zoomed in on the important details. This was the drawing the students referred to when they visualized their topics. Mrs. Yost and Mrs. McCourt allowed the students

to choose crayons, map pencils, or markers to represent their favorite camp experience with the fourth and final picture.

The teachers circulated through the room and discussed ideas with the students. Mrs. Yost said to a second grade boy, *I see you are going to write about catching a fish because you represented fishing in the first 2 boxes, but the third box you drew a snake biting your arm. I am confused.* The boy told her he was writing about a nature center *story* that happened a few years ago. Mrs. Yost had to redirect him. After conversing with each student, teachers allowed students to share their artwork and present three reasons why they chose that camp experience. This community sharing served as a rehearsal for the next day's writing activities.

On the second day, students used their art in the drafting process. The objective was for each student to write several complete sentences about one idea, present their art work, and explain how and why it was created. Mrs. McCourt modeled how to use the fourth square the students' drew the day before, as part of their brainstorming, to write one to two paragraphs. Students were given time to draft while the two teachers circulated and conferenced with students about their ideas. After 45 minutes of independent writing, the two teachers modeled the peer revision process. Mrs. McCourt read her draft out loud to Mrs. Yost to help identify any words that may have been omitted. Then, Mrs. McCourt gave her paper to Mrs. Yost to check for details. Mrs. Yost used the sentence amplifier introduced during a previous mini-lesson to help Mrs. McCourt create an interesting introduction. Mrs. Yost also put a triangle around a word which needed a revised word choice. After the demonstration, students worked in pairs to peer revise their writing. At the end of the lesson, students shared with the whole class how they perceived peer revising helped them become a better writer.

The third day was dedicated to editing. The teachers divided the whole class into two groups. Both groups had representation of all intermediate grade levels. The teachers conferenced individually with students to help with editing. The teachers identified details they liked about the student's paper, noted parts which were confusing, and corrected spelling as required. Mrs. Yost noted Jonah, a second grade boy:

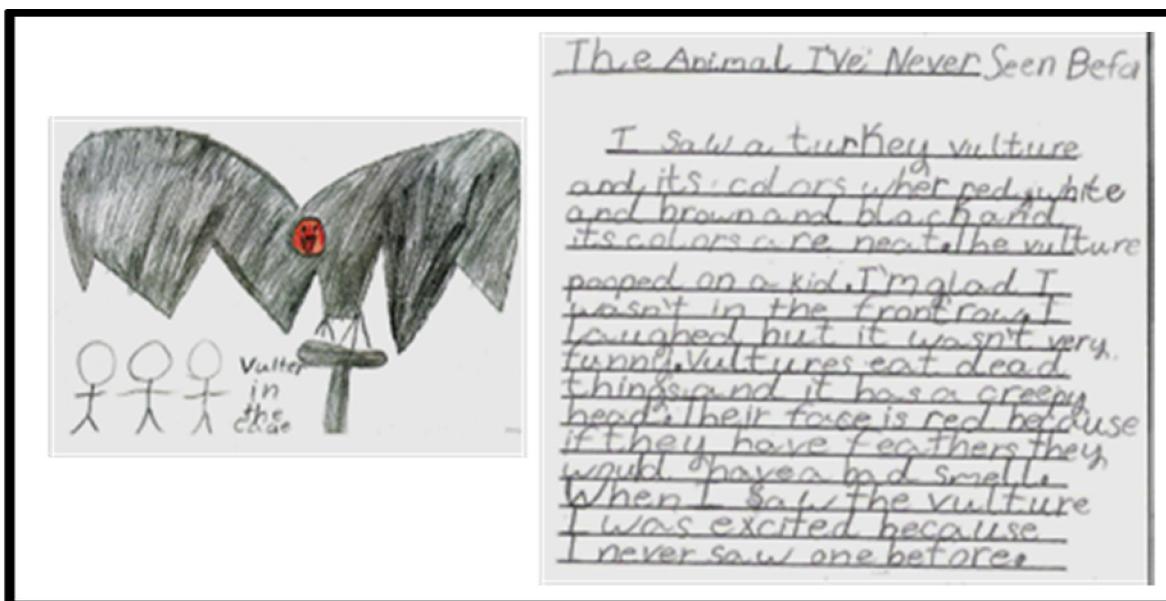
Continued writing on his turkey vulture today. He was focused and stayed on topic. Then, I encouraged him to go back and check for punctuation, capital letters at the beginning of sentence (only). He

caught several words that were capitalized and changed them to lowercase.

The teachers also created a checklist to review with each student. This checklist included criteria such as title, indention, inclusion of at least one descriptive paragraph, and incorporation of a concluding sentence. Mrs. Yost conferenced with Donisha, a fourth grade girl, who Mrs. Yost perceived did well using figurative language in her writing. Mrs. Yost also observed another fourth grade girl, Avril, using figurative language on her own. After the conference, students took the checklist back to their seat to help them focus on areas of their writing. While students were not conferencing with a teacher, they were either adding details to their writing or peer revising and editing.

The fourth day concentrated on publishing. Students rewrote their writing with their best handwriting and mounted them on construction paper. They also mounted their final art pieces in a similar fashion. The students then practiced reading their work out loud to each other to rehearse for the culminating event; the public demonstration by all the summer camps at the local high school.

Representative Intermediate Students



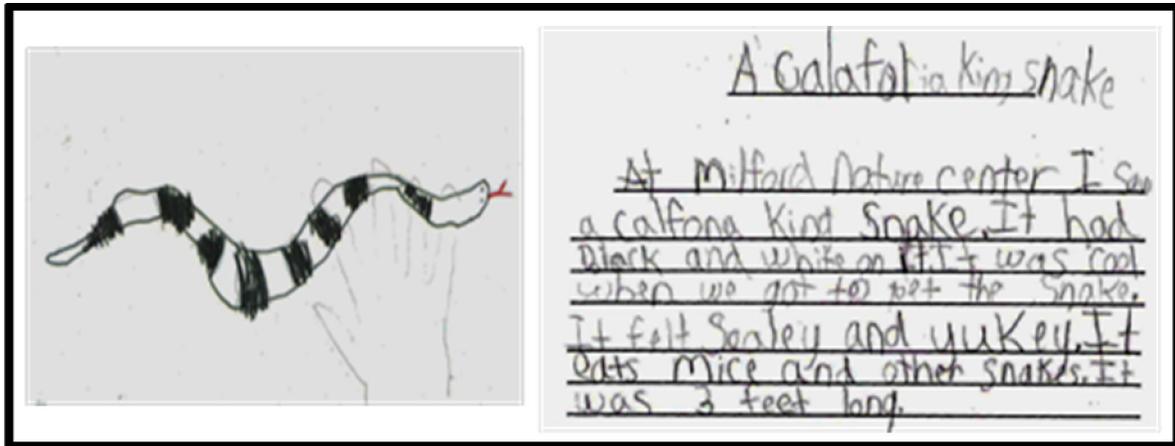
Art/Writing Sample 4.23. Jose's Final Project

Jose chose to draw and write about his experience with the turkey vulture from the nature center for his final piece (Art Sample 4.23). Jose noted, *I drew it four different ways because at the end, the picture that I liked I could put it in.* His artwork showed traits of the **Schematic** stage of artistic development. He demonstrated objects in the drawing have a spatial relationship by depicting the perched vulture leering over the students. The students and bird perch were both drawn on the same base line. The colors Jose selected to represent the vulture mirrored the colors as they appeared in reality. The exaggeration in size between the vulture and the students was typical of a Schematic drawing and most likely represented his strong feelings about the bird.

Jose said he wrote about the vulture twice because, *I've never seen a vulture before* (Writing Sample 4.23). His writing received a 4 for Ideas because he narrowed his topic to the personal experience of seeing the turkey vulture for the first time at the nature center. He supported his topic with details like, *Vultures eat dead things.* Although his ideas were clear, the reader was left with some unanswered questions such as reasons their faces were red and how that fact was related to why vultures do not have feathers on their head? This piece received a 3 for Organization. He did write a recognizable introduction and conclusion. Jose wrote an appropriate title which held the reader in suspense. Some parts of the narrative were awkward such as, *The vulture pooped on a kid in the first row . . . Vultures eat dead things.* It appeared Jose wrote two different story lines and merged them together. For Word Choice, this piece was scored as a 3 because Jose used basic language to describe his experience such as, *very funny.* The words he chose appeared to be the first words which came to mind of instead of more advanced, figurative language. Jose's piece received a 4 for Conventions. He began each sentence with a capital letter and ended each sentence with a period. Almost all words were spelled correctly, and Jose correctly used the contraction, *I'm.* His average trait score was 3.5 which resulting in a writing level of **Effective**.

Jose demonstrated characteristics of both a **Preoperational** and **Concrete** learner. His drawing showed appropriate orientation of objects drawn on a base line similar to other Concrete learners. However, the spatial relationship of the people and turkey vulture were not accurate, a common characteristic of a Preoperational learner. His final writing piece was written in Preoperational, egocentric first person when he described his emotion and feelings about the

bird. Yet, when Jose described the bird he wrote in third person which indicates the Concrete cognitive stage.



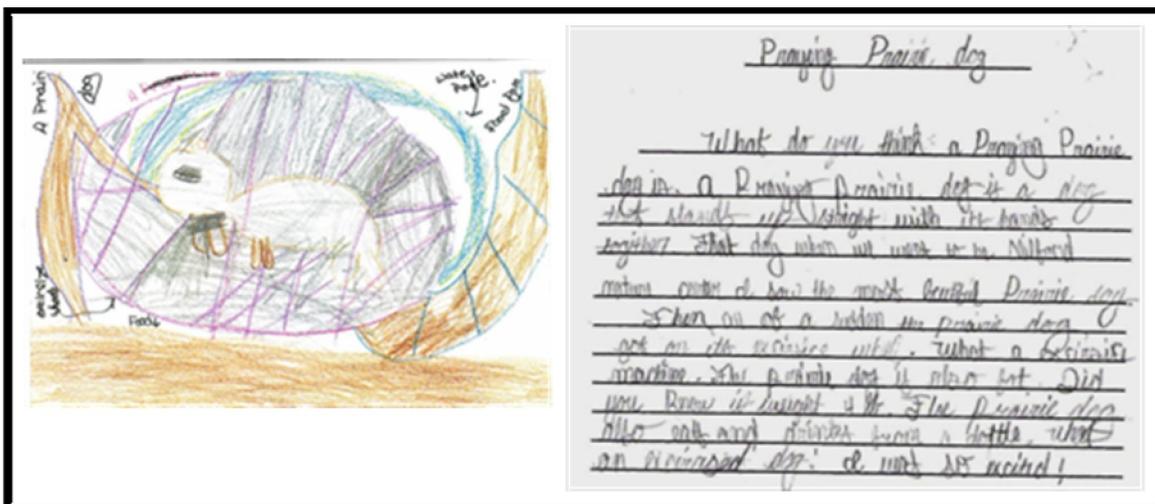
Art/Writing Sample 4.24. Jacob's Final Project

Jacob's art portrayed his hand touching the California King Snake (Art Sample 4.24). He colored the snake with marker and the artwork displayed characteristics of a **Schematic** stage drawing. Jacob drew his hand at the bottom of the page which may have acted as the drawing's base line. The color of the snake was representative of its natural markings. However, the snake's length was not drawn to proportion to the hand; the snake would need to be longer to be more realistic. The exaggeration between the hand and the snake expressed his strong feelings of touching the snake. Jacob attempted to show he was holding the snake by superimposing the animal over the fingers in his drawing. These traits all indicated a student in the Schematic artistic development stage.

Jacob chose to write about touching a snake during the nature center field experience (Writing Sample 4.24). Jacob's writing was assessed as a 3 for Ideas. Although he narrowed his topic to the California King Snake and drew upon his personal experience of touching the snake, other details supporting this experience were lacking. For Organization, his writing received a score of 3. He had a recognizable introduction, *At Milford Nature Center I saw a California King Snake*, and he attempted to conclude the paragraph with *It was 3 feet long*. He wrote a title for this piece, but it was not original nor did it entice the reader. For Voice, his writing received a 3. He connected with the audience with the phrase, *It was cool when we got to pet the snake*. Jacob included personal sensory details such as, *The snake felt Scaley and yukey*. This piece scored a 3

for Word Choice. Most of Jacob’s words were basic such as, *saw . . . black and white . . . was 3 feet long*. Although he did not use any similes, metaphors, or any forms of figurative language, *scaley and yukey*, were the most descriptive words he wrote. This paragraph received a 3 for Sentence Fluency. Five of six sentences began with the word *It*, which showed a limited variety in sentence structure. The sentence *it was cool when we got to pet the snake*, invited expressive reading. However, most sentences were basic in construction and lacked creative connections. This final piece received a 4 for Conventions. Almost all words were spelled correctly, and each sentence began with a capital letter and ended with appropriate punctuation. Most words were capitalized correctly and grammatical errors did not detract from the overall understanding of the text. These individual trait scores averaged to a cumulative score of 3.2, which placed this writing in the **Developing** level.

Jacob exhibited traits of a **Concrete** learner with his final art/writing piece. Although the snake was not proportional to his hand in terms of length, it was proportional to his hand in terms of width. The diameter of the snake was consistent with the size of the snake’s head and the width of Jacob’s fingers. As stated above, Jacob did depict both his hand and the snake in relation to a central point, or in this case, the base of the paper. The proportional and spatial characteristics of Jacob’s drawing were indicative of a student in the Concrete stage. His writing had a decidedly external focus as indicated by the repeated use of *It*, instead of discussing the snake in relation to himself. This lack of egocentrism is characteristic of a student in the Concrete stage.



Art/Writing Sample 4.25. Beyonce's Final Project

Beyonce depicted a prairie dog exercising on a wheel in its cage which she recalled from the nature center (Art Writing 4.25). She drew on a base line and used colors which were consistent with the actual colors of the objects. These, combined with the proportional representation of the size of the wheel in relation to the size of the prairie dog, were traits of the **Schematic** stage of art. However, Beyonce also included a **Dawning Realism** stage trait in this drawing. Close examination of the spokes of the wheel shows Beyonce attempted a three-dimensional representation with spokes in front and behind the prairie dog.

Mrs. Yost recalled a conversation during conference time with Beyonce:

I mentioned to Beyonce, I said, 'Tell me what is that?' She said, 'Oh, that's a prairie dog.' I said, 'Well, if hadn't been to Milford Nature Center with you, I would wonder. I could tell that was a wheel, but I would wonder if that was a rabbit or a guinea pig or a hamster.' She said, 'No, it's a prairie dog.' I said, 'Okay, well, what should we do?' She said, 'Well, should I label it?' I said, 'Well sure,' and she labeled it.

Beyonce wrote about her observations of a prairie dog (Writing Sample 4.24). For Ideas, her writing was assessed a 4. Her idea concentrated on the characteristics of a prairie dog and the supporting and personal details were consistent with the topic. For Organization, the writing was scored a 3. Beyonce had a recognizable introduction *What do you think a praying prairie dog is?* and included a concluding sentence *I was so excited!* She constructed two paragraphs but both lacked sequencing and logic. Connections between ideas in the sentences were unclear. For example *What a exirsice machine . . . The prairie dog is also fat.* The title corresponded with her text and was descriptive. Her voice score was assessed as a 4. Beyonce connected with the audience with the phrase *Did you know it weight 4 lb.* She revealed a personal detail *I was so excited.* Beyonce's writing received a 4 for Word Choice. She compared the prairie dog to *a exercising machine.* She described the prairie dog as praying because, *a dog that stands up straight with his hands together.* The remaining words Beyonce wrote were adequate. Beyonce varied how she began each sentence and received a 4 for Sentence Fluency. She used the

transition, *then, all of a sudden . . .* to move the text along. Sections of the paragraphs invite expressive oral reading like *Did you know . . . What an exercising dog . . . I was so excited.* Beyonce received a 4 for Conventions because she indented both paragraphs, capitalized the first letter in each sentence, and ended sentences with either a period or exclamation mark. She wrote two sentences in the form of questions, but did not include question marks. Almost all letters were facing the correct way except the word, *dottle*, where the *d* should be a *b*. Her trait scores averaged to a final score of 3.7 which designated Beyonce's writing level as **Effective**.

Beyonce demonstrated characteristics of a **Concrete** learner. Her artwork showed proportionality with the sizes of the wheel and prairie dog, and both objects were shown in space relative to a brown base line which Beyonce labeled *Food*. Beyonce wrote one sentence with *I* as the subject, but she wrote the remaining sentences in third person and described the prairie dog's physical features and actions. Both the art and writing samples indicate Beyonce's cognitive level was Concrete.

Additional Students

The preceding sections concentrated on analyzing the art/writing pieces of the representative students as well as their cognitive stages of development. It is important to this case study to highlight pertinent observations of the additional student participants and their art/writing samples. The additional students wrote about various topics for their final pieces.

Shannon, a second grade girl, drew a picture of a bobcat from the nature center. She depicted the animal in the cage and on the top of the wooden structure or wooden platform. The drawing had the water dishes, toys, trees, and platform. However, when Mrs. McCourt asked, *Where was the bobcat in the cage?* She didn't have any words for the platform structure.

Keenan, a second grade boy, drew and wrote about the vulture for his final piece as well. This writing highlighted his experience when the vulture relieved itself on his hand. It was titled, *Don't Sit in the First Row*.

Zena, a fourth grade girl, created a cartoon scene from the hike on the prairie. She drew four female caricatures talking to each other after noticing some out of place turkey tracks. The story was written as a conversation between the girls with the use of quotation marks.

Donisha said, *I have an idea of a real prairie dog and then when you start drawing it, it doesn't look like It . . . The paper isn't like the outside where you have, like, 3.* This comment

indicated she was moving toward the Dawning Realism stage of artistic development because she was aware her art did not resemble the real objects.

Avril, a fourth grade girl, drew a prairie dog because, *He looked like he was trying to lose weight because he was so fat.* She stated her prairie dog drawing was her best because, *at first they (teachers) made us write three things and pick one of those things for our picture and I picked that one.* She explained her prairie dog looked like a rabbit and several students did mention, *That looks like a rabbit on a wheel.* Avril said disappointedly, *I can't draw a prairie dog.*

Table 4.6 illustrates the results of the analysis of the artistic and cognitive stages and writing level for the summer writing camp. Kendrick began the summer writing camp with a writing level of Not Yet. After 3 ½ weeks, his last writing piece was evaluated as Developing. Beyonce continued to demonstrate characteristics of Dawning Realism in her art. All first through fourth grade students continue to exhibit traits of a learner in the Concrete stage of cognitive development.

Table 4.6. Artistic, Writing, and Cognitive Analysis of the Final Project

Student	Grade	Developmental Stage/Level		
		Artistic	Writing	Cognitive
Kendrick	K	Preschematic/Schematic	Developing	Preoperational
Brittany	1	Schematic	Effective	Concrete
Jose	2	Schematic	Effective	Preoperational/Concrete
Jacob	3	Schematic	Developing	Concrete
Beyonce	4	Schematic/Dawning Realism	Effective	Concrete

Summary of Final Summer Writing Camp Project

Mrs. Buchannon from the primary camp did not hold author's chair during the last couple of days to allow more time for the students to work. The students asked, *Don't we get to see everybody else's art because I really want to see what everybody else is doing.* After the question Mrs. Buchannon allowed them to share because she thought, *they truly value each other's opinions.* Mrs. Buchannon had the students *think, pair, share* before they started their art projects and talked to each other. She commented:

They were actually asking each other to describe more details after I modeled using one student. I would say, 'Okay, what did you hear? What was making that noise? Could you see what was making that noise? What did you smell?' I mean we just went through all of the senses and the kids modeled that.

Mrs. Pullman believed the previous writing experiences along with the mini-lessons prepared the students to write their final piece. However, Mrs. Buchannon thought, *This final project was like pulling teeth. Even strong students fought doing their final drafts.* Overall, Mrs. Buchannon commented, *Students' writing has increased both in volume and quality.*

Mrs. Yost believed peer editing helped students with their final piece, *Students talk about what's being drawn and give others ideas like, 'Did that turkey vulture have feathers on its head? No he didn't have feathers on his head because he was a meat eater.'*

Mrs. McCourt believed the students' final pieces benefitted from the final art technique. She said, *their pictures were better. They included some details they hadn't included before or the perspective was different and they tended to have better pictures.*

The teachers commented almost all of the students increased their writing scores through their counseling and observations of students since the beginning of the writing camp. Students perceived they became better writers during the course of summer writing camp.

Each section of Chapter 4 represents a descriptive picture of the field experience, the mini-lessons taught in both summer writing camps, and student art/writing written in response to the field experience. I analyzed 20 art/writing samples produced by the representative students in-depth. For each art/writing piece, I analyzed the student's stage of artistic development, Six-Trait scores, writing level, and stage of cognitive development. In addition to the 5 representative students' art/writing analysis, I provided highlights from the additional 14 students to provide more information about grade level performances and the uniqueness of each student. Over the course of 3 ½ weeks the 5 representative students have either maintained or improved their stage of artistic development and/or their level of writing. To see all of the 19 selected students' scores on the final writing and art piece, as well as their cognitive stage, refer to Table 5.9.

CHAPTER 5 - Holistic Analysis

This chapter is an extension of the individual student art/writing sample analysis presented in Chapter 4. The sections of Chapter 5 present a whole writing camp perspective of visualization embedded in the writing process. To set the tone for the chapter, I discuss the beginning of summer writing camp, review methodology used to assess students' base line stages of artistic development, Six-Trait Analytical Model (Spandel, 2004) scores, and writing levels. I then delve deeper into each main assessment area to gain greater understanding of how visualization may help struggling learners. The chapter concludes with a discussion of the focused codes I uncovered during the course of analysis. Chapter 5 consists of the following sections: (1) base line analysis; (2) analysis of stage of artistic development; (3) individual Six-Trait Analytical model (Spandel, 2004) analysis; (4) writing level analysis; (5) artistic stage and writing level comparison; (6) cognitive stage comparisons; and (7) analysis of student and teacher perceptions.

Base Line Analysis

I identified a base line writing level and stage of artistic development for all 19 selected summer writing camp participants. The base line served as a reference point for students' abilities before visualization was incorporated in the writing process.

During the spring semester, the district required teachers to administer a writing CRT to students in first through fifth grades. The assessment consisted of a classroom teacher giving a writing prompt, a process which was approved by the Curriculum and Instruction department of the district. Each grade level had a different prompt. Teachers were not permitted to model, instruct, assist, or conference with students during the test. Teachers allowed from one day to five weeks for students to complete the writing CRT. Students were permitted to peer revise and edit. Once the writing assessments were collected, classroom teachers scored each student's writing piece using the Six-Trait Analytical Model (Spandel, 2004). Students in first grade were assessed for Ideas, Organization, and Conventions traits. Students in second grade were assessed for Ideas, Organization, Word Choice, and Conventions traits. Students in third, fourth and fifth

grade were assessed for all six traits. These traits were: Ideas, Organization, Voice, Word Choice, Sentence Fluency, and Conventions. In some cases, classroom teachers switched papers with a co-teacher during scoring to increase accuracy in scoring.

I obtained permission from the Curriculum and Instruction department of the district for the writing CRT scores for 14 of 19 students. These writing CRT scores served as the base line writing scores for those 14 students. Kindergarten students were not administered the writing CRT, so the 4 kindergarteners in this case study did not have a writing CRT base line assessment. Instead, I assessed each kindergartener's first journal entry according to the Six-Trait Analytical Model (Spandel, 2004) trait criteria for Ideas, Organization, and Conventions. These traits are usually assessed at the end of the school year by the kindergarten teachers in the district as preparation for first grade. The base line score for Jose was also not his writing CRT score. His previous classroom teacher was new to the district and did not enter her students' scores in the database. His teacher provided his fourth quarter writing report card scores; which, I accepted as his base line writing score because it was closest to the timeframe of the district's writing CRT. His previous classroom teacher assessed Ideas, Organization, Word Choice, and Conventions, each from an assessment of a different writing assignment.

I followed the same methodology outlined in Chapter 3 to determine their base line writing levels. The Six-Trait Analytical Model (Spandel, 2004) scores were averaged to produce the overall score. This overall score was then rounded to the nearest whole number—1 through 5—to determine the writing levels of Not Yet (1), Emerging (2), Developing (3), Effective (4), and Strong (5) (NWREL, 2004). All base line CRT and assessed writing level data are contained in Table 5.1.

At the beginning of the summer writing camp, each student drew a person to the best of his or her ability. This activity was derived from Goodenough's (1926) Draw-a-Man test. I evaluated these drawings in accordance with Lowenfeld and Brittain's (1975) stages of artistic development. The assessment of each student's initial drawings determined their base line stage of artistic development. I chose this method because the district did not hold a CRT assessment for art and the students were exposed to art instruction approximately eight times throughout the school year and the art they produced was prescriptive. The students did not have individual freedom to create art. Classroom teachers always returned original art products to students because students did not receive an academic grade, assessments were not involved,

Table 5.1. Analysis of Student Participant's Base Line Art/Writing Artifacts

Student	Grade	Artistic Stage	Writing Level	Cognitive Stage	Ideas	Org	Voice	Word Choice	Sentence Fluency	Conv	Avg Score
Andrea	K	Preschematic	Emerging	n/a	2	2	n/a	n/a	n/a	2	2.0
Tonya	K	Preschematic	Effective	n/a	4	4	n/a	n/a	n/a	3	3.7
Chris	K	Preschematic	Emerging	n/a	2	2	n/a	n/a	n/a	2	2.0
Kendrick ^a	K	Preschematic	Not Yet	n/a	1	1	n/a	n/a	n/a	1	1.0
Miley	1	Schematic	Developing	n/a	3	3	n/a	n/a	n/a	3	3.0
Grant	1	Schematic	Effective	n/a	4	4	n/a	n/a	n/a	3	3.7
Brittany ^a	1	Schematic	Developing	n/a	3	3	n/a	n/a	n/a	3	3.0
Sierra	1	Schematic	Developing	n/a	4	3	n/a	n/a	n/a	3	3.3
Tyra	1	Schematic	Effective	n/a	4	4	n/a	n/a	n/a	4	4.0
Meredith	1	Preschematic	Developing	n/a	4	3	n/a	n/a	n/a	3	3.3
Jonah	2	Schematic	Effective	n/a	4	4	n/a	3	n/a	3	3.5
Jaime	2	Schematic	Developing	n/a	3	4	n/a	3	n/a	3	3.3
Jose ^a	2	Schematic	Effective	n/a	4	4	n/a	4	n/a	4	4.0
Shannon	3	Dawning Realism	Effective	n/a	4	4	4	4	3	3	3.7
Jacob ^a	3	Schematic	Developing	n/a	2	3	3	3	3	3	2.8
Jocie	4	Schematic	Effective	n/a	4	4	5	4	4	4	4.2
Avril	4	Schematic	Developing	n/a	3	3	2	3	3	3	2.8
Zena	4	Dawning Realism	Effective	n/a	4	4	4	3	3	3	3.5
Beyonce ^a	4	Schematic	Developing	n/a	3	4	3	3	3	3	3.2

Note. ^a denotes students in the representative group; Org = Organization trait; Conv = Conventions trait; n/a = not applicable to this student

and art was mostly for enrichment. Finally, I chose this method to create consistency with the methods I would use to assess stages of artistic development later in the study. At each stage of artistic development, Lowenfeld and Brittain (1975) commonly evaluated physical traits depicted in drawings of people such as symmetry, eyes, feet, head, and the figures' location in reference to a base line or horizon. A student-drawn figure of a person provided the best comparable method to apply Lowenfeld and Brittain's (1975) assessment criteria and create the base line measure of each student's stage of artistic development. The results of this base line art assessment are shown in Table 5.1.

The summer writing camp teachers instructed students to draw a person or themselves to the best of their ability. The teachers did not model this activity, but they provided paper, crayons, markers, and map pencils for the students to illustrate their figures. During my observational time, Mrs. McCourt heard her students say, *I don't know how to draw that*. Mrs. McCourt commented:

. . . a couple students started over because they scribbled, actually scribble something. . . made a head and then scribbled. Or, just made a head and said, 'I can't do the body.' I asked a couple of the kids to start over just because they had literally scribbled something and just wanted to get it finished with it.

Haley, a second grade girl, said her man drawing was difficult because, *When I pictured the man . . . This arm looks better except when I drawled it like this it doesn't look right*. These observations indicated some students may have struggled with independently drawing without referring to another object, picture, or visual aide.

The students' cognitive stages were not determined before the summer writing camp, so a base line for this factor was not established. Table 5.1 has the column for cognitive development stage, but it is left blank for consistency purposes with Table 5.9 which displays the final camp analysis of all stages, levels, and traits. As Chapter 3 outlined, methodology used to determine a student's cognitive development stage relied on an evaluation of both their writing and corresponding art samples. I only received the numeric CRT scores for each grade level appropriate six-traits from the district; original writing samples were not forwarded to me for

independent assessment. As mentioned above, any art produced during the school year by students attending summer school was not available, and it did not correspond to the writing piece assessed by the CRT. Both these obstacles precluded establishment of a base line cognitive development stage for the 19 selected participants. I assessed cognitive stages of the 5 representative students for each of the four field experience projects and the final writing pieces for all 19 students. All base line information is contained in Table 5.1.

Artistic Development Stage Analysis

The main teaching strategy of the primary and intermediate summer writing camps was incorporation of visualization techniques in the writing process. One technique teachers used to help students generate ideas for writing was integrating art in the writing process. Students were encouraged to draw as a different method of brainstorming and to help conceptualize ideas about which to write.

I assessed art pieces according to Lowenfeld and Brittain's (1975) Stages of Artistic Development. As explained in Chapter 3, students were required to Draw-a-Man (Goodenough, 1926) which was assessed as the base line art sample because of the lack of any other art assessment tools within the district. These drawings were assessed using Lowenfeld and Brittain's (1975) characteristics of Preschematic, Schematic, and Dawning Realism stages of artistic development.

The summer writing camp was comprised of students in kindergarten through fourth grade; the Preschematic (4 to 6 years), Schematic (7 to 9 years), and Dawning Realism (9 to 11 years) stages were the stages of artistic development upon which I focused my analysis. The Preschematic stage was identified by the inability of students to place objects on the base line and use colors which were representative of objects found in nature. Drawings at the Schematic stage were identified by the placement of objects on a base line, proper up and down orientation of the objects, realistic coloring, and any exaggeration between figures which represented an emotional attachment. Drawings from the Dawning Realism stage typically exhibited human figures clearly identifiable by gender, attempted three-dimensional representation, and varied object size to portray depth instead of remaining in contact with a base line or horizon (Lowenfeld and Brittain, 1975).

The students composed a total of five writing and art pieces. Students were able to revise their final art piece before publishing them along with their writing pieces.

Art lessons were not given during summer writing camp as it was not the camp’s focus. Artwork was a tool for students to use to visualize their topics. The different media and the non-standard methods of using art embedded in the writing process were intentional. Assessing the stage of artistic development of each student combined with observation of instructional practices provided insight into student’s writing level and cognitive stage of development. Figure 5.1 compares the base line and final stages of artistic development for the 19 student participants. The base line stages of artistic development are represented in red and the final are represented in blue.

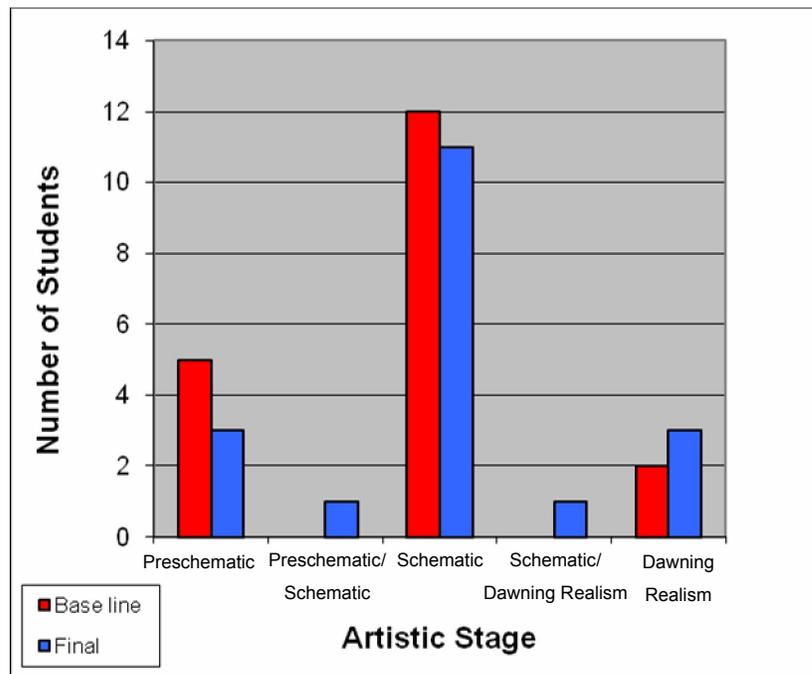


Figure 5.1. Final Artistic Development Stages

Two more students’ drawings were assessed Preschematic on the base line versus the final art piece and one more student drawing was identified Dawning Realism for the final art piece than the base line. Twelve students’ drawings were assessed as Schematic for the base line and 15 students’ drawings were assessed as Schematic, Schematic/Dawning Realism, or Dawning Realism for their final piece. Table 5.2 provides a holistic view of which grade levels experienced change in stages of artistic development between the base line and final art pieces.

Table 5.2. Stage of Artistic Development Comparison (19 Students)

Student	Grade	Base line Artistic Stage	Final Artistic Stage	Change
Andrea	K	Preschematic	Schematic	+
Tonya	K	Preschematic	Preschematic	no change
Chris	K	Preschematic	Preschematic	no change
Kendrick ^a	K	Preschematic	Preschematic/Schematic	□
Miley	1	Schematic	Schematic	no change
Grant	1	Schematic	Schematic	no change
Brittany ^a	1	Schematic	Schematic	no change
Sierra	1	Schematic	Schematic	no change
Tyra	1	Schematic	Schematic	no change
Meredith	1	Preschematic	Preschematic	no change
Jonah	2	Schematic	Schematic	no change
Jaime	2	Schematic	Schematic	no change
Jose ^a	2	Schematic	Schematic	no change
Shannon	3	Dawning Realism	Schematic	-
Jacob ^a	3	Schematic	Schematic	no change
Jocie	4	Schematic	Dawning Realism	+
Avril	4	Schematic	Dawning Realism	+
Zena	4	Dawning Realism	Dawning Realism	no change
Beyonce ^a	4	Schematic	Schematic/Dawning Realism	□

Note. + = Increased by 1 art stage; □ = Decreased by 1 art stage; □ = Increased by ½ art stage

^a Indicates representative students discussed in detail in Chapters 3 and 4.

As Table 5.2 illustrates, four students moved to higher stage of artistic development and two students are transitioning to a higher stage of artistic development. Andrea, a kindergarten student, final drawing was assessed at the Schematic versus Preschematic stage. Kendrick, a kindergarten student, is transitioning to the Schematic stage. All students in first and second grade remained at their base line stage of either Preschematic or Schematic stages. Shannon's, a third grade student, final art piece was assessed at the Schematic level versus her base line of

Dawning Realism. All four fourth grade students' final art pieces were assessed at a higher stage of artistic development than their base line.

The fourth grade girls believed they became better artists. Donisha said she used a pencil before going over it with crayons which helped her draw better pictures. Zena claimed her artistic skills were self-taught and she felt these skills surpassed those of her peers. Beyonce commented she frequently practiced drawing at home since summer school writing camp began. The girls shared they hoped to continue drawing in fifth grade, but were worried their new classroom teachers would not allow them to draw before writing.

It was not the summer writing camp's goal for students to increase their stages of artistic development, but rather to use art as a way to visualize what to write. However, analysis of the stages of artistic development offered opportunities to gain a deeper understanding of how art may reflect the student's cognitive development stage and his or her writing level.

Individual Six-Trait Analysis

With an observed increase in writing scores and levels among the primary camp, I created a bar graph to compare individual Six-Trait scores for the base line and final writing pieces. Kindergarten and first grade students were scored for three of the six traits: Ideas, Organization, and Conventions. As stated in Chapter 3, this selective trait assessment is consistent with district standards. The primary camp students' writing was assessed with Vicki Spandel's (2004) Young Writers Rubric (see Appendix D11) which was grade-level appropriate and provided distinction between traits at a younger writing level. The Young Writers Rubric also provided detailed examples of levels of writing for each trait.

Figure 5.2 compares the three traits assessed for the primary camp students' base line and final Six-Trait scores. A holistic analysis of the primary camp Six-Trait scores for Ideas, Organization, and Conventions reveal an increase from the base line to the final writing. The traits which showed the most improvement were Ideas and Conventions. The traits in the base line assessments for some students were assessed below a 3 but by the final piece, all primary students were assessed a 3 or higher on grade level appropriate traits. To gain a deeper understanding of which students in kindergarten and first grade received higher scores on the assessed traits, refer to Table 5.3.

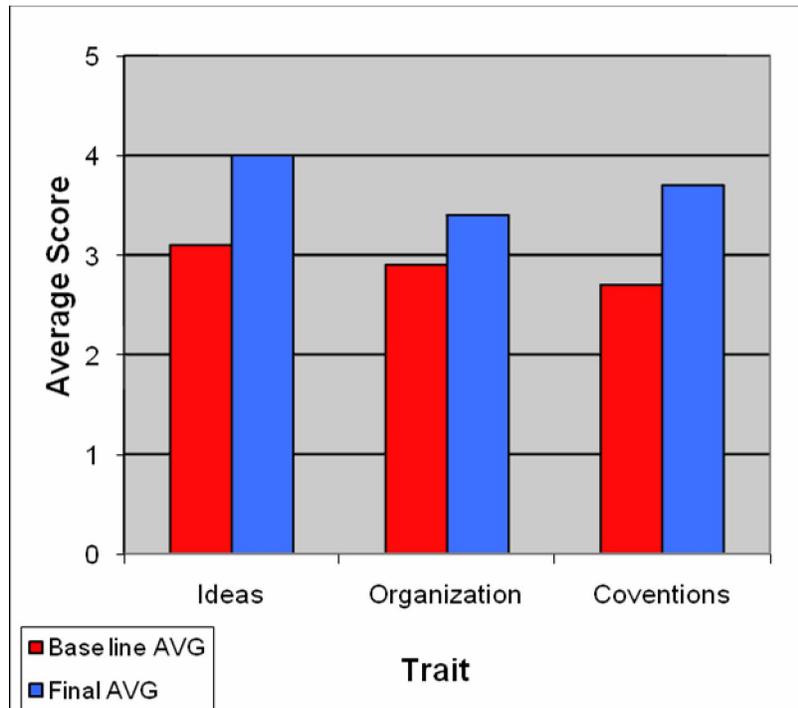


Figure 5.2. Average Changes to Six-Trait scores (Primary Camp)

Three of four kindergarten students improved their scores for the assessed traits. Andrea and Kendrick’s scores increased most, both gaining at least two points for Ideas and Organization. Tonya’s final writing scores for Ideas and Conventions trait remained the same compared to her base line writing. Overall, 5 of the 6 first grade students scored the same or higher on the final writing piece for Ideas. The Organization trait score improved for 3 of the 5 students in first grade from the base line to final writing. All first grade students either remained or increased their Conventions scores as well. Andrea improved her Six-Trait scores the most by receiving a 4 for Ideas, 4 for Organization, and 3 for Conventions. Her averaged base line score was a 3.7 versus her average final score of 2.0.

Primary writing camp students could not explain why they thought their scores increased. However, several students commented they thought they were better writers because they attended writing camp, but did not elaborate about the six traits. Miley said writing camp helped her, *Because I write more*. Students at the primary level were not required to identify the six traits even though their teachers incorporated the traits in their writing mini-lessons. Mrs.

Buchannon commented, *I definitely think that the ideas that we came up with for this camp were phenomenal.* Mrs. Buchannon also believed Conventions and Word Choice mini-lessons on utilizing word walls benefited the students because, *I mean they've seen them before but not known how to use them.* Grant, a first grade boy, believed writing was easy, *Because you can look for small words and you can look for big words.*

Table 5.3. Individual Six-Trait Scores Comparison (Primary Camp)

Student	Grade	Ideas			Organization			Conventions		
		Base line	Final	Change	Base line	Final	Change	Base line	Final	Change
Andrea	K	2	4	++	2	4	++	2	3	+
Tonya	K	4	4	n/c	4	3	-	3	3	n/c
Chris	K	2	4	++	2	3	+	2	3	+
Kendrick ^a	K	1	4	+++	1	3	++	1	3	++
Miley	1	3	4	+	3	3	n/c	3	4	+
Grant	1	4	4	n/c	4	3	-	3	4	+
Brittany ^a	1	3	5	++	3	4	+	3	4	+
Sierra	1	4	3	-	3	4	+	3	4	+
Tyra	1	4	4	n/c	4	3	-	4	4	n/c
Meredith	1	4	4	n/c	3	4	+	3	5	++

Note. += Increased by 1 score; ++ = Increased by 2 scores; +++ = Increased by 3 scores; □ = Decreased by one score; n/c = No Change in score.

^a Indicates representative students discussed in detail in Chapters 3 and 4.

Figure 5.3 displays the comparison of all six traits for assessed for the intermediate camp. The intermediate camp consisted of second, third, and fourth grade students. As stated before, both the base line and final writing the second grade students composed was assessed for Ideas, Organization, Word Choice, and Conventions as this is district practice. Students' base line and final writing in third and fourth grade was scored for all six traits. As Figure 5.3 shows, Ideas,

Voice, and Conventions increased from the base line to the final writing. The overall scores for Word Choice and Sentence Fluency remained the same for the duration of summer writing camp. However, Organization decreased from the base line to final writing. Table 5.4 shows the comparison of all six traits as assessed from the base line and final writing samples.

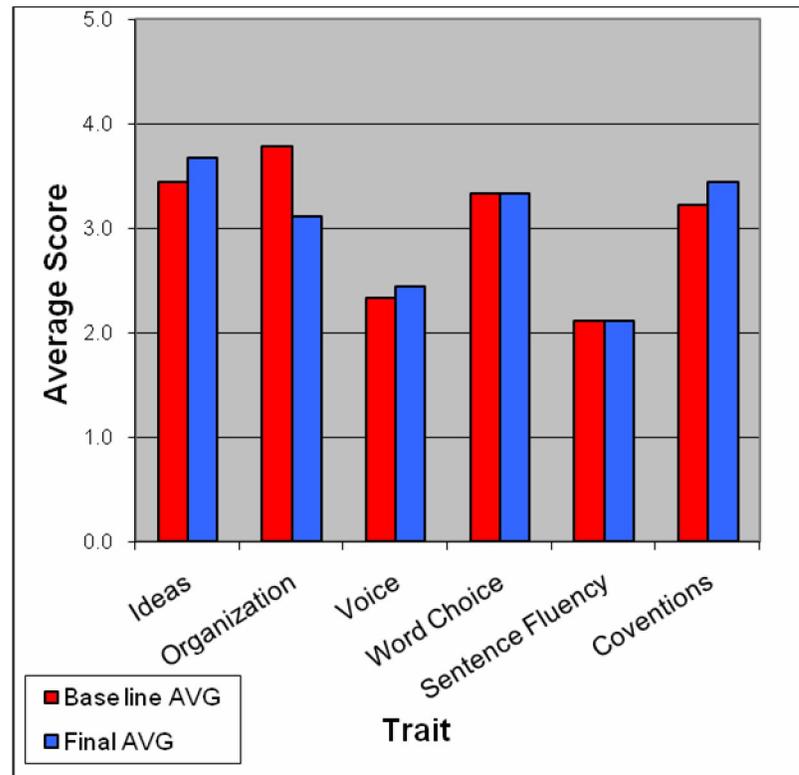


Figure 5.3. Average Changes to Six-Trait scores (Intermediate Camp)

The results for the intermediate writing camp are different from the primary writing camp. None of the second grade students increased their scores for any traits in the final writing. Jacob was the only third grader who increased in Ideas and Conventions, but remained the same level for the other assessed traits. Avril was the only fourth grade student who increased her Six-Trait scores for Ideas, Organization, Voice, and Word Choice. Beyonce increased her Ideas, Voice, Word Choice, and Conventions scores. Jocie maintained her base line score with the exception of Voice, where she had a one point decrease.

Table 5.4. Individual Six-Trait Scores Comparison (Intermediate Camp)

Student	Grade	Ideas			Organization			Voice		
		Base line	Final	Change	Base line	Final	Change	Base line	Final	Change
Jonah	2	4	4	n/c	4	3	–	n/a	n/a	n/a
Jaime	2	3	3	n/c	4	2	--	n/a	n/a	n/a
Jose ^a	2	4	4	n/c	4	3	–	n/a	n/a	n/a
Shannon	3	4	3	–	4	3	–	4	3	–
Jacob ^a	3	2	3	+	3	3	n/c	3	3	n/c
Jocie	4	4	4	n/c	4	4	n/c	5	4	–
Avril	4	3	4	+	3	4	+	2	4	++
Zena	4	4	4	n/c	4	3	–	4	4	n/c
Beyonce ^a	4	3	4	+	4	3	–	3	4	+

Note. += Increased by 1 score; ++ = Increased by 2 scores; – = Decreased by one score; -- = Decreased by 2 scores; n/c = No Change in score; n/a = This trait was not evaluated during the case study to remain consistent with district standards for six-traits assessed at each grade level.

^a Indicates representative students discussed in detail in Chapters 3 and 4.

Students in the intermediate camp attributed their ability to receive higher scores for the Ideas trait to field trips, drawing, and having freedom of choice to write about topics which interested them. Jose, the second grade ELL student, said, *Field trips make me think a lot so I can write.* Jacob believed brainstorming with words and art helped him increase his Ideas score. He commented:

I get my new ideas because it is like your are imagining something in your head . . . The field trips were a lot of fun and helped us write a lot and drawing helps me remember how to write because when I use artwork I write about it.

Table 5.4. (continued)

Student	Grade	Word Choice			Sentence Fluency			Conventions		
		Base line	Final	Change	Base line	Final	Change	Base line	Final	Change
Jonah	2	3	3	n/c	n/a	n/a	n/a	3	3	n/c
Jaime	2	3	3	n/c	n/a	n/a	n/a	3	3	n/c
Jose ^a	2	4	3	–	n/a	n/a	n/a	4	4	n/c
Shannon	3	4	3	–	3	2	–	3	2	–
Jacob ^a	3	3	3	n/c	3	3	n/c	3	4	+
Jocie	4	4	4	n/c	4	4	n/c	4	4	n/c
Avril	4	3	4	+	3	3	n/c	3	3	–
Zena	4	3	3	–	3	3	n/c	3	4	+
Beyonce ^a	4	3	4	+	3	4	+	3	4	+

Note. += Increased by 1 score; ++ = Increased by 2 scores; – = Decreased by one score; n/c = No Change in score; n/a = This trait was not evaluated during the case study to remain consistent with district standards for six-traits assessed at each grade level.

^a Indicates representative students discussed in detail in Chapters 3 and 4.

Beyonce, the fourth grade girl, noted, *If you write you can just read what you got and then write it down, but if you get to draw first you can see what your draw and then you can write it down.* The students believed their writing improved during summer writing camp because their motivation was provided by non-standard experiences such as the field trips, drawing, and choice.

As for Conventions, students believed summer writing camp helped with spelling. Jaime, a second grade girl, revealed she learned from conferencing with teachers, *That if you stretch out your words, you'll get better at spelling.* Shannon, a third grade student, noted she had two fifth graders help her with spelling. The collaboration across grade levels helped students learn from each other. When asked what she learned from her classmates at camp, Jocie, a fourth grade girl, responded, *I learned how to spell words I hadn't learned.* Jocie also believed she improved her

Word Choice by adding *more descriptive words*. Jocie mentioned for her final piece, *I described the catfish and told where they sting you at*. Mrs. Yost confirmed she observed many students helping others correct spelling during the peer editing phase. It appeared many students believed they became better spellers from a combination of teacher's counseling and collaboration with peers.

Scores for the Organization trait decreased overall from the base line to final writing for the intermediate camp. There were mini-lessons given by the intermediate writing camp teachers and Mrs. Yost stated:

Visualization helps students to see it in their mind. Hopefully to put things in order because I know that after an event or a field trip, when we made them visualize, it really made them think about what happened. I think it helped with sequencing.

Mrs. Yost also commented on the use of graphic organizers:

Some graphic organizers where they could have drawn and to organize their thoughts better maybe . . . I would have them draw and write in that bubble or in that space. I think I'd have them do a lot more labeling.

Not all writing camp students could explain why they thought their scores increased. However, several students commented they thought they had become better writers during the course of summer writing camp. Although scores do not indicate an overall improvement in all six traits, students perceived they were becoming better writers.

Writing Level Analysis

Summer writing camp sought to gain greater insight on how visualization embedded in the writing process may be used to help struggling learners. To gain greater understanding of this idea, I created a bar graph (see Figure 5.4) comparing the base line to the final writing levels.

The base line writing level displays the district's spring 2007 CRT writing scores of students in first through fourth grade. These scores were assessed by the previous classroom teachers using the Six-Trait Analytical Model (Spandel, 2004). First grade students were assessed on the following traits: Ideas, Organization, and Conventions. Second grade students were assessed on Ideas, Organization, Word Choice, and Conventions traits. Students in third and fourth grade were assessed on all six traits: Ideas, Organization, Voice, Word Choice, Sentence Fluency, and Conventions. Students in kindergarten were not required to take the writing CRT. To create a base line assessment of their writing level, I assessed the first art/writing journal entry composed during the summer writing camp for the traits of Ideas, Organization, and Conventions. These traits were commonly assessed at the end of the kindergarten year by kindergarten teachers in the district. The district was not able to provide the spring 2007 CRT writing scores for Jose. His fourth quarter report grades for the assessed traits were substituted in place of the CRT. To determine the base line writing level for all of the students, Six-Trait scores from their base line assessments were averaged to the nearest whole number which corresponded to a writing level (NWREL, 2004): (1) Not Yet, (2) Emerging, (3) Developing, (4) Effective, and (5) Strong.

Final writing levels of the 19 selected students were determined using the same methodology as the base line. After students wrote about their favorite writing experience, their writing was assessed using the Six-Trait Analytical Model (Spandel, 2004). The traits analyzed at each grade level for the base line writing assessment corresponded with the traits assessed for the final writing piece. To replicate the same procedure for determining the writing level, traits were averaged to the nearest whole number. The averaged number was then used to determine the student's writing level. Figure 5.4 displays the comparison of the base line and final writing levels for the 10 primary students and 9 intermediate students in the summer writing camp.

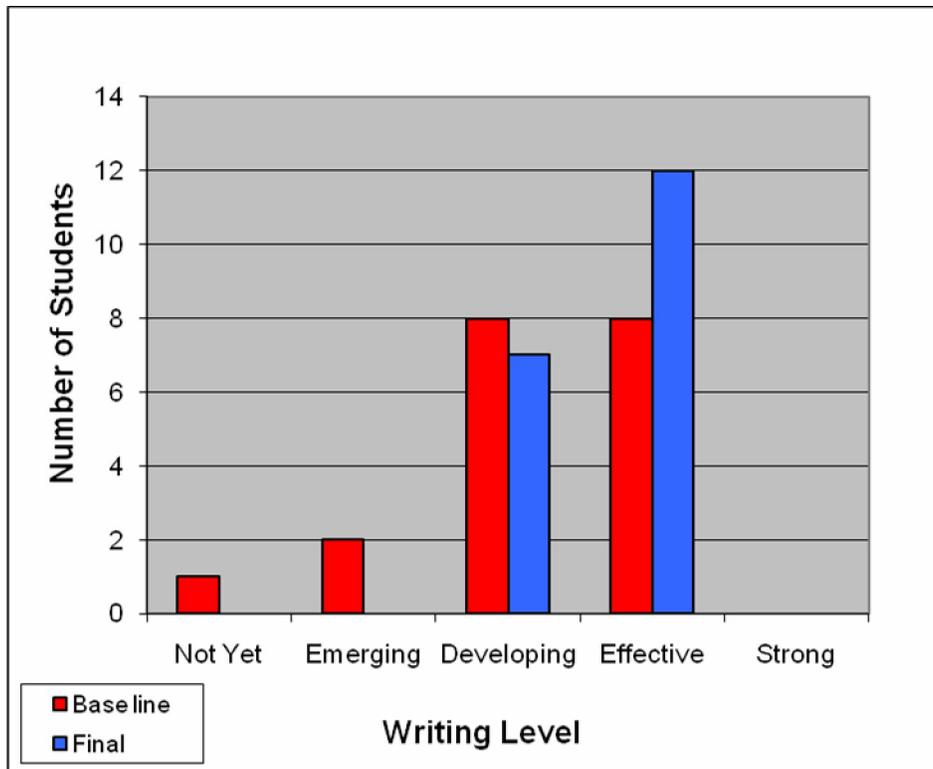


Figure 5.4. Comparison of Whole Camp Base line and Final Writing Levels

Figure 5.4 compares the writing levels the 19 selected students achieved for the base line and final writing. The base line writing levels are represented in red and the final writing levels are represented in blue. The Not Yet level is the lowest level on the continuum and the Strong level is the highest. For the base line, one student assessed Not Yet, two students assessed Emerging, eight students assessed Developing, and eight students assessed Effective. The final writing levels for the 19 participants fell into two categories: Developing and Effective. There were seven students assessed Developing and 12 students assessed Effective. There were not any students assessed Strong for the base line or the final writing piece. Table 5.5 displays a complete comparison of each of the 19 student’s base line and final writing levels.

Table 5.5. Writing Level Comparison (19 Students)

Student	Grade	Base line Writing Level	Final Writing Level	Changes
Andrea	K	Emerging	Effective	++
Tonya	K	Effective	Developing	-
Chris	K	Emerging	Developing	+
Kendrick ^a	K	Not Yet	Developing	++
Miley	1	Developing	Effective	+
Grant	1	Effective	Effective	no change
Brittany ^a	1	Developing	Effective	+
Sierra	1	Developing	Effective	+
Tyra	1	Effective	Effective	no change
Meredith	1	Developing	Effective	+
Jonah	2	Effective	Developing	-
Jaime	2	Developing	Developing	no change
Jose ^a	2	Effective	Effective	no change
Shannon	3	Effective	Developing	-
Jacob ^a	3	Developing	Developing	no change
Jocie	4	Effective	Effective	no change
Avril	4	Developing	Effective	+
Zena	4	Effective	Effective	no change
Beyonce ^a	4	Developing	Effective	+

Note. += Increased by one writing level; ++ = Increased by two writing levels; - = Decreased by one writing level

^a Indicates representative students discussed in detail in Chapters 3 and 4.

Table 5.5 shows the students' base line (CRT) and final writing levels according to their averaged Six-Trait Analytical Model (Spandel, 2004) score in detail. Three of the four kindergarten students increased. Four first grade students increased their writing level from Developing to Effective. Two first grade students remained at the Effective level. Two of the three second grade students exhibited no change from their base line levels. Jonah, a second grade student, decreased one level from his base line and final writing assessment. Jacob, a third

grade student, retained his base line writing level after the final writing piece. Shannon, the other third grade student, was assessed as Effective for her base line writing level, but dropped to Developing for her final writing level. Half of the fourth grade students increased from Developing to Effective. The remaining fourth grade students remained at their base line level.

The primary camp students had a greater number of students increase their assessed writing levels. In the primary camp, 7 of 10 students increased at least one writing level. Of the remaining three primary students, two students did not change writing levels and one student decreased by one level. This was in contrast to results observed in the intermediate camp. The intermediate students, as a group, only had 2 of 9 students increase writing levels while 5 of 9 did not change. The remaining 2 of 9 intermediate students actually decreased by one level each in the base line versus final writing piece comparison. Overall, 9 of the 19 students increased from their base line to final writing level, 7 students did not change, and 3 students decreased from their base line writing level to their final writing level.

Artistic Stage and Writing Level Analysis

After analyzing 39 student art/writing samples from kindergarten through fourth grade, I created a comparison table (see Table 5.6) to present the students' stages of artistic development (Lowenfeld & Brittain, 1975) and writing levels. The samples consisted of the 5 representative students' art/writing responses to the 4 field experiences and their final, art project for a total of 25 art/writing samples. In addition, I used the 14 final art/writing samples from the additional selected students.

Of the evaluated samples, students assessed at the Preschematic stage of artistic development ranged in writing level from Not Yet to Effective with 4 of 5 students in the Not Yet and Emerging writing levels. Once the students began to transition into the Schematic stage of artistic development their writing level ranged from Emerging to Strong. Of the 24 samples assessed at the Schematic stage of artistic development, 22 of these students also fell into the Developing or Effective writing levels. Three of the 4 students assessed as Dawning Realism were also assessed at an Effective writing level.

Table 5.6. Comparison of Stages of Artistic Development and Writing Levels

Artistic Stage	Writing Level					Total
	Not Yet	Emerging	Developing	Effective	Strong	
Preschematic	2 (22%)	2 (22%)	3 (33%)	2 (22%)	–	9 (23%)
Preschematic/ Schematic	–	–	1 (100%)	–	–	1 (3%)
Schematic	–	1 (4%)	13 (54%)	9 (38%)	1 (4%)	24 (61%)
Schematic/ Dawning Realism	–	–	–	1 (100%)	–	1 (3%)
Dawning Realism	–	–	1 (25%)	3 (75%)	–	4 (10%)

Cognitive Stage Analysis

Table 5.7 compares the students' assessed writing levels and stages of cognitive development from the 39 art/writing samples collected. Again these samples included the 25 art/writing analyzed samples from the five representative students. The additional 14 samples were collected from the selected students' final art/writing piece analysis. A student's cognitive stage of development was determined using the criteria described in Chapter 3.

As Table 5.7 shows, 4 of 5 student writings assessed as either Not Yet or Emerging, indicated a student in the Preoperational stage of development. The results indicated if a student's writings were assessed as Developing or higher, they were usually either in the transitional Preoperational/Concrete or Concrete stage of cognitive development. The only student assessed at the Strong writing level was in the Concrete stage of development.

Table 5.7. Comparison of Cognitive Development Stage and Writing Level

Cognitive Stage	Writing Level					Total
	Not Yet	Emerging	Developing	Effective	Strong	
Preoperational	2 (28.5%)	2 (28.5%)	2 (28.5%)	1 (14.5%)	–	7 (18%)
Preoperational /Concrete	–	–	10 (53%)	9 (47%)	–	19 (49%)
Concrete	–	1 (8%)	6 (46%)	5 (38%)	1 (8%)	13 (33%)

Finally, Table 5.8 compares students’ stages of artistic development to their cognitive stages of development. There were 39 total art/writing samples assessed. The stages of cognitive development were determined using procedures discussed in Chapter 3 and highlighted in narrative form in Chapter 4 for the representative students.

Table 5.8 illustrates if a student’s artwork was determined either Preschematic or transitioning between Preschematic/Schematic stages, they were more likely to be assessed as Preoperational or Preoperational/Concrete learners. Students transitioning from Schematic to Dawning Realism stages of artistic development mostly were identified as Preoperational/Concrete or Concrete learners. In 4 of 5 cases of an art piece being assessed as either transitioning from Schematic/Dawning Realism to Dawning Realism, the students were assessed as Concrete learners. Additionally, in all but one case, student artwork assessed as Schematic indicated the student may be transitioning from the Preoperational to Concrete stage of cognitive development.

Table 5.8. Comparison of Cognitive Development Stage and Artistic Stage of Development

Cognitive Stage	Stage of Artistic Development					Total
	Preschematic	Preschematic /Schematic	Schematic	Schematic /Dawning Realism	Dawning Realism	
Preoperational	5 (83%)	–	1 (17%)	–	–	6 (15%)
Preoperational /Concrete	3 (14%)	1 (3%)	15 (75%)	–	1 (3%)	20 (51%)
Concrete	–	–	9 (70%)	1 (7%)	3 (23%)	13 (33%)

Analysis of Student and Teacher Perceptions

During the data analysis process, I noticed a number of common statements from students and teachers. Further review of my fieldnotes and transcripts from mini-lessons revealed similar trends. Students and teachers did not use the term *perception*. However, their explanations of art, writing, and the summer writing camp could best be described in terms of how they viewed each. Continued review of data led me to define the code *perception* in terms of students and teachers. For students, *perception* was their self awareness, attitudes as learners, and their awareness of how they experienced objects and activities. *Perception* for teachers was defined as how they viewed students’ abilities and the use visualization in the writing process.

After applying the *perception* code to transcripts using HyperRESEARCH™, 2.8, it was clear the initial coded material was broad and needed refinement. After reviewing the coded data again, additional codes became apparent. I noticed students articulated themselves as artists and writers. I created an additional code, *learning to see*, to identify tools which students used to help them visualize in the writing process. The use of these visual tools and visualization techniques learned from the summer writing camp gave the students a new, flexible way of thinking about writing.

While reviewing the data coded for *perception*, I noticed a difference emerged for the teachers and their *perceptions* of the primary and intermediate students. Comments from teachers during their interviews also revealed openness to new methods of instruction. This change in their *perception* of themselves as teachers using visualization was a result of their own observations of students during the summer writing camp.

Observing student actions and conversing with teachers led me to understand if both groups were open to learning and incorporating visualization techniques in the writing process, they had demonstrated flexibility in their thinking about writing. Therefore, the code *perception* led to *learning to see* from the students' and *opened eyes* from the teachers' points of view. Students' *learning to see* and teachers' with *opened eyes* indicated a degree of *flexibility in thinking* for students as learners and teachers as educators of writing. Figure 3.2 in the Chapter 3 section, Focused Codes, is a graphic organizer which illustrates this coding process.

Student Perceptions

After reviewing fieldnotes and transcribed interviews, it became apparent students perceived themselves and other classmates as writers and artists. The intermediate writing camp students expressed these thoughts more articulately than primary writing camp students. The cooperative learning environment created by the summer writing camp allowed students to discuss their views as writers and artists to teachers, the researcher, and other students. First, I will discuss how students *perceived* themselves as artists. Even though it was not the purpose of the camp to create artists, art was a technique used to incorporate visualization in the writing process. Then, I will discuss how students *perceived* themselves as writers.

Of Themselves as Artists

Part of the summer writing camp involved drawing and other forms of artwork as a precursor to writing. Students in the primary writing camp did not distinguish between the two. Although students made comments which stated how much they enjoyed art, not one student in the primary camp viewed themselves separately as either an artist or writer. Students often began their comments about how they liked art and it helped them write. Sierra, a first grade student explained,

Sierra: *Sometimes I draw pictures before I write because, so it can help me.*

Researcher: *How does it help you?*

Sierra: *It helps me because I look at the picture very good and when I need to look at it again.*

Researcher: *How did that help you become a good writer?*

Sierra: *It helped me become a really good writer so I can think.*

Avril, a fourth grade girl, commented drawing was easier than writing. She also helped other students in the intermediate writing camp by drawing objects for them in their journals.

Avril: *It was easier to draw than write about it. So my thoughts is that pictures tell you more than writing does.*

Researcher: *So you think pictures like this tell more than what writing does?*

Avril: *Because of saying, "it looked cute, it was brown," you can see it.*

However, Beyonce thought her drawings were not as good as she would like. She was able to discuss her artistic abilities in terms with what she struggled with when drawing.

Researcher: *What problems did you have with your artwork?*

Beyonce: *Well, I thought that it wouldn't look good because whenever I write I just usually I don't know how to do something stuff just falls on the paper from my eyes, and whenever I draw I think it is not going to look good because I don't draw really, really good because I don't practice a lot.*

When observing the students in the intermediate writing camp during art/writing journal time it was apparent the older students struggled with drawing what they wanted on paper. Noticing one fourth grade student kept erasing, I asked her what was the matter? She said,

Donisha: *You like picture something in your mind about how it is supposed to look but as you draw it out it doesn't look the same.*

Researcher: *What makes you say that?*

Donisha: *Because look what happened to my artwork.*

Researcher: *So you have it in your mind one way but it is hard to make it look like that on paper?*

Donisha: *Yeah, you have an idea of a real prairie dog and then when you start drawing it; it doesn't look like it.*

Donisha sat next to Alison, a second grade student, who was also struggling with her artwork. Both agreed drawing was difficult because they were trying to draw three-dimensional objects on a two-dimensional piece of paper.

Researcher: *Alison, what problems do you have with your art?*

Alison: *I didn't know how to draw it on the page.*

Researcher: *And that is hard for you, why? What do you mean by you didn't know how to draw it?*

Alison: *Like the railing.*

Donisha: *The paper isn't like the outside where you have, like, 3-D.*

It is possible kindergarten and first grade students perceived writing as an extension of their art. They were closer, than the students in the intermediate writing camp, to the stage where drawing was her only form of written communication. Students in the intermediate summer writing camp verbalized their frustration of trying to draw an object how it looks which indicates a transition in stage of artistic development.

Of Themselves as Writers

By the end of summer writing camp, many of the students became aware of themselves as writers despite being labeled struggling learners. Students perceived the act of writing was either enjoyable or not enjoyable. Students spoke about where they found ideas to write, how drawing helped them with their writing, and noted what they thought made a “good” writer. The first few quotes are samples of comments from primary writing camp students.

During an interview with Destiny, a kindergartner, I discovered she enjoyed receiving praise for her writing. She perceived if she was given an award, it meant her writing was good. *I got a piece of bubble gum because I did a good job on my writing.* During a discussion about what she enjoyed about drawing and writing she said,

Destiny: *Because I like pictures instead for sentences.*

Researcher: *Why?*

Destiny: *Because writing is boring.*

Researcher: *Why do you think that?*

Destiny: *Because every time I write my hand hurts. That's why it's boring.*

Destiny was not the only kindergartner who shared her hand hurt when she wrote. Kendrick also said his hand gets tired and he'd rather draw.

For some, the act of writing independently meant they had become a better writer. This is showcased in an interview with Chris a kindergarten boy.

Researcher: *How did drawing those pictures help you become a better writer?*

Chris: *Because I wrote it by myself. Because sometimes I write all by myself sometimes I need help with words, and no one did help me.*

Miley, a first grade girl, shared writing made her feel good about herself for two reasons. First, she thought she was a good writer. Second, she was not getting in trouble for her actions. Miley shared an art/writing sample she perceived as her best work.

Researcher: *How does this make you feel? (Pointing to an art/writing sample)*

Miley: *Happy.*

Researcher: *Why?*

Miley: *Because I am a good writer.*

Brittany, a first grade girl, turned to an art/writing sample she perceived was her best. It was the response from the third field experience at the nature center. Brittany perceived drawing before writing helped her develop ideas for her writing.

Researcher: *How does that make you feel?*

Brittany: *Happy because I wrote six sentences. It makes me proud.*

Researcher: *How did you write those six sentences?*

Brittany: *I needed to draw first.*

Researcher: *Why?*

Brittany: *I wouldn't know what the picture was about and couldn't write.*

Another first grade girl, Sierra, commented she struggled with writing at first specifically with spelling. She shared why she thought writing was easier for her than it was at the start of the summer writing camp.

Sierra: *I thought it was pretty hard at first. But then it got easier.*

Researcher: *What made it easier?*

Sierra: *Because my teacher helped me.*

Researcher: *How did she help you?*

Sierra: *She helped me sound out words, like with anaconda.*

During observation of the intermediate writing camp, Donisha, a fourth grade student, and Haley, a third grade student, conversed with me about how their writing changed since the beginning of the summer writing camp.

Researcher: *How has it changed, Haley?*

Haley: *About how much I've been writing. I've been getting better.*

Researcher: *What do you mean by 'getting better' though?*

Donisha: *How long your sentences are.*

Haley: *Yes. This one only has two sentences (pointing to an art/writing journal entry).*

Researcher: *What about you Donisha? Donisha, how has your writing changed? Do you think you've gotten better?*

Donisha: *Yeah. I'm comparing stuff more than other people can like, today about the prairie dog I wrote . . .*

Researcher: *Did you compare the prairie dog to something?*

Donisha: *Yeah, I wrote, 'The prairie dog looked like a fat baby learning how to crawl.'*

Jocie, a student entering fifth grade, understood she needed to work on increasing her word choice score by using more descriptive words. When discussing her work in an interview, she noted drawing helped her with her word choice. Then, she continued to discuss how she learned to organize her writing.

Researcher: *What do you notice about your work?*

Jocie: *I've added more descriptive words.*

Researcher: *What helped you with your descriptive words?*

Jocie: *Drawing pictures.*

Researcher: *How did drawing pictures help you?*

Jocie: *Because I draw picture. Then I describe what they are. Then I write and do labels.*

Researcher: *What did you learn about writing that you didn't know before?*

Jocie: *I learned about paragraphs. That when you start swimming, then when you go get something to eat, then you start a new paragraph because you go to a different place.*

The comments students provided ranged from how they viewed writing to their assessment of their abilities. Tyra, a first grade student, commented she liked writing and was the best writer in her class. Older students were able to verbalize how their writing changed since the summer writing camp began and what techniques helped.

Learning to See

Through mini-lessons teachers gave during the writing workshop, students *learned to see* their visual environment as a tool to help them write. Students looked at word wall charts, digital photographs, and their own art and writing. The strategies students used to observe their environment differed as much as their ability.

Meredith, a first grade girl, commented she observed her surroundings on a field experience to the fire department to draw a detailed image of her visit there and write about her favorite part of the tour. She pointed to the objects in her drawing including a tree.

Researcher: *Oh, so that's the — this is the fire truck and it says fire rescue on it. Oh. And what's this?*

Meredith: *Door.*

Researcher: *The door you climb in, and this is the -*

Meredith: *window. Here is a tree because it was behind the fire truck. It was hiding.*

Researcher: *By the tree? How did you know that? Did you remember that? Did you see that in a picture?*

Meredith: *I saw it um . . . I saw it behind the truck when I was about to go to the library.*

Grant, a first grade boy, provided two examples of his *learning to see* during an interview. The first example referred to a mini-lesson Mrs. Pullman gave to help students with spelling. The second example described how a visual tool in the room gave him an idea to draw.

Researcher: *How do you think your writing has changed?*

Grant: *The writing is easy and it's kind of hard.*

Researcher: *Why is it easy?*

Grant: *Because you can look for small words and you can look for big words.*

Researcher: *Did you pick out your favorite drawing?*

Grant: *Yep. It's the flag.*

Researcher: *Okay. Why did you make this flag?*

Grant: *Because I saw it on a poster in the other room.*

Grant was not the only student who expressed how looking around the room helped brainstorm ideas to write. Shannon, a third grade girl, referred twice to instances when she *learned to see* her environment to help her write. She discussed how her visual environment inspired her.

Researcher: *How does drawing first help you?*

Shannon: *I am just drawing I see. I get stuck with my writing I just look at the picture or 10, 20 seconds and just I just figure it out.*

Researcher: *Why was that your best picture (picture of tent with yellow stars in the sky)?*

Shannon: *When I was sitting in the tent over there. I was just looking. And when I just saw (points to tent) tents and when I looked at the stars it just gave me an idea to color this black and the stars orange.*

Avril, a fourth grade girl, stated digital photographs helped her recall information from field experiences. She referred to this process as “ideas of creations.”

Researcher: *Why do you like the pictures being up?*

Avril: *Because we can look at the picture and remember what happened if it happened a long time ago too. Then we can remember it, and it gives us ideas of creations.*

Researcher: *I like how you use those four squares to come up with this one [drawing] here. So is this what your favorite memory is going to be about? Do you ever look at your drawings to remind you what to write about? Can you show me?*

Avril: *Yeah. It reminds me of what I can write about it.*

Researcher: *Like what?*

Avril: *Like if I forget what color it is I can go back and look at my picture. I learned that if I write what color it is, I have to draw that color and if I draw it that color, I have to write about that color. I cannot say if the bunny’s brown on the picture and say the bunny is green.*

Students in the summer writing camp learned to see their visual environment inside or outside the classroom. Visual cues helped students with spelling, time to study their drawings may have helped students write more about their topic, and observing their environment during field experiences motivated students to draw and write.

Teacher Perceptions

The five interviewed teachers shared their thoughts about students from the summer writing program. The teachers’ insights were influenced by the grade-level division between primary and intermediate students. After closely reading their interviews, I noticed teachers had three perceptions. The first was of students and their ability. These perceptions differed between primary and intermediate students because the three primary teachers’ perspectives encompassed different ages, skills, and abilities. The second perception was the realization, or awakening, of

using visualization in the writing process. The final perception was influenced by the previous two and concerned a new flexibility in the teacher's thinking and willingness to change her instruction in the future.

Of Primary Students

Mrs. Pullman disclosed in her interview how the summer writing camp changed her perception of a student who will enter her class next year. She said,

I saw him (Kendrick) in kindergarten and he could not write words, letters, draw, nothing. And now, he is drawing somewhat of a picture and he is able to form, with the bug activity, three sentences in his own mind, looking at the picture. This child I thought we might have had to test. And now, I think he just didn't have that experience that he couldn't come up with it, his writing, without having a picture or something. His is probably the best writing that I've seen with a kindergartener group which I am really excited for because those students are going to be in my class. I am like WOW, you can actually write words down.

Mrs. Pullman discussed her perceptions of students' abilities based on their drawing ability. She noticed and commented,

You can look at their drawings. You can definitely see what their writing is going to be; what ability level it is going to be. Because I look at some drawings that are just, I call them elemental because they are a circle with legs and arms out, which are not even . . . Then you look at their writing and they cannot form words. So you can tell if their drawing is really weak or below grade level, their writing is probably going to be the same thing. On the reverse side, there are some kids who enjoy writing more than they enjoy drawing pictures because they are already at that stage where

writing isn't as hard to come up with words. I mean the more detailed their picture is, the more detailed their writing is.

Mrs. Sykes also commented on how she perceived visualization may help primary students. She noted her perceptions of students who struggled with writing versus students who were comfortable with writing:

You can definitely tell the ones that are writers because, well the ones that are higher writers, you can tell they've went beyond . . . they don't need that picture as much . . . The ones that haven't grasped the writing process would prefer to spend twenty minutes on their picture and two minutes trying to write. The other ones will get something down and move on to writing or even write first and then go back and draw.

Mrs. Buchannon commented how her perception of the students' abilities has changed during the summer writing camp. She said:

I don't think even a month . . . I would say over half a month, some of them weren't even writing words. Letters maybe, sometimes what you think was a letter, but you are really not sure what letter they are going for.

The three primary camp teachers perceived students' writing abilities as part of the growth the student experienced during the summer writing camp. Mrs. Pullman confessed she thought one student was not capable of writing and now she believes he is. Mrs. Sykes entered camp thinking primary students could not write in detail and her perception of students' writing abilities changed through her own observations of their work.

Of Intermediate Students

The two intermediate writing camp teachers, Mrs. Yost and Mrs. McCourt, had their own perceptions of the students they taught. Mrs. Yost shared how she thought students benefited from art in the writing process. She claimed:

I think they're a lot more excited about writing, especially this lower group of kids. I think art is something everyone can do on their own level and I don't think at this age they feel intimidated. But the kids aren't intimidated and they enjoy it all so they are not inhibited to represent something through visualization.

Mrs. McCourt noticed a connection between students' writing and drawing abilities. She reflected:

Seems like kids that can draw better, have better abilities at drawing, also have better writing abilities. I am wondering if that has to do only with age or other cognitive structures that have developed. Kids that are able to add a lot of details to their picture . . . tend to add a lot of detail to their writing also.

The two intermediate teachers perceived how the technique of visualization helped students change their attitude about writing. The teachers also perceived they were giving the students tools and techniques to use next year.

Opened Eyes

The term *opened eyes* came from two interviewed teachers. I noticed these two teachers used the phrase *opened eyes* to describe their experiences as a teacher who never used visualization embedded in the writing process. The comments in this section refer to how all five teachers have been awakened to visualization in the writing process.

Mrs. Buchannon commented, *I think that gives them more practice with their fine motor skills, it gives them some coordination. It also gives them a chance to plan before they write. I think that is something they need to have, that time.*

Mrs. Pullman was admittedly skeptical of how drawing and writing in the art/writing journals may benefit the students when she said:

I think I am going to take the extra time to have them draw their picture first because the details that come out of it. Their writing, I think, is so much more in-depth, and it helps them a lot better than just writing their words first. As a teacher, this has opened my eyes a lot because I wanted them to do their writing, and its writing time not art time, its writing time and they need to be sitting and writing. But those pictures really do help them get their ideas and get them down on paper.

Mrs. Sykes, a second-year teacher who admitted to struggle with writing herself as a student, believed her struggling is one of the reasons why she struggles to teach writing. She shared:

I think the benefits that I have found has just given me ideas I can take back into my classroom. I think as far as benefits for some of the kids, I think it's given them that little extra push they needed to get them up there and get them going with the writing . . . It really has kind of opened my eyes . . .

Mrs. Yost, who left teaching for several years to raise her children, is now entering the teaching profession again. She perceived these experiences as a way to grow as a teacher. Mrs. Yost said, *Each year I've been getting better, but this has really helped me, and given me a lot of ideas and some insight on how I can change things and be a better teacher and write differently.*

Mrs. McCourt expressed she never instructed students to draw or visualize before writing and this was new to her. She noted students at this level in their education wanted and thought you wrote first and then drew a picture at the end when you were done. She commented how students were confused at first when she and Mrs. Yost said they were going to visualize before writing. She commented:

They weren't sure exactly what to draw. I've seen though, that kids do write more, especially after they've drawn the picture.

Sometimes they just write a little bit to start with, but then if you go back to their picture and say, 'Well, what about this? You drew these things, but there is nothing in your story about them.' They were much more willing to add detail about what they've drawn.

Mrs. McCourt's experience as a reading teacher trained her to observe vocabulary skills of students. She noticed if a student drew a detailed picture, it did not mean the student could write in detail. Mrs. McCourt said:

The one thing that I did find though, kids can draw quite a bit but not have the words for the things that they draw. Somebody drew a picture of a bobcat that we saw at Milford Nature Center, in the cage, in the pen with the bobcat on the top of the wooden structure or wooden platform. The drawing was fantastic, very detailed. It had the water dishes, the toys, the trees, and the platform. But when I asked, 'Where was the bobcat in the cage?' she didn't have any words for the platform structure and I thought that was really interesting. Here they are drawing things, but there are no words for these things. I am looking at their drawings in new ways . . .

All five teachers from different teaching backgrounds *opened their eyes* to visualization embedded in the writing process. They commented and shared how the summer writing camp helped them grow as teachers and gave them opportunities to apply these techniques in the future in their own classroom.

The Common Ground – Flexibility of Thinking

Flexibility of thinking refers to the students' ability to understand how visualization may help them as writers and teachers' willingness to change to new methods of instruction and

learning. *Flexibility of thinking* cannot occur unless the student is able to see his or her environment as a visual tool which may help them as a writer. For the teacher, he or she must be open to the idea of a new method of writing instruction. Students had their own perceptions as did teachers, and through awareness and enlightenment of visualization embedded in the writing process, both students and teachers meet at a level in their learning called *flexibility of thinking*.

Sierra, a first grade student, thought drawing helped her remember what to write. This is highlighted in the dialogue below with Sierra.

Researcher: *How did the drawing help you?*

Sierra: *The drawing helped me so I could remember. First I draw and then it helped me with my words, because so I can look at it then I can write. I can think about what I can write. Sometimes I draw pictures before I write because, so it can help me.*

Researcher: *How does it help you?*

Sierra: *It helps me because I look at the picture very good, and when I need to look at it again.*

Avril, a fourth grade student, attributed field experiences and drawing to helping her develop ideas.

Researcher: *What gives you ideas to write about?*

Avril: *We get to go on field trips, and they give us more ideas to write about because it is usually so boring because we have to write about stuff we already wrote about. Like when we were in second grade we write about things we did in the past.*

Researcher: *How does drawing help you write?*

Avril: *It is easier for me to color, and then, look off of the color I did and then write. Because you may write about it and not remember how to draw it well, because when you are just drawing, you don't think about the writing. It is easier to draw it because that is what I think people do when they are making books.*

Beyonce's "ah-ha" moment was captured during an interview. She told me she preferred to write before drawing so she would not forget her ideas. I proposed the idea of drawing before writing to help her remember her ideas.

Researcher: *Maybe if you draw that idea first, and then, that will help you exactly what to say and write.*

Beyonce: *Now I get it because if you draw something first and you have to pack up, and when you get back I forget because I have short term memory. Whenever I am writing and we have to pack it up and then put it away I read through it and think what is next. Now I get it. If you draw first you don't forget.*

Zena, a fifth grade student, shared she was worried about being able to draw next year.

Researcher: *When you go to fifth grade and your teacher says it's time to write, are you going to try to draw before you write?*

Zena: *I am going to try and draw because camp helped me learn that if you draw it out that you can get ideas about it.*

Mrs. Pullman, a first grade teacher, commented how transferring visualization techniques embedded in the writing process would not be difficult in a traditional classroom. She said:

Oh I could see incorporating every single activity you do in the classroom. In first grade we do a lot of pictures oh, well, I didn't first, but now we're going to be doing it first. I always gave them until the end . . . Their pictures were not detailed . . . This next year, I will be doing the illustrations first and then their writing.

Mrs. Sykes expressed her excitement to embed visualization in the writing process:

It's given me ideas that I can take back to my classroom and try to use next year; using visualization more in the writing because I

think it has helped a lot of these little kids. By getting their ideas down in a picture, they are able to expand more in their writing . . . I've noticed the kids love the real pictures. They love to be able to go up there and pick up that picture from that event. Try and take them on experiences that we can photograph. Take pictures while I am out and about just about things I could bring in and talk about, things they could actually see. Then they could take them back and make their own pictures. With the brainstorming, I think that I am going to try and have them make pictures first, even if they are quick sketches of what they are going to write about, just so they know "this is the one I've chosen to write about and draw a picture of it first so I can always go back and look at the picture and remember this is what I've decided to draw about.

Mrs. Buchannon is currently not a classroom teacher, but works as a reading program facilitator. She believed visualization could be incorporated in the program easily. She said:

I definitely think that it can be used in the SFA model because they do have the Adventures in 'Writing in the Wings' and they have the 'Language Links' in the Roots. If we could use this and have them really focus on one piece, because they say struggling readers need to get a chance to respond to their reading. We could use art as a way for the kids to respond. Then, using the art to pull out the words, I think it would be very . . . I think it would be a great cycle to get into the habit of.

After her experiences at the summer writing camp, Mrs. Buchannon commented how she would design her writing instruction if she were a classroom teacher. She noted:

I can honestly say that if I was to go back into the classroom, I would have felt that writing was something I would have struggled

the most with. I would think that would not necessarily be true anymore because I would set up my curriculum and would figure out an art project, and then, we'll write about it. I would probably choose art projects that I would like to do in order to find some writing and figure out a way to write. That is exactly how I would do it in the future.

Mrs. Yost, who taught fifth grade during the school year, admitted the concept of visualization was new to her because she taught upper elementary. To her, visualization in the writing process was limited to graphic organizers and drawing vocabulary words in reading. She shared how she would be open to trying visualization in a future summer writing camp:

Of course, as a fifth grade teacher, I am so much more trained to that peer editing piece when you are writing. I did not transfer that over to visualization, really, as far as lets edit, or look at, our visualization together and give each other ideas. That sure could be something we add in the future if we did this again.

As a reading teacher, Mrs. McCourt reflected visualization could help with vocabulary instruction:

I can see how something like this would be a wonderful way to bring vocabulary in. This is what you drew; these are some names for what you drew. I think that the visualization before writing has helped so many of the kids out because it helps them focus their writing on what they are going to write about, and it helps them to expand on their details.

Summary

This qualitative case study occurred during a 3 ½ week summer school writing camp. The 32 students selected to attend the summer school were all identified as struggling learners by their previous classroom teachers. The 19 student participants represented kindergarten through fourth grade, and they composed a diverse sampling of race, age, and abilities. The summer writing camp was a flexible writing workshop which incorporated visualization techniques in the writing process. Visualization in the forms of field experiences, digital photographs, graphic organizers, word walls, and student art pieces were introduced at multiple stages in the writing process to scaffold each student's writing.

I focused on 5 of the 19 students for more detailed observations and analysis. I wanted to observe in explicit detail to capture rich data, which could help me understand visualization embedded in the process writing. There were 5 selected students which represented each participating grade level at the summer writing camp which provided an in-depth view of their abilities across the spectrum.

Through focused coding I was able to determine each student's stage of artistic development and writing level. The coding for the writing levels involved assessment of each writing piece using the Six-Trait Analytical Model (Spandel, 2004). Analysis of the six-traits provided the ability to assess each student's writing in-depth according to individual trait rubrics which were also grade specific. The average score of the six traits corresponded to the students' writing levels. I analyzed the student's art pieces using Lowenfeld and Brittain's (1975) stages of artistic development and used the stage names Preschematic, Schematic, and Dawning Realism to assess each student's art.

I evaluated the same writing and art pieces to determine each student's cognitive stage of development (Piaget & Inhelder, 1969/2000). Each art piece was assessed for the degree of spatial relationship of objects, which focused primarily on scale and location with respect to fixed points. The writing pieces were all assessed for the degree level of egocentrism displayed by the students. The two criteria mentioned above helped categorize students between the Preoperational and Concrete learning stages.

Table 5.9 shows the results of artistic, writing, and cognitive analysis of the 19 selected students' final pieces created at the conclusion of the summer writing camp. The students chose their favorite field experience to draw and write about through the writing process. As with the

base line, I analyzed each drawing with Lowenfeld and Brittain's (1975) stages of artistic development. Then, I and a teacher from the primary and intermediate camp scored the complementing writing piece using the Six-Trait Analytical Model (Spandel, 2004). Once the scores were averaged to the nearest whole number a writing level was assigned using NWREL (2004) writing level continuum. Finally, I used elements of the drawing and the writing explained in Chapter 3 to determine each student's stage of cognitive development. Previous tables and figures discussed in Chapter 5 compare the students' base line and final Six-Trait scores, writing levels, and stages of artistic development. The students' stage of cognitive development was not compared because a base line was not determined for this factor due to the constraints of the data provided to me by the district. Please see the base line analysis for further information. The interesting feature of Table 5.9 provides a holistic view of each analyzed factor and the change in the students' averaged writing scores. This change is positively reflected mostly in the primary grades which are captured in Table 5.2. Overall, there was an improvement in the students' averaged writing scores, which is reflected in Figure 5.4.

Finally, focused codes were analyzed. These focus codes stemmed from a reoccurring observation of perception through rereading the transcripts of interviews and fieldnotes. The graphic organizer details the four analyzed codes: *perception*, *learning to see*, *opened eyes*, and *flexibility of thinking*. This analysis of codes provided a holistic view of the student, which provided rich data describing the methods and techniques used to teach visualization embedded in the writing process, as well as, how students and teachers view connections between drawing and writing.

Table 5.9. Analysis of Participating Students' Final Art/Writing Samples

Student	Grade	Artistic Stage	Writing Level	Cognitive Stage	Ideas	Org	Voice	Word Choice	Sentence Fluency	Conv	Avg Score	Change
Andrea	K	Schematic	Effective	Preoperational	4	4	n/a	n/a	n/a	3	3.7	1.7
Tonya	K	Preschematic	Developing	Preoperational	4	3	n/a	n/a	n/a	3	3.3	-0.3
Chris	K	Preschematic	Developing	Preoperational	4	3	n/a	n/a	n/a	3	3.3	1.3
Kendrick^a	K	Preschematic /Schematic	Developing	Preop/Concrete	4	3	n/a	n/a	n/a	3	3.3	2.3
Miley	1	Schematic	Effective	Preop/Concrete	4	3	n/a	n/a	n/a	4	3.7	0.7
Grant	1	Schematic	Effective	Preop/Concrete	4	3	n/a	n/a	n/a	4	3.7	0
Brittany^a	1	Schematic	Effective	Concrete	5	4	n/a	n/a	n/a	4	4.3	1.3
Sierra	1	Schematic	Effective	Preop/Concrete	3	4	n/a	n/a	n/a	4	3.7	0.3
Tyra	1	Schematic	Effective	Preop/Concrete	4	3	n/a	n/a	n/a	4	3.7	-0.3
Meredith	1	Preschematic	Effective	Preop/Concrete	4	4	n/a	n/a	n/a	5	4.3	1.0
Jonah	2	Schematic	Developing	Concrete	4	3	n/a	3	n/a	3	3.3	-0.3
Jaime	2	Schematic	Developing	Concrete	3	2	n/a	3	n/a	3	2.8	-0.5
Jose^a	2	Schematic	Effective	Preop/Concrete	4	3	n/a	3	n/a	4	3.5	-0.5
Shannon	3	Schematic	Developing	Concrete	3	3	3	3	2	2	2.7	-1.0
Jacob^a	3	Schematic	Developing	Concrete	3	3	3	3	3	4	3.2	0.3
Jocie	4	Dawning Realism	Effective	Concrete	4	4	4	4	4	4	4.0	-0.2
Avril	4	Dawning Realism	Effective	Concrete	4	4	4	4	3	3	3.7	0.8
Zena	4	Dawning Realism	Effective	Concrete	4	3	4	3	3	4	3.5	0.0
Beyonce^a	4	Schematic/ Dawning Realism	Effective	Concrete	4	3	4	4	4	4	3.8	0.7

Note. ^a denotes students in the representative group; Org = Organization trait; Conv = Conventions trait; n/a = not applicable to this student

CHAPTER 6 - Discussion

This chapter provides a synthesis of the findings outlined in Chapters 4 and 5 of this qualitative case study concerning how visualization embedded in the writing process influenced struggling learners in a kindergarten through fourth grade summer writing camp. By revisiting theories and research outlined in Chapter 2, I infer and examine the data to answer my overarching research question and subquestions. Then, I discuss implications of these findings for future research and classroom teachers. Finally, a summary and my final thoughts about the strengths of visualization embedded in the writing process conclude the study.

Summary of the Study

With the mandates of NCLB's state testing in the subjects of math and reading, little time is left in the school day for a writing block where the writing process occurs. Nonetheless, "Writing today is not a frill for the few, but an essential skill for the many" (The National Commission on Writing for America's Families, Schools, and Colleges, 2003). This quote poignantly states the necessity of teaching writing. Educators emphasize the need for better writing instruction beginning in the early elementary grades. This study focused on how the use of visualization embedded in the writing process influenced struggling learners' (K-4) writing levels. During the study, methods to teach visualization and student art/writing samples were analyzed to gain a greater understanding of how the "many" could begin to obtain the essential skill of writing.

The purpose of this qualitative case study was to gain a deeper understanding of how visualization embedded in the writing process influenced struggling learners in a kindergarten through fourth grade summer school writing camp. There is limited research concerning how a student's writing level reflects his or her stage of artistic development and his or her cognitive stage of development. I conducted this research to learn more about how educators teach visualization embedded in the writing process, how the writing levels of the struggling students are influenced by using visualization techniques, how the stages of artistic and cognitive

development reflect a student's writing level, and how the students and teachers of the summer writing camp perceived any potential connections between art and writing.

This qualitative case study was conducted at an elementary school adjacent to a military installation, in the Midwest, during the 2007 summer school session for 3 ½ weeks. Students recommended by their classroom teacher were bused to the site for a 3 hour academic day. Students chose to attend the writing camp from three other summer school camp options. All students who attended summer school received their first choice of camps. Once the summer writing camp began, students were divided into two groups (primary and intermediate) to help lower the student-teacher ratio. Although 32 students attended the camp, 19 were selected using maximum variation sampling. Then, five students were selected to represent each grade level, kindergarten through fourth grade, using criteria outlined in Chapter 3. Five certified teachers from the district taught the summer school writing camp. Three teachers taught in the primary writing camp, and two teachers taught in the intermediate writing camp. The teachers chose to teach in either camp based on their professional experience.

Three rooms were allotted for the writing camp and were decorated in an outdoor camp setting complete with tents, faux camp fires, stuffed animals, and a variety of camping paraphernalia in an attempt to transform the standard classroom into an inspiring writing solace. One room was allocated for the primary writing camp (K-1 students) and the second room was for the intermediate writing camp (2-4 students) for instruction, while a third was used for students to write independently and without distraction.

Knowing most students struggle choosing writing topics, the camp design incorporated three types of environments: learning visual, and literacy. The field experiences served as part of the visual environment along with student created art. Students worked collaboratively to create a positive learning environment. Students drew and wrote in art/writing journals after each field experience to develop a literacy rich environment. Each week the students participated in a field experience such as fishing at a nearby pond, hiking on the prairie, visiting a local nature center, or touring the city fire department to give all student participants a series of experiences about which to write. These community-based experiences provided meaningful opportunities for the students to learn and interact with the community. Most importantly, the students were able to take back several ideas to write.

While attending these fieldtrips, teachers took numerous photographs with digital and disposable cameras. The pictures were developed and when students returned to the classrooms after their experience they were treated to walls lined with photographs of their recent experiences. The students were able to use photographs as a way of brainstorming prior to writing. Through teacher led mini-lessons about using word walls, descriptive words, editing, and other topics. Students practiced the technique in pairs and/or individually. Teachers conferenced with students to provide individual instruction.

As part of their brainstorming, students drew in their journals, and then wrote about their drawing using either narrative style or technical labels depending on the students' interest and ability. After sharing their drawings with each other, students drafted their pieces using their artwork. Students shared their writings and artwork with each other through peer reviewing and author's chair. After three weeks, students chose their favorite experience as their writing topic for their final art/writing sample. This final piece was shared with the community at the high school during an end of summer school exhibition.

I used initial codes discussed in Chapter 3 to analyze the art/writing samples created by the representative students. The art samples were analyzed using Lowenfeld and Brittain's (1975) stages of artistic development. Each writing piece was scored using Spandel's (2004) Six-Trait Analytical Model according to grade-appropriate assessed traits identified by the district. A writing level was determined by averaging the Six-Trait scores. Then, using elements from the art and writing the student created, I determined his or her stage of cognitive development according to Piaget and Inhelder (1969/2000).

To create a holistic perspective on how visualization embedded in the writing process may influence struggling learners, I analyzed the stage of artistic development, writing level, and cognitive stage of development of all 19 selected students' base line or 2007 Spring CRT and their final art/writing piece. This provided information of how writing levels may be influenced by using visualization in the writing process and how a student's writing level reflects his or her stage of artistic development and stage of cognitive development. After analyzing students' art/writing samples, I discerned four focused codes—*perception, learning to see, opened eyes, and flexibility in thinking*—from the transcribed interviews and fieldnotes using HyperRESEARCH™ 2.8. These codes provided more information on how students and teachers perceived the connection between art and writing. A professional colleague served as a

peer coder and coded 20% of the data using the initial and focused codes. Using Holsti's (1969) method, we reached an 85.2% peer agreement.

This qualitative case study was completed in 3 ½ weeks with 19 students and 5 teachers using visualization embedded in the writing process. The results are presented in Chapters 4 and 5 in written and visual form. Now, it is necessary and insightful to synthesize the findings.

Findings

Several forms of data were collected and analyzed to provide rich description which helped me gain a deeper understanding of visualization embedded in the writing process. Student art/writing samples were coded with initial codes discussed in Chapter 3 to help gain a deeper understanding of the overarching question and two of four subquestions. Analysis of interviews and fieldnotes revealed four focused codes, which provided insight into two of the subquestions. This examination, when superimposed over accepted curriculum performance standards, could assist in the development of new instructional practices—leveraging visualization. Thus, all four main questions form the underpinning to understand how visualization, when embedded in the writing process, influences struggling learners.

1. How does the use of visualization embedded in the writing process influence struggling learners in a kindergarten through fourth grade summer writing camp?

Visualization embedded in the writing process integrated elements of visual arts and writing. Three different environments, which are unique independent of each other but powerful when combined, provided the design framework of the summer school writing camp. When the visual, literacy, and learning environments overlapped each other, they contributed to the success of the summer writing camp and ultimately to how visualization embedded in the writing process influenced struggling learners. The field experiences, along with the incorporation of art and digital photography, provided the visual environment for the summer writing camp. The use of literature and the implementation of the writing process created a literacy environment. Peer collaboration among students in different grade levels, the sharing of art and writing, and teacher-student conferences established a community of learners. Figure 6.1 visually displays the

three environments overlapping each other. The intersection of all three environments comprised the summer writing camp.

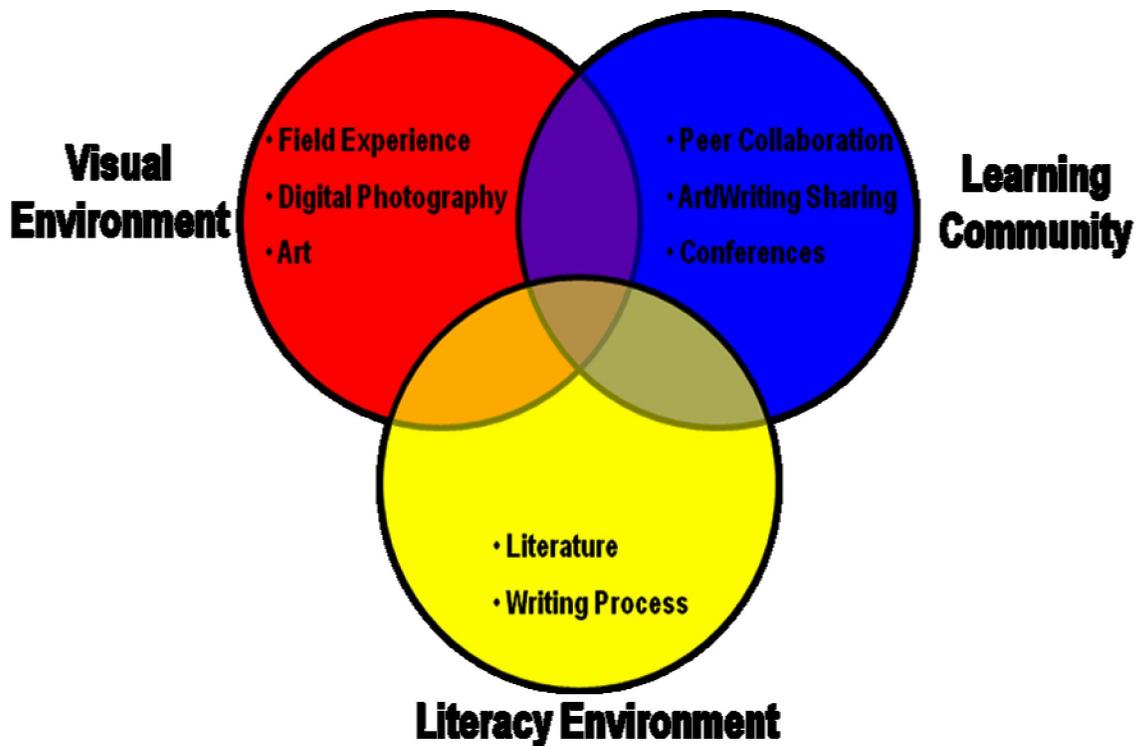


Figure 6.1. Summer Writing Camp Design

Often when a teacher gives a struggling learner a piece of blank paper, he or she becomes afraid of writing and will admit defeat before beginning. Teachers often hear, “I don’t know what to write” from students who struggle with writing. To prevent this moment of frustration, summer writing camp teachers provided each student with an art/writing journal in which three-quarters of the page was blank for drawing and the bottom quarter had ruled lines for writing. Providing struggling learners with four field experiences in a 3 ½ week time span exposed students to their environment, which may not occur during the school year or in their home lives. The struggling students in the summer writing camp had a purpose to write in their art/writing journals. The field experiences provided specific ideas about which to write. Students wanted to write and share their new discoveries of what it was like to catch a fish, walk across a bridge, hold a hissing cockroach, and sit in an ambulance. The evidence found in the data shows of the 19 students selected for summer school, 8 students scored at least 1 point higher on their final

than their base line for the Ideas trait. Also, four of the students (2 kindergarten and 2 first grade students) scored 2 or more points higher for the Ideas trait on their final writing piece compared to their base line. John Dewey (1897) stated “I believe that literature is the reflex expression and interpretation of social experience; that hence it must follow upon and not precede such experience” (p.80). It appeared the visual experience preceded the writing in the summer writing camp.

After the field experiences, students reviewed their trip by viewing digital photographs which helped recall of events. This approach was similar to Pressley’s (1976) research when he instructed third-grade children to construct mental images to increase story recall. Next, summer writing camp students drew in their art/writing journals as a response to the field experience. The art served three purposes: motivation, conceptualization, and categorization. Lowenfeld and Brittain (1975) asserted students who are frustrated in school may use art as to release their frustrations. The incorporation of art is recognized as a stimulus to creativity and activity.

Lowenfeld and Brittain (1975) noted the act of drawing is a way to conceptually organize ideas. Mrs. Sykes observed this act and conveyed in her interview that when students get their ideas down in a picture, they are able to expand more in the writing. Piaget and Inhelder (1969/2000) acknowledged that drawing and the ability to create mental images develop in the Preoperational stage and are refined in the Concrete-Operational stage. This ability is found in the student’s level of spatial intelligence which stems from the ability to observe the visual world. Mental models or images influence problem solving skills and are useful tools in thinking (Gardner, 1983/2004). Analyzing the student art pieces provided clues into their spatial intelligence ability which formed half of the equation to identifying their stage of cognitive development; the other half was how the writer wrote in relation to him or herself. The data in Chapter 5 revealed 4 students increased their stage of artistic development and three of these students were in fourth grade.

The summer writing camp was divided into two camps and the division between the two allowed the teachers to tailor instruction to meet the needs of the students. The three teachers in the primary camp and the two teachers in the intermediate camp provided a low student-teacher ratio. This permitted small group instruction and frequent teacher-student conferences. Donald Graves’ (1983/2003) writing workshop process also encouraged students to peer collaborate by sharing their ideas, drawings, and writing. Mrs. Buchannon shared that by the conclusion of

summer writing camp, students asked to see everyone else's final art piece. The writing workshop is inherently a sociolinguistic practice. Students often helped each other with editing and drawing of objects. The summer writing teachers activated a cooperative learning strategy of Think – Pair – Share before beginning their art projects and allowed time for the students to share their ideas with each other. Between the Calkins' (1986/1994) inspired mini-lessons the teachers modeled such as how to read a word wall, count syllables, know when to start a new paragraph, and collaborating of younger students with older students, the overall Conventions trait increased for both camps. There were 8 students in the primary camp who increased their Conventions trait and 2 students in the intermediate writing camp who increased their Conventions trait from the base line to the final writing piece.

Vygotsky (1978) investigated how children learn to use language as a tool to share cultural meaning as well as how using language affects the child's learning and cognitive development. Although each student experienced the same field experience to the pond, prairie, nature center, and fire department, all experienced something different and internalized the experience differently. This was evident in the student drawing and writing pieces. Although several students drew and wrote about walking over the bridge at the prairie, some students drew an aerial view of the bridge and some students drew the bridge vertically or horizontally. This was representative of their perspective of the experience and their ability to represent it using visual media.

For some struggling learners, visualization may not make a difference because they don't have the language tools. This may give insight on why intermediate camp students' art levels increased as expected, but not their writing levels. Karl Bühler (1930) stated a student's drawing reflects his or her conceptual knowledge of language. He observed that the more discombobulated a student's drawing appears, the less control he or she has of language. Howard Gardner (1980) reflected that drawing is the only form of expression and communication for students who have not yet mastered the skill of writing. He claimed that students' writing abilities were not developed sufficiently to offset their ability to express themselves graphically until age 9 or 10.

These statements are supported by the data collected and analyzed. The students who were in kindergarten and first grade used art as a way to conceptualize their ideas and thus their writing scores and levels increased. However, struggling students in second through fourth

grades who still did not have full control of their language skills, used art as a form of expression. The second through fourth grade struggling students use art as transmediation (Parsons, 2006), or a way to communicate their ideas using symbols other than written words. Drawing provides these struggling students a way to show and express details which they cannot write. This was revealed in the analysis of the stages of artistic development in Chapter 5. Four of the 9 second through fourth grade students increased their stage of artistic ability, while 2 of the 9 second through fourth grade students increased writing levels. Therefore, the drawing for the older struggling students is a form of transmediation until they gain sufficient control of language skills. This is a contrast when compared to 2 of 10 students in kindergarten and first grade who increased their stage of artistic development and 7 of the 10 same students who increased their writing level.

The data revealed visualization influences the primary (K-1) struggling learners more than the intermediate (2-4) struggling students. Visualization embedded in the writing process is a scaffolding tool to help primary struggling students become independent, successful writers. Scaffolding is how a teacher gradually releases the student's transition from a shared to individual state of learning (Bruner, 1985). Teachers may use visualization in the zone of proximal development (Vygotsky, 1978) to more effectively meet the needs of the emerging writer.

2. What types of instructional methods, activities, and techniques engage children in visualization during writer's workshop?

The writing workshop is a social setting. Donald Graves (1983/2003) described the writing workshop atmosphere as a hushed, busy tone. This interaction fosters ideas and encourages oral language which is consistent with Vygotsky's (1978) sociolinguistic theory. The data collected from fieldnotes and interviews revealed teachers used several forms of methods, activities, and techniques to instruct visualization embedded in the writing process.

All teachers of the summer writing camp employed the powerful teaching method of focused mini-lessons. Through daily mini-lessons, students received focused instruction on elements of the writing process, incorporating increased amounts of details, and techniques to narrow ideas. Calkins (1986/1994) referred to mini-lessons as an opportunity for the teacher to

model and reinforce strategies and techniques. The transcribed interviews with teachers revealed their thoughts and beliefs about the necessary mini-lessons. Mrs. Pullman believed mini-lessons provided time to model drawing upon the newly gained knowledge learned from the field experiences and transferring those ideas into art/writing pieces. Five of the 10 primary students increased their Ideas scores from their base line to final writing piece. Mrs. Buchannon thought teaching students how to utilize a word wall influenced the primary writing camp's Conventions scores. Compared to the base line, the final writing pieces showed 8 primary students increased their Conventions scores. In addition, 2 primary students increased their Conventions score by 2 points. Mrs. Sykes believed the mini-lesson regarding descriptive words about animals, drawn in response to nature center experience, contributed to some of the students' best writing pieces.

The writing camp teachers also engaged students in different activities to incorporate visualization embedded in the writing process. Activities included reviewing digital pictures of field experiences and drawing and writing in art/writing journals. Writers draw in their journals and these sketches give them ideas about which to write (Graves, 1984). The students used a variety of visual and physical experiences to generate writing ideas. The focus on writing in journals was intended to foster students' desire to live, as Lucy Calkins (1986/1994) described, the *writerly life*. Living a writerly life during the summer writing camp meant students experienced life and subsequently captured those experiences by writing in journals. Journal entries were a doodle of a lady bug, poem, reflection, story, or fact. The time for free writing helps writers build fluency (Murray, 1989). Although both students and teachers were apprehensive at first of using the art/writing journals, both commented in interviews how the process helped students become stronger writers.

Teachers opened their eyes to journals and realized they are personal, meaningful, and practical. None of the five teachers previously used art/writing journals. The intermediate teachers believed students needed more room to write and less room to draw in their art/writing journals. Mrs. Pullman, a primary summer writing camp teacher, thought writing in journals was not as productive as writing longer, polished pieces. Mrs. Buchannon thought students were going to increase their writing abilities when they returned to school because she observed that many students enjoyed their journals and complained when they did not write in their journals daily. The students' journals became sources of ideas and served as a function of brainstorming when trying to determine a topic for their final writing piece.

The students were not familiar with drawing before writing and would often write before drawing. This behavior was mostly observed in the intermediate writing camp. Students revealed they wanted to write their ideas down before they forgot them and then go back and draw. Shannon, a third grade student commented how she used to draw, but her classroom teacher last year did not give the class time to draw before writing. Three of four fourth grade students expressed how they would like to continue drawing before writing next year, but were uncertain if their fifth grade teacher would permit this activity.

Two techniques observed during instruction included the viewing of digital photographs and Mrs. McCourt's zooming. These techniques provided ways for the students to visualize and create images before writing. Sadoski and Paivio (2001) proposed writers create mental images of what they desire to write. Teachers developed techniques to help harness students' abstract mental images into tangible creations.

The digital photographs captured events which occurred during each field experience. Teachers posted these pictures on the board for students to review. The pictures served as talking points to refresh their memories of the experience and a way for students to visually conceptualize what to draw. Again, through think aloud and modeling, teachers showed students how to observe pictures and think about what to draw and write. Mrs. Buchannon commented how digital pictures served as a tool for her to help guide students to write more information about their topics. She asked students to think of their favorite moment and take that picture to study. Students took ownership of this responsibility by asking to take the digital pictures back to their desks. The students would lay the picture next to their art/writing journal and look at the picture and then sketch. This process continued until the students were finished drawing. Each time the student observed the picture, he or she cemented their idea about what to write. Although digital pictures were intended to help struggling learners recall events, they bloomed into a technique to help students visualize what to draw and write.

The second technique of zooming was only utilized in the intermediate writing camp. Mrs. McCourt remembered this technique from a conference she attended and thought this technique would be of beneficial use to intermediate students. By having students draw an image four different times, zooming in on the details or drawing an image from a different perspective each time, encouraged students to create more detailed pictures and conceptualize their ideas.

This technique was utilized to create the final art piece which led to the final writing piece. Three of the 9 students' final art pieces were analyzed at a higher level than their base line. Three of the 9 students received a higher score for Ideas on their final writing piece compared to their base line. Two of these students, who were both fourth graders, increased in their stage of artistic development, score for Ideas trait, and writing level after Mrs. McCourt introduced the zooming in technique.

Observing the methods, activities, techniques teachers employed during the writing process led to the creation of an altered writing process Graves' pioneered in 1983. Donald Graves (1983/2003), Lucy Calkins (1986/1994), and Nancy Atwell (1987) all incorporated the writing process which was built upon five basic stages: brainstorming, drafting, revising, editing, and publishing. However, their writing processes do not specifically address how to incorporate visualization. Graves (1983/2003) does incorporate the steps *rehearses by drawing* and *changes drawing* in the writing process for six-year olds. Figure 6.2 is the writing process display I designed based on this case study which incorporates visualization.



Figure 6.2. Visualization Embedded Writing Process

This new writing process model is supported with my observations, statements from teachers, and student writing levels. All five teachers agreed the visual experience derived from the field experiences and/or review of digital photographs motivated students to develop ideas about what to write. After discussing the field experience, the verbal discourse between partners and/or teacher served as a way of rehearsing and building schemata. After discussing, students drew their ideas. This action served as a means to conceptualize ideas. These actions created a predictable routine which made it easier for students to write (Atwell, 1987). After the summer writing camp, Mrs. Sykes revealed that next year she will instruct her third grade students to draw a picture first so they can refer back to the picture and recall their original writing ideas.

Sharing the drawings allows students to help each other with their artwork and orally tell what they are to write which offers another opportunity for the struggling students to conceptualize their ideas. After the visual experience, sharing, and drawing, the students are prepared to compose a draft. During revising, teachers and students can ask students to add more detail to their writing based on the amount of detail in their pictures. Mrs. McCourt noticed that students may write a little at first, but if the student is held responsible for drawing a picture, their writing should correspond. She noted that it was easier to have students add more details to their writing and drawing so the two pieces reflect each other.

Teachers modeled throughout the process and conferenced with students. Graves (1983/2003) and Calkins (1986/1994) noted that one-on-one conferences can be effective in helping students with their writing. Students were encouraged to collaborate with others to develop their drawings and writings. In order for writers to grow, they need time to practice and talk to other writers to receive guidance and feedback (Graves, 1983/2003). During the editing phase, teachers held students accountable for correcting spelling, if it was on the word wall the class made, and empowering older students to work with younger students to edit for spelling and punctuation. When the art and writing pieces were published, it was essential for the students to orally share these with their peers and tell how the visual experience and drawing helped them write. This act served two functions. First, the students took ownership for their learning by orally explaining how visualization influenced their writing. This explanation helped students internalize the process. Second, students wanted to observe how their peers drew their pictures and what they wrote about them. Often, the students helped a student who was sharing his or her drawing or editing with the group. They took pride in their peers' work—which facilitated a

community of writers. Calkins (1986/1994) and Routman (1994) asserted a community of writers who support each other makes it easier and more enjoyable for students to write.

Overall, the visualization embedded in the writing process model encourages students to focus their writing and expand on their details. Through these activities, methods, and techniques teachers engaged students to use visualization embedded in the writing process. The fruition of these efforts is found in the 19 students' writing levels. The base line writing levels ranged from **Not Yet** to **Effective** and the final writing levels ranged from **Developing** to **Effective**. All of the 19 struggling learners are now at a writing level which could help their schools meet Adequate Yearly Progress.

3. How does visualization influence potential effects in the individual writing scores of the Six-Trait Analytical Model (Spandel, 2004)?

The base line, four responses, and final writing pieces were assessed using Spandel's (2004) Six-Trait Analytical Model. The original six-trait rubric was developed by teachers in 1984 and has been revised many times since. The Six-Trait Analytical Model is based on Paul Diedrich's (1974) and Donald Murray's (1982) systematic way of ranking and recording features of quality writing.

Visualization embedded in the writing process influenced kindergarten and first grade students' writing more than it influenced the second through fourth grade students. All three assessed traits (Ideas, Organization, and Conventions) at kindergarten and first grade level increased from the base line writing piece to the final writing piece. There are many contributing factors to why these scores increased.

Researchers found students use several modes of communication to express themselves before they can compose (Graves, 1983/2003). Through analyzing interviews and fieldnotes it was apparent the participation in field experiences, reviewing digital photographs, and oral discussion of events contributed to the final scores for the Ideas trait. Five of the 10 students in the primary writing camp increased their Ideas scores on the final writing piece. Kendrick, the representative kindergarten student, increased his score by 3 points. Brittany, the representative first grade student, increased her Ideas score by 2 points.

The physical act of drawing is a concrete activity and served as a way to conceptualize for students in the Preoperational, Preoperational/Concrete, and Concrete stages of cognitive development. A drawing becomes an internalized imitation of the mental image (Piaget & Inhelder, 1969/2000). The drawing may have influenced how students organized their thoughts. Six of the 10 primary students increased their Organization scores. Kendrick increased his Organization score by 2 points and Brittany increased her score by 1 point.

Vygotsky's (1978) sociolinguistic theory supports interactions to develop language. Through student-teacher conferences and peer revising and editing, 8 of the 10 students increased their Conventions scores. Kendrick increased his Conventions score by 2 points and Brittany increased her Conventions score by 1 point.

The intermediate writing camp students did not experience the same increase in Six-Trait scores as the primary camp students. There are two possible reasons why their scores may have not increased. The first reason involves each student's previous classroom teacher. The CRTs or base line writing was scored by the classroom teacher. Although, the classroom teacher used the Six-Trait Analytical Rubric (Spandel, 2004), the teacher may have assessed the student from the progress made since the beginning of the year, and the scores at the end of the year may be inflated due to teacher bias. The second reason, which is indicated by the data collected, is that struggling students in second through fourth grades have not completely acquired the language skills necessary express themselves sufficiently. This lack of efficient control of language is evident in the Six-Trait scores of these students.

Students chose their favorite field experience to develop through the writing process for their final writing piece. Allowing students to choose to write about a personal topic gave the author authority and was easier than writing about an unfamiliar topic (Murray, 1989). Overall, there were three traits which increased from the base line to the final writing piece for the 9 second through fourth grade students. Two of these three traits were also the same traits in which the primary writing students increased: Ideas and Conventions. The possible reasons why these two traits increased are the same as the primary writing camp's. The visual field experiences, reviewing digital photographs, and drawing ideas before writing contributed to a developed idea. While 5 students did not experience any change in their Ideas scores, three students did increase at least 1 point. Jose, the representative second grade student, did not increase or decrease his Ideas score from his base line. Both Jacob, the representative third grade student, and Beyonce,

the representative fourth grade student, increased their Ideas score by 1 point compared to their base line scores. Similar to the primary writing camp, older students conferenced and collaborated with younger students. Fourth grade students helped second grade students with their spelling. This interaction along with teacher-student conferences, and mini-lessons may support why the Conventions trait slightly increased. Four of the students did not increase or decrease their Conventions score from the base line to the final writing piece, while three students did increase their scores by 1 point. Jose did not change his scores and Jacob and Beyonce increased their Conventions score by 1 point. Voice increased slightly from the base line to the final writing piece. Two students of the 9, both fourth graders, increased their Voice score. The ability to choose a topic which to write and the act of writing from personal experiences may contribute to the increase in Voice for these two students.

These struggling students may draw detailed pictures, but may not have the ability to communicate the details because they lack control of language. This was evident when Shannon, a third grade student, drew a picture representative of her experience at the nature center but did not have the vocabulary to describe what was in the picture. She drew items because she observed them, but was not able to provide the detailed information needed to increase her Word Choice scores. It is well documented that those who came from less literacy-rich homes have a smaller vocabulary than students who came from literacy-rich environment (Morrow, 1995).

The traits Organization and Sentence Fluency either remained the same or decreased slightly from the base line scores. Although some students did increase in these traits, it was not enough to demonstrate an overall increase. Reviewing the transcripts revealed teachers taught one mini-lesson concerning Sentence Fluency using transition words and three mini-lessons about Organization, a trait which did not increase or decrease from the base line. The summer writing camp was limited in time with 3 ½ weeks. The intermediate teachers believed spending time on developing Ideas would be more beneficial to struggling students and focused their efforts on how to use the visualization strategies.

4. How do the students' writing and artistic stages reflect the cognitive development stage of the writer?

Educators seek to understand the core of a student as a learner through analysis of student-produced products. In this case study, three elements were analyzed to gain a deeper understanding of how visualization embedded in the writing process may influence a struggling learner. These elements included the identification of a student's stage of artistic development, writing level, and cognitive development stage. These elements were gleaned from student art/writing samples and were analyzed to determine more about how students' writing and artistic stages reflected their cognitive developmental stage.

In this case study, students drew images from their field experiences before writing which served as a form of visualization. The student artwork was analyzed using Lowenfeld and Brittain's (1975) stage of artistic development, a stage theory similar to Piaget and Inhelder's (1969/2000) theory of cognitive development. Lowenfeld and Brittain (1975) asserted students' progression in drawings is representative of their development as a whole. Elements such as spatial relationships of objects in the picture help determine their level of artistic development and consequently their stage in spatial development.

Joan Davidson's (1996) study served as the main framework for this study which focused on how writing influenced drawing. However, Davidson found during student interviews that drawing helped them write. This study was designed using Davidson's implications to gain a better understanding of how visualization may influence struggling learners in a summer writing camp. Davidson required students to draw about the block on which they live and then write about it. The students revised the art and writing three times. However, she investigated whether writing increased the artistic ability of the students. She did not assess the writing. In this case study the writing was assessed using the Six-Trait Analytical Model (Spandel, 2004). After averaging the Six-Trait scores, a writing level was assigned using the NWREL (2004) rubric.

Judy Hale's (1996) research also shaped this case study. She discovered a connection between cognitive developmental stage (Piaget & Inhelder, 1969/2000) and artistic development stage (Lowenfeld & Brittain, 1975). Her study categorized students according to their stage of artistic development and cognitive development. She did find a connection between the two stages of development according to the student's literacy level.

By analyzing whether students wrote from an egocentric point of view versus a third person point of view and analyzing spatial relationship of the drawing, a cognitive level was determined using Piaget and Inhelder's (1969/2000) theory of cognitive development. Previous

research led the desire to understand if a student's writing level and artistic stage reflect the cognitive development stage of the writer. In this case study the stage of cognitive development was only recorded in the final table in Chapter 5 due to restraints discussed earlier in Chapter 3.

Overall, reviewing the analyzed data displayed in Chapter 5 revealed that students who were assessed in the Preoperational stage were typically assessed at the Preschematic stage of artistic development and not higher than Emerging writing level. There were not any students found in the Preoperational stage of cognitive development and Dawning Realism stage of artistic development or at the Developing writing level. The writing level and stage of artistic development may reflect the student's cognitive level because all three elements are developmental and follow a line of sequence and acquisition of skills.

Reviewing the Stage of Artistic Development Comparison (Table 5.2) revealed 8 of the 10 students in the primary writing camp remained in the same stage in artistic development when comparing the base line to the final art/writing samples. This contrasts to 4 students, all fourth graders, of the 9 in the intermediate writing camp who increased their stage of artistic development from the base line to the final.

These findings deserve a more detailed and in-depth review to fully understand their meaning. First, I will examine the primary writing camp's analysis of participating student's final art/writing samples. Then, I will discuss the intermediate writing camp's analysis of all three elements.

The three kindergarten students who were assessed at the Preschematic artistic stage were also assessed at the Developing writing level and two of these students were identified as Preoperational learners. Plus, there was one student identified as Preoperational/Concrete learner, or someone who is transitioning identified as Preschematic and Developing. It appears if the student's stage of artistic analysis is determined as Preschematic, then his or her writing level and cognitive level reflects this stage in development. Six of the 10 primary writing camp students were assessed at the Schematic stage of artistic development and Effecting writing level. Four of these students were also identified as Preoperational/Concrete learners, 1 Preoperational learner, and 1 Concrete learner. Students assessed at the Schematic stage of artistic development in kindergarten and first grades reflect a more advanced writing level as well as a student who is transitioning into a concrete learner.

The intermediate writing camp's findings portray a slightly different perspective than the primary writing camp's analysis. Four (2 second graders and 2 third graders) of the 9 students were assessed at the Schematic stage of artistic development, Developing writing level, and Concrete stage of learning. Recall the students in kindergarten and first grade who were also at the Schematic stage of development, but were also Effective writers and transitioning to the Concrete stage of learning. It seems in second and third grade the students have moved into the Concrete stage of learning, but their writing does not reflect this growth like their art stage does. Perhaps, the students experience a lapse in writing development during the transition to the concrete stage of learning in these grades because the four students in fourth grade, who were all categorized as Concrete learners, were also Effective writers, and their stage of artistic development is or is transitioning to Dawning Realism.

Karl Bühler (1930) asserted that a student's drawing reflects his or her conceptual knowledge of language. He observed that the more disorganized a student's drawing appears, the less command he or she has of language skills. Howard Gardner (1980) found that drawing is the only form of communication detailed enough for expression for students who have not yet mastered writing. He claimed students' writing abilities were not mature enough to counterbalance their ability to express themselves visually until age 9 or 10.

The art/writing samples analyzed that revealed student's writing level and artistic stage of development may reflect a student's cognitive development. The interviews from teachers support this idea. Mrs. Pullman, the first grade teacher, observed that the level of detail on a student drawing is indicative of a student's writing level. Mrs. Pullman also reflected that there were some students who enjoyed writing more than they enjoyed drawing pictures because they were already at the stage where writing was not difficult for them to retrieve words to express themselves. Her observational point of view indicated the more detailed a picture was, the stronger a writer the student was.

There are students in second through fourth grades who did not increase in their writing scores and levels and, although many factors are to be explored as to this reason, one seemed to surface through the data. These students are struggling learners because either they are identified special education, ELL, or do not have adequate test scores or grades. Struggling students have not mastered all language functions, and, therefore, drawing before writing may not have a potential effect on their Six-Trait scores. There is a disconnect between art level and the writing

level for this reason. Mrs. McCourt reported she found some students could draw detailed pictures, but did not have the vocabulary to support the drawings and could not express themselves in writing. In the intermediate writing camp, Mrs. Yost noted it appeared students who drew well also tended to be stronger writers, but this was not always the case. She believed students who struggled more with language and attention struggled more with writing even if they drew a detailed picture. Mrs. Yost also revealed that students who had behavior issues seemed to prosper from the integration of meaningful experiences, and their art and writing were more advanced than others.

5. How do students and teachers view potential connections between art and writing?

Howard Gardner (1980) asserted that it is not until the start of school that a student transitions toward a left brain dominance which controls the language capacities, and, as it gains more dominance, the right side, which houses the visual-spatial relation ability, becomes less dominant. This idea may explain why Davidson's (1996) study revealed that students thought drawing helped them with their writing. With this possible connection between writing and drawing, this case study sought to gain a deeper understanding of the connection between drawing and writing. I examined the students' and teachers' perceptions derived from the interviews of this potential connection.

The students in the primary writing camp struggled expressing their thoughts on how drawing before writing may help them become a better writer. Most of the kindergarten and first grade students made comments like, "Looking at my drawing helped think of what to write." This was most prevalent after the nature center field experience when the students created their new animal and had to write three sentences to describe their animal. Chris, a kindergarten boy, pointed at his snake's black eyes and wrote *The snake has black bean eyes*. As Mrs. Buchannon noted, students at this age want to please their teacher and will do anything they are instructed. Goodenough (1926) believed drawing for young children is language and is purposeful. However, the students, mostly second and third graders, who were moving towards the Concrete stage of learning, could explain more about the connection between drawing and writing. Sierra, a first grade girl, simply stated if she did not draw she would not know what to write. Grant, a first grade boy, commented that looking around the room gave him ideas about which to draw

and write. The students in the intermediate camp were able to express more detailed statements. Donisha, a fourth grade girl, revealed that if you draw it, then you need to write about it. Beyonce, the representative fourth grade student, realized drawing could help her remember her ideas because of her memory problems and the frequency of having to quit writing before she was finished.

The ability to generate ideas is an essential component of the writing process. This ability uses all the resources available such as reading, talking, drawing, and writing. During the drafting phase of the writing process, the brain needs working memory, but the memory has space limitations (Kabrich & McCutchen, 1996). When the student is drafting, he or she can become distracted due to interruptions or lack of attention. These interruptions make the student's coordination of thought process and the physical act of writing difficult to correspond (Berninger, 1999). The writing brain uses its short-term, long-term and working memory to solve problems. Drawing the idea first before writing allowed students to refer back to their idea and not forget what they are writing. Students with memory problems benefit from art integration (Jensen, 2001). Furthermore, students with learning difficulties specifically those with reading problems, have late occurring or mixed-dominance and it is thought these students have a desire to express themselves graphically. Therefore, drawing is a more comfortable form of communication than writing. This may contribute to why all the teachers believed students who struggled with writing would rather draw for longer periods of time than write and students who were stronger writers did not need to spend a lot of time drawing. These observations support Van der Horst's (1950) idea of as the student's language skills increase, the student relies more on language to express his or her thoughts. The participants of this study were struggling students, and therefore, would prefer to draw more than write due to their lack of language skills.

The teachers could express the connection between art and writing more articulately than the students. Mrs. Buchannon viewed drawing as extra practice for students to work on their dexterity skills because the kindergarten and first grade students were still learning how to hold a pencil to write. Mrs. Sykes thought the students responded well to art being integrated because it helped them focus their writing. Mrs. Pullman believed the students' writing was more in-depth when they drew before composing and plans to integrate this practice in her classroom next year. Mrs. McCourt thought visualization before writing has helped so many of the

students because it helps them focus their writing on what they are going to write about and it helps them expand. These reflections coincide with Van der Horst's (1950) thought that drawing is a concrete activity and is not as efficient as language to communicate.

The visual experience and subsequent drawing motivated students to write about those experiences. During interviews only a few perceived themselves as "bad" writers and most thought of themselves as "good" writers. Students who thought they were "bad" explained they do not know how to spell or they had poor handwriting. Students who categorized themselves as "good" writers believed this because of their growth as a writer by the end of the camp. I asked what made them write more and several students said because they drew pictures with a lot of details so they wrote a lot of details. Interestingly, students were motivated to write because they perceived themselves as better writers regardless of Six-Trait scores. Mrs. McCourt thought students who were able to add a lot of details to their picture tended to add a lot of details to their writing.

At the conclusion of summer writing camp, teachers expressed their desire to continue drawing before writing due to their observations and experiences with visualization embedded in the writing process. The teachers thought they learned more about a student as a learner. By understanding the drawings produced by a student, it would lead them to better understand the student as both a writer and a learner.

Conclusions

This case study explored how students used visualization as a precursor to writing. As participants in this study, students were part of a writing community. For 3 ½ weeks the students bonded in a summer school writing camp as writers and engaged in prewriting, composing, revising, editing, and sharing activities and shared their pieces with each other. The summer writing camp, which embraced the writing workshop atmosphere, provided a safe and comfortable learning environment and invited students to take risks with their writing. I sought to gain a deeper understanding of how visualization embedded in the writing process influenced struggling learners. Through analysis and discussion of the findings, the data revealed several conclusions about this case study.

The predictable routine of the visualization in the writing process model allowed struggling students to feel successful. The intermediate writing camp students became cognitively aware that every time they participated in a field experience, they were going to draw and write about it. The visualization embedded in the writing process model allowed students to integrate art with writing and collaborate with their peers. This model influenced students' ideas and Conventions scores while creating a community of writers.

The success of visualization encompassed a visual experience, recall and a study of the visual elements presented in digital photographs, and drawing as a way to conceptualize ideas. Each of these activities built schema, and thus, when the struggling learner begins to draft these events, have been conceptualized through the concrete act of drawing. Goodenough (1925) asserted drawing is based on concepts, which are built upon experiences thus allowing the student to grasp the abstract. The field experiences provided the purpose and motivation for the struggling learners to write. Digital photographs served as a way to recall events which happened during the field experience and acted as a reference during drawing time.

In this study, art projects were created as a method for students to visualize their ideas during the writing process and served as external tools which assisted students' transition to using internal tools, specifically their own imaginations. Drawing was used during prewriting, which is the first step in the writing process. Drawing is a cultural tool which scaffolds younger students and aides the teacher to instruct within the student's zone of proximal development (Vygotsky, 1978). These experiences, activities, methods, and techniques contributed to the primary writing camp's increased score for all the assessed traits: Ideas, Organization, and Conventions and the intermediate camp's increased score in Ideas. Teachers implemented mini-lessons and visualization techniques like zooming during the revising phase of the writing process. During peer and student-teacher conferences, the students revised and reflected on how the drawing coincides with writing. The older student helping the younger student created a community of writers while contributing to the overall increased Conventions score.

By using elements such as the spatial relationships in the student's drawing and the egocentrism point-of-view in his or her writing, the learner's stage in cognitive development was identified. The stage of artistic development for the students in the primary writing camp was identified as lower than the students in the intermediate writing camp, which reflects Lowenfeld and Brittain's (1975) stage theory. Thus, the primary writing camp students' artistic ability

mirrored their language ability. However, this age group (kindergartner and first graders) experienced the largest growth in writing levels during the summer writing camp.

Drawing before writing influenced the primary camp writers more than the intermediate camp writers. Visualization embedded in the writing process may not influence struggling learners in second through fourth grades because they don't have sufficient control of the language. As the struggling students' age increased, language still had not developed and the struggling learner relied on the detailed drawings to express his or her thoughts. Although the primary writing camp students experienced the most positive influence with increased Six-Trait scores and writing levels, students in the intermediate writing camp were not influenced as positively because they did not have control of the language. Specifically, struggling students in the intermediate writing camp did not have the vocabulary needed to describe the drawing despite the detailed level of their drawings. For the intermediate writing camp struggling learners, the graphic representations accounted basically for their written expression ability.

Teachers can have a strong indication of a student's writing level based on his or her stage of artistic development. Both the writing level and the stage of artistic development are developmental. Previous research has linked a student's stage of artistic development to a student's stage of cognitive development. Therefore, identifying the student's stage of artistic development can aid the educator to identify the writing level and stage of cognitive development. By identifying all three categories, the educator can more effectively tailor instruction to benefit the individual learner.

Implications for Further Research

The purpose of this qualitative case study was to gain a deeper understanding of how visualization embedded in the writing process influences struggling learners. The study was not intended to generalize to other contexts. Collection and analysis of the data led to the findings of this study and in the process, several ideas for future research emerged. All suggestions provide a different perspective of researching visualization embedded in the writing process.

Visualization During the Regular School Year. This case study occurred during summer school, a 3 ½ week period. To appeal to the majority of administrators and teachers it would be worthy to explore how to integrate visualization in the writing process during the standard 10

month school year. The instructional time period during summer school was 3 hours a day which provided an uninterrupted amount of time to focus on writing. Teachers face increasingly demanding schedules and often do not have time to devote to a writing block of 45 minutes every day. Graves (1983/2003) suggests a writing block should be at least 45 minutes a day three days a week. Another factor to consider is that teachers may not be able to take their students on many field experiences which provided the motivation and visual environment to write. The use of digital photographs helped with memory recall and details of objects to draw and write. Teachers may not have a digital camera and printing capabilities to provide this visualization technique. Modifications would have to be made in order to succeed outside the summer school time frame.

Varied Ability Levels. The participants of this qualitative research were struggling learners. To assist the classroom teacher who has below average, average, and above average students in the classroom, it would be interesting to incorporate the non-struggling and gifted and talented learners and explore how visualization potentially influences their Six-Trait scores. For students who have grasped language and are comfortable expressing themselves with writing, visualization may take a form other than drawing. Students might be stimulated by creating videos using Movie Maker, a computer drawing program, developing a digital photo album, cropping pictures to zoom in on the details, or devising a power point presentation.

Quasi-Experimental Study. To research the potential effect of visualization embedded in the writing process, a quasi-experimental study could be designed to compare a class who practiced visualization embedded in the writing process to another class in the same grade level who did not incorporate visualization. Factors to examine might include but are not limited to time, Six-Trait scores, and reading levels. The researcher could keep a record of how much time the class using visualization embedded in the writing process took to complete a writing project and compare the duration to a control class traditionally completing the same writing project. Time is valuable in the instructional day, and it is essential to understand how visualization embedded in the writing process may effect the amount of writing produced and whether other subjects, such as the heavily tested math and reading, had to be reduced. The amount of writing is not necessarily the purpose of the writing workshop but rather its quality. The researcher could also compare the Six-Trait scores of the control class to the experimental class and gain a deeper understanding of how visualization embedded in the writing process potentially affects writing

scores and levels. Another form of standard measurement to research concerning the potential effects of visualization in the writing process is students' reading levels. There is existing research stating writing influences reading (Clay, 1975). It would be interesting to understand how students in the class who used visualization embedded in the writing process were impacted in reading levels, writing scores, and writing levels compared to a control class.

Art Analysis. For this case study the art base line used to determine the stage of artistic development was adapted from the Goodenough (1926) Draw-a-Man test. I analyzed the stage of artistic development for each student using Lowenfeld and Brittain's (1975) stage theory concepts derived from Hale's (1996) research. Harris (1963) reviewed how Goodenough's (1926) Draw-a-Man test is reflective of the student's cognitive level because it is a nonverbal intelligence test. To gain a deeper understanding of how a student's writing level is reflective of his or her stage of artistic development and stage of cognitive development, a researcher could administer Goodenough's (1926) Draw-a-Man test to each student, following the procedures and her method of analyzing. Then, after determining the base line cognitive level using Goodenough's (1926) Draw-a-Man test, analyze the students' writing and art pieces to determine if the cognitive levels correspond. Understanding the stage of cognitive development of a student allows the teacher to differentiate instruction and would provide more information on how a student's writing level is reflective of his or her stage of cognitive development.

Longitudinal Study. This case study was set in a specific period of time to explore how visualization embedded in the writing process influenced struggling learners. The participants were in kindergarten through fourth grade. The most positive influence found, which contributed to Six-Trait scores, was found in kindergarten and first grade students. Future research could explore how students in kindergarten and first grade continue to use visualization embedded in the writing process in future grades as well as how visualization continues to impact the writing scores and levels. An longitudinal study following the kindergarten and first grade students who attended the summer writing camp would provide insight on how visualization taught in the primary grades could potentially effect a student's future writing experiences, attitude about writing, Six-Trait scores, and writing levels. It would also be noteworthy to find out if the same students who attended the summer writing camp were recommended for summer school again.

English-Language Learners. There was one second grade representative boy who was ELL. His writing scores and level neither increased nor decreased during the summer writing

camp. It was observed by his teachers that he still struggled with the vocabulary needed to express his detailed writings. Future research could help understand how visualization may help ELL students learn the needed vocabulary to express themselves in English. The research could have the ELL student draw a visual scene and label the items in the picture for the student to refer to when he or she writes. If the ELL student's main difficulty is lack of vocabulary, perhaps labeling the parts of a picture with the student will provide the scaffolding needed to increase his or her Six-Trait scores.

Administrative Goal. Administrators write curriculum goals based on areas of weaknesses which need to be addressed. This plan could address the goal of improving students' writing levels as assessed by the six-traits. Creating a plan using visualization embedded in the writing process to help increase student writing levels, would provide specific steps in accomplishing the goal. The administrator could state, "All students identified as Not Yet and Emerging writing levels, as determined by their base line, will increase their writing level to Developing by the fourth quarter writing assessment to meet Adequate Yearly Progress." To accomplish this goal, the administrator could propose students draw before and during the writing process to increase Ideas, Organization, and Word Choice. Older students will pair with younger students to peer revise and edit to increase Conventions. Teachers and librarians will teach mini-lessons using visualization in the writing process. Teachers and students will use resources located in and around the school to form visual experiences about which to write. Teachers will collaborate and share ideas and lessons which emphasize visualization embedded in the writing process. The administrator could collect the base line writing level and the fourth quarter writing level of each student in all the grades to determine if the goal has been met.

Professional Development School Setting. Conducting future research with a professional development school would help build relationships between the university and the school, but also provide the researcher an opportunity to explore how the university liaison and undergraduate students in their field experiences incorporate visualization embedded in the writing process. The university liaison to the PDS could provide professional developments for teachers and the researcher could provide insight on how teachers' ongoing professional development contributes to the successful implementation of visualization and the impact on students' Six-Trait scores and writing levels. The university students could tutor struggling students using visualization embedded in the writing process methods, activities, and techniques.

The researcher could track the writing scores of students who are tutored to understand if tutoring may influence their writing scores. The opportunities of research are limitless in this setting.

Implications for Classroom Instruction

This case study was conducted in one school district during summer school with 19 students from all grade levels between kindergarten and fourth grade and five certified teachers. The contextual features were unique to this case study. However, teachers, administrators, and curriculum designers may use the ideas and findings to enhance their instruction, create unity in school practices, and provide financial support and professional development to use visualization embedded in the writing process.

Innovative Instruction. Teachers are constantly seeking innovative ways to help struggling students learn. The methods, activities, and techniques conducted during the summer writing camp to instruct visualization embedded in the writing process were not from a textbook with a prescribed, endorsed curriculum. Visualization embedded in the writing process requires the teacher to think in a non-traditional manner and incorporate best practices despite the mandates of NCLB, which often leads teachers to focus primarily on tested knowledge and subject areas. Teachers should seek community resources to provide student field trips that are free or with little cost. Providing these field experiences, and then drawing and writing about them help build schema and give purpose for writing. Students are motivated to write when they are engaged. Personal experiences are easier to write about than a generic prompt from a book (Graves, 1983/2003). Students enjoy being able to choose ideas about which to write. If teachers chose not to seek out community resources for the students to experience or cannot fund the experiences, teachers should turn to the resources they have. Most schools have gardens or courtyards. Students could observe their visual environment in the garden and draw and write about the different parts of the flower or describe a blue jay. Teachers could bring their digital camera or borrow the school's or district's to take pictures of people or objects found in the school to provide recall and visual stimulation for drawing and writing. The teachers and students of this study attributed these types of visual experiences to the increase in the Ideas trait.

Sociolinguistic Practices. Vygotsky (1978) stated that language is learned best in social environments. The summer writing camp encouraged students to collaborate and work together both academically and socially. Older students peer revised and edited younger students' writing. This activity contributed to increases in students' Conventions scores. Teachers could assign the above average learner to the average and below average learners inside the classroom to peer revise and edit. Many schools have at least two classrooms per grade level. During the peer revising and editing stages of the writing process, teachers could exchange students and pair them to match strengths and weaknesses. Many classrooms also have book buddies. Teachers could invite the older partner class to peer revise and edit the writing of the younger class. By incorporating these practices, a community of writers will be constructed. Students will feel comfortable writing when they are a part of community which values their writing (Calkins, 1994; Routman, 2000).

Art/Writing Paper. Struggling students of all ages and grade levels usually are frustrated easily when told to write. They are overwhelmed with a piece of blank paper. Students believe they have to write enough to fill the paper. The physical act of writing is painful for kindergarten and first grade students who are still learning how to hold a pencil. Teachers can lessen the anxiety experienced by struggling students by providing paper that is blank on the top for drawing and lined on the bottom quarter. Through proper modeling, students will understand to draw first in the blank part and write about the drawing on the lined part. Through practice, teachers and struggling students will not feel frustrated during writing time. Classroom teachers should treat all their students as writers. The drawing serves as a scaffold for students which allow them to become more independent and successful writers.

Student-Friendly Assessment. During the first week of school, teachers often have students write a short story about what they did over the summer. This serves as a base line writing sample. Struggling students may find it difficult to remember what they did, take a lot of time thinking about it, and ultimately do not write a great deal. This experience could compound the student's frustration with writing. To bypass this situation, teachers could have students draw a picture of what they did over the summer. By analyzing the picture for certain spatial relationships, a teacher could gain an idea of the writing and cognitive level because these are reflected by a student's stage of artistic development. After the drawing, the students could write a response to the drawing which provides the student with the focus needed to write. The teacher

could then analyze the writing and compare it with the art to develop a deeper understanding of the learner. For example, if a student draws a detailed picture, then their writing should reflect this. By examining the art/writing sample, the teacher would understand if the student has enough language skills so he or she could express themselves sufficiently with writing, unless the student was considered a struggling student who is in a transitional period between the Preoperational and Concrete stages of learning, or most likely between the ages of 7 and 9 years old. Also, if the teacher analyzed the student's drawing as elemental, then his or her writing should reflect this along with his or her stage of cognitive development. Analyzing these products allows the teacher to differentiate future instruction to meet the student's individual needs. Does this child need more visualization because he or she does not have a good grasp on language? Or does this child have enough control over the language and does not need visualization strategies to become successful?

Implementation of Visualization in the Writing Process. Teachers should implement visualization embedded in the writing process slowly through modeling. Mini-lessons provide the direct instruction students need to learn techniques to help them write. The summer writing camp teachers believed mini-lessons influenced the increase in the observed Six-Trait scores. Students in the intermediate writing camp realized there was a routine after the second field experience. Jose, the second grade boy, realized he needed to study the vulture at the nature center because he was expected to draw and write when he returned to camp. Being consistent with the implementation of the visualization embedded in the writing process provides a routine and structure which helps students succeed. Atwell (1987) asserted predictable routines make it easier for students to write. Visualization embedded in the writing process is for every writing assignment, not just for the district test at the end of the year.

Integrated Schedule With Visualization. With heavy testing in reading and math, at least one other school subject has been reduced to make time for the tested subjects. Teachers can reevaluate the schedule to determine when visualization techniques can be incorporated throughout the day. The field experiences to businesses and landmarks in the community can be incorporated with social studies. Drawing the stages of a bean sprouting into a plant integrates science concepts. Visualization methods, activities, and techniques can be integrated with other subjects. The implementation of these techniques throughout the day builds a support structure for struggling learners and builds upon the procedural routine of learning a new concept. All of

the summer school writing camp teachers stated how they could see visualization being incorporated into other subjects and how they would implement it in their classroom the following year.

Professional Development. Highly qualified teachers stay abreast of current practices to engage students and assess student growth. Teachers reflect upon lessons delivered and their students' responses to those lessons in order to adjust future plans in their effort to help students grow. An increasing number of leaders in education noticed data indicates master teachers are pertinent to student achievement (Berry, Johnson, & Montgomery, 2005). All of the summer writing camp teachers commented that they did not feel comfortable teaching writing and were not sure how to implement a writing workshop in their classroom. Teachers' knowledge of and comfort with teaching writing effects students' writing progress and enjoyment (Simmons and Carroll, 2003). Teachers should seek training in developing a writer's workshop, how to analyze the stages of artistic development, assess Six-Traits, and identify a student's stage of cognitive development. Without proper professional training and follow up training, visualization embedded in the writing process may be too cumbersome for teachers to implement. Administrators and school district's curriculum and instruction should provide professional development in these areas. Along with proper instruction in how to teach visualization embedded in the writing process, teachers should reflect upon their practices to design instruction to best meet the needs of their individual students.

Final Thoughts

The old cliché, "A picture is worth a thousand words," illustrates this qualitative case study. Although students did not compose a thousand words, they expressed themselves through both art and written words. With my years of teaching primary students forming the basis of my interest in this area, I designed a qualitative case study exploring how visualization embedded in the writing process can influence struggling learners.

Through drawing and writing I determined a student's cognitive stage of development. A student's stage of artistic development reflects their writing level. This information provides teachers insights to understand their students at a deeper level. Understanding each student's stage of artistic development helped increase understanding of each student's cognitive stage and

served as an indicator of the student's writing level. As Jensen (2001) said, "Of all the effects on cognition, visual arts seem to be strongest when used as a tool for academic learning" (p. 58).

If a student's imagination propels him or her to seek knowledge, then it is the teacher's duty to harness that imagination and provide outlets for both expression and communication. Visualization invites students to use their imaginations to draw. Through drawing the student conceptualizes what to write. If a student takes the time to conceptualize what to write, then the student takes ownership of the subject. The Ideas trait increased for students in both camps compared to the base line assessments. As a classroom teacher, developing an idea about which to write was the hardest trait to teach. I knew if the students developed one idea about which to write, the remaining traits would follow through mini-lessons and conferences.

When drawing was part of the writing process, students referred to their pictures and became inspired to write. Students did not forget what they were writing after a day has passed. They could quickly refer to their drawing and reread their words to determine what to write next. Referring back to the drawing may help keep each student focused and thus ultimately reduce the time and frustration a teacher spends trying to get the student to regain his or her focus.

Visualization embedded in the writing process incorporates many best practices. Field experiences provide real-world opportunities to learn. The review of digital photographs helps with recall. Drawing and writing addresses various learning styles and intelligences. Working together to draw and write promotes collaboration and a sense of community. Teachers provide one-on-one feedback and encourage students to draw and write. Students choose what to write from their learning experiences. These activities add to the student's schema about the subject creating a sociolinguistic experience (Vygotsky, 1978).

Providing a student-centered, purposeful learning experience is what it means to be a highly qualified teacher. This exploration on how visualization embedded in the writing process validated my teaching practices for the past four years. Perhaps it was the increase of Six-Trait scores in the primary writing camp and the increase of Ideas and Conventions scores in the intermediate camp which convinced me how visualization embedded in the writing process can influence a struggling learner. Truthfully, I believe it was the students themselves and their authentic words which showed me my research was noteworthy. Sierra, a first grader, commented, "It's fun to use your imagination because you gets to write about what you wants too," which made me realize students even in first grade do not always get to choose the topic

about which to write. Adam, a fourth grade boy said, “I usually don’t write much. I’ve never went to summer school before, and my writing has changed because we are starting to write more.” If the student comments were not enough to make me realize the importance of this research, the teachers’ reactions were. Teachers who were originally not interested in using this method said this experience opened their eyes to a new way of instruction and has changed their way of thinking and their teaching strategies for the next year.

As I reviewed the data, I looked at the photographs I had taken during the summer writing camp to help me recall the events. I realized I mirrored the same process as the students when they went to the board in the front of the room to look at the pictures taken from their field experiences. They would take the pictures back to their seats and begin drawing and writing. Here, I was writing a dissertation incorporating the same process they were. Visualization influenced my ability to write this dissertation.

Donald Graves (1983/2003) reported that writing is not given a lot of attention because little time is given to writing. The summer writing camp provided time to teach writing. Struggling students who did not like to write may have regained their interest through visual field experiences and drawing. The time to brainstorm, develop drafts, collaborate with others, and engage in teacher conferences provided the support structure for struggling students.

Reading Today (Cassidy & Cassidy, 2008) reported writing as “what’s not” and “should be hot” on the “What’s Hot List” for the second consecutive year. However, one item that is always hot in the educational world is how to help struggling learners. Visualization may be a defining tool to use to scaffold struggling writers—creating more independent writers. With the mandates of NCLB (2001), schools are pressured to meet AYP. Educators cannot afford to overlook innovative research-based practices which integrate several disciplines and learning styles. Visualization embedded in the writing process influences our youngest learners. Writing is a necessary skill to be had by the “many.” When educators use the power of visualization embedded in the writing process to teach struggling students how to write, they provide students with the tools to communicate and empower while empowering them to be independent and successful in their environment.

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Appendix A - Summer School Documents

A-1 Summer School Program Flyer

USD 475 Summer School 2007

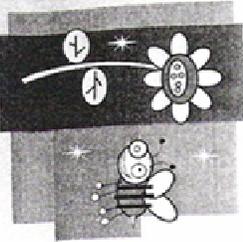
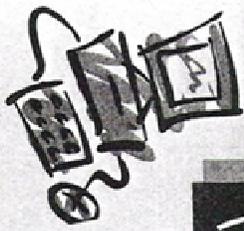
Camp Imagination is the name for the 2007 USD 475 Summer School Program. Campers are invited to participate in Camp Imagination through the recommendation of their classroom teacher. Choices of camps include: technology, mathematics and science, writing and dramatics.

Cost: \$10

Call your school today or call the USD 475 District Office at 717-4000 for more details!





USD 475 Summer School Program

June 6-29, 2007

Summer School Sites:
 Lincoln Elementary
 Washington Elementary
 Ware Elementary
 Custer Hill Elementary

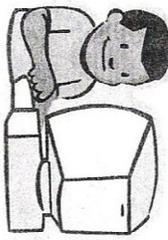
Kindergarten-4th Grade Students

Call your school for details!

Call your school or phone 785, 717-4000 for details!

**The Power of Storytelling Through Technology—
Camp "Tech Me a Story"**

Camp-ers will learn to use digital cameras, video cameras, music and web based technology tools to choose and plan out a project of their choice to tell their own stories. Final project is a presentation to other technology campers.



Camp Olympics
With a focus on measurement skills, campers apply their

mathematics and science learning in "hands-on" nutrition, body awareness and fun sports activities. Learn to take your heart rate while participating in games, sports and other activities.

Camp Writing!

Do you love to write? Love using your creative skills? Campers will have study community changes and growth through writing projects. "On the job" training will be provided through "being there" field trip experiences.

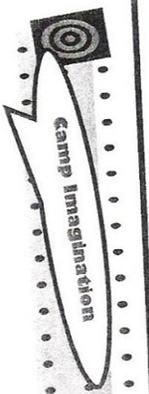
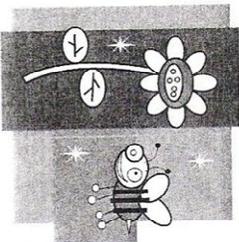


Lincoln/Custer Hill camps:

- Camp Bugz
- Camp Writing
- Washington/Ware camps:
- Camp Tech Me a Story
- Camp Olympics

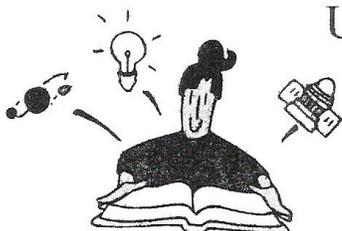
If you love drama, come to

Camp Bugz! Campers will have fun participating in the "Bugz" play. Learn what goes on in putting on a play from acting to building props and even advertising for the play!



- Summer School Sites:
- Lincoln Elementary
 - Washington Elementary
 - Ware Elementary
 - Custer Hill Elementary

A-2 Summer School Application



USD 475 Summer School Camp Imagination Enrollment Form June 6 – June 29, 2007

1. Please indicate with an "x" choices for student:

Summer School Academic Program (*a.m.* only)

Indicate your camp choices using "1" as your first choice and "4" as your last choice:

_____ Drama (Camp Bugz) _____ Camp Writing _____ Camp Olympics _____ Camp "Tech Me A Story"

OR

Full Day program (*a.m.* Summer School Academic Program - *p.m.* is Boys/Girls Club Enrichment program. ***For Full Day program, complete both sides of the form.***)

2. Student Name _____ 3. Grade _____

4. Parent Name _____

5. Home Phone _____ 6. Work Phone _____

7. Address _____

8. Emergency Contact Name _____

Emergency Contact Phone _____

9. Teacher during the regular school year _____

10. Does your child receive any special services? _____

11. Will your child need to have the school dispense medications during Summer School hours? _____ yes _____ no (if yes, please indicate medication) _____

12. Please list any special health concerns: _____

13. Does your child attend Youth Services in the summer? _____ yes _____ no

To hold a place for your child, please return to the school office by Friday, May 4, 2007.

Parent Form

A-3 Sample Lesson Plans (Primary & Intermediate)

Primary Camp Lesson Plan: Tuesday, June 19

8:00 Sharpen pencils. Get journals ready. Post any words or pictures that will help with journals. Make any needed copies or gather any materials for that day.

8:35 Instruct kids to write in their journals about their animal, maybe what their animal would do in the wild, or what it likes to eat or play. Name the animal based on what it looks like. Students should draw a picture and try to write what the picture is about. Assist students who need help with spelling. Write at the bottom of the page what the child means to write if it is illegible.

8:50 Share 1 or 2 journal entries.

9:00 Instructional lesson: Students write a description of animal created using different types of media.

Obj: Student writes several complete sentences about one idea. Student presents art work and explains how and why it was created.

Anticipatory set: Showcase dried art pieces on shelf of white board for students to view. Show teacher-made art work, and describe how it looks.

Teaching Input: Make a word wall of descriptive words.

Modeling: Show how to use word wall and artwork to write three sentences about the animal.

Check for understanding: Have several students repeat directions and purpose.

(Allow children to begin. Pass materials out such as lined paper, art work, and pencil) To extend lesson have students write about a habitat for animal using cardboard or tag board. Group students according to ability. Low= 2-3 sentences. Medium= 2-4 sentences. High= 1 to 2 paragraphs.

Question: With small group ask students how they use their artwork to help them visualize and write sentences. Record observations in journal.

Closure: Students share their animals and their writing. Create a chart “How Was I A Good Author Today.” Review purpose of writing using descriptive words.

Intermediate Camp Lesson Plan: Friday, June 22

8:00 Sharpen pencils. Get journals ready. Post any words or pictures that will help with journals. Make any needed copies or gather any materials for that day.

8:35 Instruct kids to write in their journals about their favorite field trip and tell why if they can. Assist students who need help with spelling. Write at the bottom of the page what the child means to write if it is illegible.

8:50 Share 1 or 2 journal entries.

9:00 Instructional lesson: Students write riddles for their animals they created.

Obj: Students brainstorm one idea to write about. Student describes qualities among different forms of art works.

Anticipatory set: display pictures of all their field trips and experiences.

Teaching Input: Tell students they will use the pictures we have taken, use their journal entries or other writings (already photocopied) and books we have read to make posters about our writing camp to refresh our memories. Posters should partly be made and have students help you finish them.

10:15 Modeling: Show how to use one poster to select your favorite memory and use the pictures, books, and journal pages to explain why. Draw a picture of their favorite memory.

Check for understanding: Have several students repeat directions and purpose. (Allow children to begin. Pass materials out like riddle blank book.)

Question: With small group ask students how they use their artwork to help them visualize and write sentences. How does drawing help them remember their ideas? Record observations in journal.

Closure: Students share their favorite camp memory and drawing. Create a chart “My favorite camp memory.” Review purpose of taking this one idea to make to take it through the publishing process.

Appendix B - Pilot Exploration

B-1 Flint Hills Writing Project Flyer

SUMMER INSTITUTE FOR STUDENTS

Because Writing is a Good Thing!

Who: Students in grades first through fifth.
What: Intensive Writing workshop through the
Flint Hills Writing Project of Kansas State
University
When: 9:00 a.m. to 12:00 p.m. July 10-13
Where: Bluemont Hall 321. KSU. Manhattan, KS

A limited number of spaces are available. The fee for the four half day writing festival is \$35, to be paid with the application. To register mail the application, a check, and a paragraph explaining why you'd like to participate to the address below. Registration is due by June 15, 2006. The application fee will be refunded to anyone not accepted to attend. Participants will receive a T-shirt.

For more information email: czg6644@ksu.edu.



Name: _____
Address: _____
Phone: _____ 06-07 Grade: _____
School: _____
Adult T-shirt size: _____
Email address: _____

Mail form, paragraph, and \$20 per student to: Chris Goering
Kansas State University
1100 Mid Campus Drive
Bluemont Hall 347
Manhattan, KS 66502

Make checks payable to Flint Hills Writing Project

B-2 Flint Hills Writing Project Student Samples

My favorite ^{cookies are} chocolate _{dip}

CUCUMBERS

OR

huckleberries

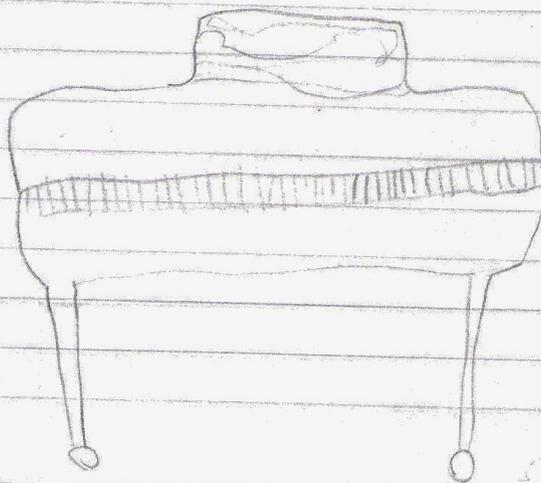


Date _____

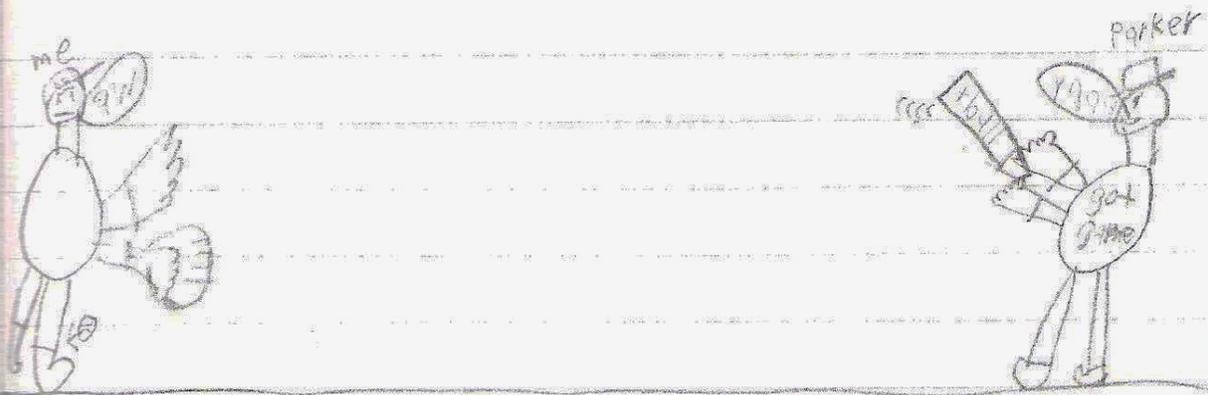
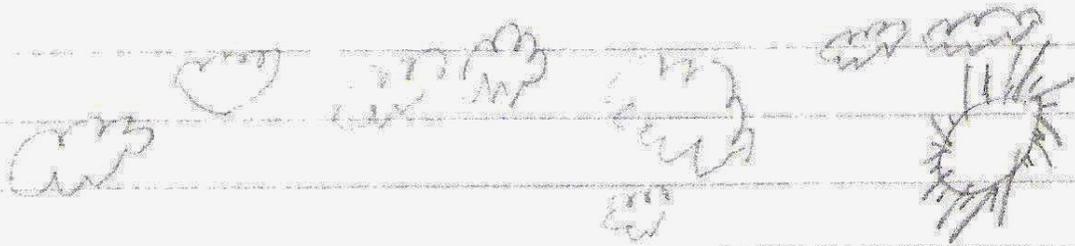
The Piano

Hi. My name is Hannah
Glasgow, and I play the Piano.
There are many kinds of Pianos.
And I love all of them.

Do you play the piano? If you
do, good for you. If you don't,
I'm positive that you would.



One time I brack my leg and did not now it and it was bring tball and did not hav a Kast and I did not cry.



Appendix C - IRB Documents

C-1 Research Site Permission Letter



Lincoln Elementary School

300 Lincoln Dr., Junction City, KS 66441
Phone: (785) 717-4570 Fax: (785) 717-4571

Samrie Devin, Principal

March 26, 2007

Dear Sir/Madam,

Erin Jurand has permission to conduct qualitative research at Lincoln Elementary. If you have any questions regarding this letter please contact me at 785-761-4570.

Thank you,


Samrie Devin



C-2 IRB Approval Letter



University Research
Compliance Office
203 Fairchild Hall
Lower Mezzanine
Manhattan, KS 66506-1103
785-532-3224
Fax: 785-532-3278
<http://www.ksu.edu/research/comply>

TO: Marjorie Hancock
Elementary Education
246 Bluemont Hall

Proposal Number: 4318

FROM: Rick Scheidt, Chair
Committee on Research Involving Human Subjects

DATE: May 30, 2007

RE: Approval of Proposal Entitled, "Igniting Images: Visualization in the Writing Process."

The Committee on Research Involving Human Subjects has reviewed your proposal and has granted full approval. This proposal is **approved for one year from the date of this correspondence, pending "continuing review."**

APPROVAL DATE: May 30, 2007

EXPIRATION DATE: May 30, 2008

Several months prior to the expiration date listed, the IRB will solicit information from you for federally mandated "**continuing review**" of the research. Based on the review, the IRB may approve the activity for another year. **If continuing IRB approval is not granted, or the IRB fails to perform the continuing review before the expiration date noted above, the project will expire and the activity involving human subjects must be terminated on that date. Consequently, it is critical that you are responsive to the IRB request for information for continuing review if you want your project to continue.**

In giving its approval, the Committee has determined that:

- There is no more than minimal risk to the subjects.
 There is greater than minimal risk to the subjects.

This approval applies only to the proposal currently on file as written. Any change or modification affecting human subjects must be approved by the IRB prior to implementation. All approved proposals are subject to continuing review at least annually, which may include the examination of records connected with the project. Announced post-approval monitoring may be performed during the course of this approval period by URCO staff. Injuries, unanticipated problems or adverse events involving risk to subjects or to others must be reported immediately to the Chair of the IRB and / or the URCO.

C-3 Parent Information Letter

Dear Parent,

I am writing to ask your permission to allow your child, _____, to participate in a research project titled, "Igniting Images: Visualization in the Writing Process". The purpose of this project is to explore how visualization in the writing process connects to developmental thought processes.

This study will allow me to observe children during their summer writing camp to see what types of activities they participate in that connect drawing with literacy. Over a period of several weeks (June 6 – June 29, 2007), I will observe how teachers and students engage in visualization in the writing process. I will take notes and occasionally videotape the activities to accurately record group activities. I may also ask the students their ideas about visualization and ways drawing may help them learn or remember ideas.

Your child's school has been selected due to its excellent literacy instruction and the support of experienced teachers and administration. This project is at no cost to you or your family. No part of this report or videotapes will be published, presented, or placed on the internet without your expressed written consent. If in the future a journal publication or conference presentation is given over what is learned from this study, your child's name and the location of this study will not be revealed.

In order for this study to begin, I am asking that you sign the attached parental informed consent letter and return it to me in the enclosed envelope. You may drop it in the mail or return it to school with your child. If you have any questions at any time during this project, please do not hesitate to call me at home (717-3037) or at my cell (209-0634) or e-mail me ejurandt@ksu.com. You may also contact Dr. Marjorie Hancock at 532-5917 or at mrhanc@ksu.edu. Additionally, if you have further questions about your child's participation in this project, you may contact Dr. Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, Kansas State University, Manhattan, KS 55606, 785-532-3224.

Thank you so much for allowing your child to participate in this study. I look forward to spending time in his/her classroom!

Sincerely,

Erin Jurand
College of Education
Kansas State University
246 Bluemont Hall
1100 Mid-Campus Drive
Manhattan, KS 66506

C-4 Parent Informed Consent Form

I have read the Parent Information Letter from Erin Jurand and understand the project **Igniting Images: Visualization in the Writing Process** is a case study in which she will be exploring the use of visualization (drawing) in the writing summer camp, especially as it pertains to writing instruction.

I voluntarily agree to allow my child, _____, to participate in this study. It is my understanding that the purpose of the project is to describe the use of visualization as it is related to writing instruction. I understand that my child may be asked how drawing helps him/her become a better writer. His/her name will **not** be used in any report of this study. I also understand that some writing lessons may be videotaped in order for activities to be accurately documented. All videotapes will remain the property of Erin Jurand and will **not** be published, presented, or downloaded to the Internet without additional written consent. If I have any questions or concerns, I may contact Erin Jurand at home (785-717-3037) or at her cell phone (785-209-0634) or e-mail her at ejurand@ksu.edu. I may also contact Dr. Marjorie Hancock at her office (785-532-5917) or by e-mail at mrhanc@ksu.edu. Furthermore, I may contact Dr. Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, KSU, Manhattan, KS 66506 (785-532-3224).

Signature of Parent/ Guardian

Date

PLEASE RETURN THIS FORM IN THE ENVELOPE PROVIDED

C-5 Teacher Informed Consent Form

PROJECT TITLE: Igniting Images: Visualization in the Writing Process

PRINCIPAL INVESTIGATOR: Dr. Marjorie Hancock

CO-INVESTIGATOR(S): Erin Jurand, ejurand@ksu.edu

CONTACT NAME AND PHONE FOR ANY PROBLEMS/QUESTIONS:

Dr. Marjorie Hancock,

246 Bluemont Hall, 785-532-7304, mrhancok@ksu.edu

IRB CHAIR CONTACT/PHONE INFORMATION: Rick Scheidt: 785-532-3224

PURPOSE OF THE RESEARCH: To observe how students and teachers use visualization in the writing process to connect to the developmental thought process to increase Six-Trait Analytical scores.

PROCEDURES OR METHODS TO BE USED: Researcher will be observing the summer writing camp from 8:30-11:30 Monday through Friday for four weeks. Fieldnotes will be recorded. Occasionally, video-taping of group activities will also be done in order to document student participation and engagement. Brief teacher interviews will be videotaped in order to assure accurate recording of teacher comments. Children will be asked questions regarding how drawing helps them think and write. Observations and interviews will occur at times mutually agreed upon by the teachers and researcher.

LENGTH OF STUDY: Summer 2007: June 6- June 29, 2007 There are no anticipated risks from this study. No intervention is to be implemented. This case study is observational in nature and researcher will be an observer, not a participant.

TERMS OF PARTICIPATION: I understand this project is research, and that my participation is completely voluntary. I also understand that if I decide to participate in this study, I may withdraw my consent at any time, and stop participating at any time without explanation, penalty, or loss of benefits, or academic standing to which I may otherwise be entitled.

I verify my signature below indicates that I have read and understand this consent form, and willingly agree to participate in this study under the terms described. My signature acknowledges I have received a signed and dated copy of this consent form.

Name of Participant:

Signature of Participant:

_____ Date: _____

Appendix D - Data Collection and Analysis Samples

D-1 Sample Fieldnotes

Thursday, June 14, 2007

7:55 a.m. arrived to school. Spoke with LY about new direction. I will start lesson plans next week and send home a weekly report to parents about their child's progress.

Comment [J1]: Teachers needed more guidance, participant observer

8:30 get students

Talked to CB about how tos. She could not find a how to book and I offered to model how to make a worm farm, if someone could help me chart and illustrate. She agreed. Asked volunteer to help find dirt.

Comment [J2]: Modeled lesson, instruction, participant observer

8:50 2-4 classroom. Students talking with table partners about what they saw at the Konza Prairie. Students share what they saw. Today's mini lesson is about comparing two objects to create a simile.

Comment [J3]: Oral conversations, brainstorming

Teachers modeled how they saw a 150 year old tree and how the bark was brown like dead grass.

Comment [J4]: Mini-lesson, writing process, instruction, share what they saw, community, brainstorming

Students begin to share about what they saw and try to create a simile.

Comment [J5]: Modeling, instruction, mini-lesson word choice

I notice DO is crying and is very upset. RM told her to participate and she said she did not have anything she could not think of anything. She began to tear up. I asked her what was wrong she said nothing. So, I asked her what was her favorite thing she saw. She replied the 150 year old tree. I told her and two boys the story of a 200 year old tree in Austin called Treaty Oak.

Comment [J6]: Emotional, needy child

HJ says a turkey was fast

RM: Fast as what? What can you compare it with? A boy shouted out cheetah.

Comment [J7]: Community of learners, environment help each other

The students share their similes with their partner.

Comment [J8]: Cooperative learning, sharing, partner building

LY: Instructs students on how to use the sentence amplifier to make their sentences stronger and longer.

Comment [J9]: Tool to help students make longer sentences, visual

She calls DA up to share his writing. She comments on his drawings and how he wrote about a sentence about each drawing. He used his visualization to help him write.

Comment [J10]: Sharing, community of writers, learners

Comment [J11]: Positive reinforcement for using visualization

Let me show you KM. She shows his picture and how he only drew about the position ivy. He chose one topic to write about. The students said he wrote about poison ivy. Yes, he wrote one really good descriptive paragraph about poison ivy.

Comment [J12]: Ideas, drawing matched writing

Comment [J13]: Descriptive, word choice

K: reads his paper. He read out loud and inserted a word that he missed. LY: uses the sentence amplifier to help amplify the sentence. She turns it to why. Why was the grass wet? He answered because it was raining.

Comment [J14]: Used picture to help him elaborate

LY: she chooses one more. Let's look at HJ's picture. Let the students tell us. The students say flowers, trees, LY: says I see orange flowers what kind of flowers? Butterfly Milk weed. HJ said she also drew cat's claw and six poison ivy plants with three leaves. She drew the 150 year old oak tree. One more thing, a bridge. LY: What is missing? Why did we go over the bridge? HJ answers the water. LY: Says can you add the water? HJ says yes.

Comment [J15]: Very specific, high inserts, idea from experience

Comment [J16]:

Comment [J17]: Perhaps developmental, add?

HJ asks to read her story. LY: asks her what color were the flowers. HJ answers the pom poms were purple. She says she forgot and goes to the chart to look at the flowers charted. The butterfly milkweed is orange and black.

Comment [J18]: Visual environment, looks at chart

LY: Instead of saying I saw lots of flowers. She is going to revise I saw orange and black flowers called butterfly milkweed. I saw purple flowers called cat's claw.

Comment [J19]: Revised writing after sharing, looking at chart, visual environment helped her revise

10:00 end of lesson students go to library.

Finish attendance sheet for k-1. Copy rubrics for 2-4.

10:30 Talk to 2-4 group about rubrics. RM took notes for me. Explained how to get a 4,3,2,1.

Comment [J20]: Materials, expectations, learning environment

10:45 join k-1 group in lounge. CS is leading a lesson on how to make a s'more. She tells the steps orally and students make s'mores. Students eat s'mores. CS: asks what the lesson was. Students especially SJ shouts out eat it! AP microwaves s'mores because the sun is not out for the ovens. EB: takes pictures and asks them if this is a delicious treat. CS: Passes out napkins. Students are shouting out I have messy hands. I am thirsty. Look at my hands. Is there chocolate on my nose?

11:00 join 2-4 group in the secret tents with Mrs. MB. HJ is not concentrating. I ask her if she is going to get a 4,3,2, or 1. She says 4. I remind her that to get a 4 you do not get distracted. She gets started. AP is writing across from her. There is a bunny in between them.

D-2 Original Questions for Guided Conversation

1. How has your work changed since the beginning of camp?
2. What helped you get new ideas?
3. What problems did you have doing your art work?
4. How did you solve any problems you had?
5. What problems did you have in doing your writing?
6. How did you solve any problems you had?
7. What did you learn about writing you didn't know before?
8. What else would like to learn about making pictures?
9. What else would you like to learn about writing?
10. What did you learn from your classmate?
11. Which drawing showed more of your thinking? Give evidence in the art work. Give evidence in your writing. (Which drawing shows a lot of details? Can you show me? Can you point to the picture? Can you show me the words?) 1st and 2nd grade
12. Which is your best picture? Why?
13. Which is your best writing? Why?
14. How you think your art work helped with your writing?
15. How you think your writing helped with your artwork?
16. How do you think you will use drawing to help you as a writer next year?

D-3 Revised Primary Questions for Guided Conversations

1. Which one is your favorite drawing? Can you tell me why.
2. Which piece is your favorite writing? Can you tell me why.
3. Explain why or tell how you drew the pictures before you write.
4. How does art or drawing help you be a better writer?

D-4 Interview Face Sheet

(Complete before conducting interview with teacher)

Name:

Job description:

Years of experience:

Schools taught in:

Writer's workshop experience of the teacher?

Art experience of the teacher?

Additional comments?

D-5 Classroom Teacher Questions

Protocol: videotape turned on after obtaining permission for interview.

1. Please tell me about the summer writing camp?
2. What are your thoughts about using visualization before writing?
3. How does drawing affect students' writing abilities?
4. How do the children respond to the art being integrated?
5. How have the students' conversations changed after introducing visualization?
6. How can visualization be incorporated in the classroom during the school year?
7. What benefits do you see the most with summer writing camp?
8. Any additional questions or thoughts?

D-6 Sample Student Interview Transcript

Transcript:

This is Monday, June 25th and we are with Miss SJ. SJ, what grade are you going to go into?

S: Second.

Second grade, you know I used to teach second grade?

S: No.

Yes, it was my favorite thing to teach, second grade. You could have been in my class.

S: I want to be in your class next year.

You do?

S: Except I am going to Eisenhower.

Well, I have a friend who works at Eisenhower. I'll put in a good word for you okay. Alright SJ, I am going to ask you some questions and I just want you to do the very best okay? The first one is, which one is your favorite drawing and can you tell me why? It can be anything in your journals or any of your other art pictures. So which is your favorite drawing and tell me why.

S: My favorite drawing is when I draw the spider. I made the spider because it was really fun.

Comment [J1]: Draw spider, experience at Milford, likes to draw because it is fun, attitude

Can you talk about maybe some of the things you've done there?

S: My spider lives in Hawaii and I'm chasing it.

Comment [J2]: Made a narrative story out of her learning about the spider

You said it was fun. What made it fun?

S: Because I got to use my imagination.

Comment [J3]: Uses her imagination, that is why it is fun

Can you explain that to me?

S: It's fun to use your imagination because you gets to write about what you wants too.

Comment [J4]: Using your imagination, free to write what you want, fun, motivation

Do you think that makes you a better writer when you write about what you want too?

S: Yes.

What if a teacher gave you something to write about, which is more fun?

S: I'd say both.

If I were to say write about something or if you were to create something, which would be better?

S: Create.

Comment [J5]: Likes to create things, creative

Why?

S: Because creating is much more fun. Sometimes you get to use your imagination.

Comment [J6]: Creating is fun because you can use your imagination

Why is that fun, to use your imagination?

S: Because you gets to write about fun things that never happened.

Comment [J7]: Make up your own story, creative, freedom

Is it easier to write about things using your imagination?

S: Yeah because you can just imagine something that you wants to do. And sometimes too, I like to use my imagination a lot that's why I always write in my journal everyday at home.

Comment [J8]: Literacy practice at home, imagination lets you be creative

You do?

S: Everyday before I go to bed.

Comment [J9]: Writes in journal nightly, good literacy practices

You'll have to bring it to me and show me. (Pause for rambling)

Okay, so we talked about what your favorite drawing was, can you tell me which is your favorite writing and why?

S: My favorite writing was when I went to the nature center because we gots to see a snake.

Comment [J10]: Experience at Milford

Can you show me that piece? Can you talk to me about it?

S: It says, "I say a anaconda at the nature center and it.....I touched it."

Comment [J11]: Did not see or touch anaconda, using imagination

Oh, you touched it.

S: Yep, and it feeled kind of soft to me.

Comment [J12]: Touched snake, tactile

You can even add that to your writing. So what is this a picture of here?

Comment [J13]: Revising, conferencing, conversation

D-7 Sample Teacher Interview Transcript

Transcript:

Before we get started I just want to make sure I have your permission to videotape you?

L: You do.

Okay, please tell me about the summer writing camp.

L: Okay, let's see...the writing camp we had between 16 and 21 students daily. I think our average was probably 17 for the last 3 ½ weeks. Writing camp is to make students better writers and we were trying to do that through visualization during this time. The concept of visualization was new for me because I teach the upper grade levels. We use a lot of graphic organizers so I can't say that I've made them put pictures into those graphic organizers instead of words but I think the concept of visualization is very powerful. I could see in the future how I could use it. I have used it in my vocabulary exercises at school. We've drawn pictures and visualized but not in my writing process. But I got off topic there, sorry. Writing camp was about teaching students to visualize before they write hopefully helping them become better writers through that process. I feel like for some of them, we've given them a new tool to work with, especially if they are in the upper grades. I don't know that upper grade teachers use that tool as much as it could be used. So for myself as a teacher, I found it very beneficial and I think that would be a tool I would use in the future, if I was going to be in the classroom next year. But I will be from time to time. I will teach reading next year so that will be a tool that I can use with the younger...I'll be teaching younger kids. It will be something that I use more.

Comment [J1]: Attendance

Comment [J2]: Was this higher than normal?

Comment [J3]: Understands purpose of camp

Comment [J4]: Visualization new idea for her, maybe it is only used more at the lower grades?

Comment [J5]: Graphic organizers may be what visualization looks at a higher level

Comment [J6]: Feeling about visualization

Comment [J7]: Future use

Comment [J8]: Visualization in vocabulary lessons

Comment [J9]: Has not used visualization in writing process

Comment [J10]: Goal is for the students to become better writers

Comment [J11]: Visualization a tool for struggling writers

Comment [J12]: Thinks tool is beneficial at upper levels

Great. What are your thoughts about visualization before writing?

Comment [J13]: Believes will use visualization more with younger students

L: I think that visualization helps students to see it in their mind. Hopefully to put things in order because I know that after an event or a field trip, when we made them visualize, it really made them think about what happened. I think it helped with sequencing. It helped them with recall and they even said that on our writing...

Comment [J14]: See it in mind

Comment [J15]: Put things in order after an event, sequence

Comment [J16]: Sequencing a form of text structure

Comment [J17]: Visualization helped recall information

Oh yeah. I can't wait to see what they wrote.

L: Wait until you see what they wrote.

I am so excited. I saw theirs and was like wow.

L: Someone says, "Writing is imaginative." They used three different ways of using the word imagination; they said imaginative, imagination,

Comment [J18]: Imaginative, for writing is-could this be josh

and imagine. Three different people used that but no one used visualization. They used that and someone said, "It helped me remember," and so I think that it is a tool to help them remember. So yeah, I think it is a tool to help with sequencing and details of events.

Comment [J19]: The word imagination in three different ways in writing is poem

Comment [J20]: Kids did not use the word visualization, maybe not taught as much, but did use imagination

Comment [J21]: Remember, writing helped them remember, a tool

Comment [J22]: Visualization is a tool for sequencing, details

Comment [J23]: Teachers must know the right questions to ask

Comment [J24]: Believes must teach students to look at picture to help them write

How does drawing affect student's writing abilities?

L: Well, I think if you know as a teacher the right questions to ask, I really think that you can help them to look into that picture more which will help eventually in the writing. For example, and you and the other teachers helped me with this, when they're writing about something and they've drawn other things in the picture I know at first we were saying, "Well look, you drew this up here, how come you didn't write about that?" So I think it is a tool to help them to write more, or express themselves more because they can tell about everything they've drawn. We did work on that. We worked on talking about everything in the picture then we talked about zooming in and being descriptive of one thing in the picture.

Comment [J25]: What they drew in the picture, should be written on paper, write more, details

Comment [J26]: Drawing helps express thoughts I written word

Comment [J27]: Mini lessons on talking about everything in picture

Comment [J28]: Mini lesson on zooming in to one thing on the picture

Yeah, I really like those pieces.

L: The zooming in was fun. Of course the other pieces we did were more broad, you know, we were trying to get a more broad idea, an overall idea. I think we could have used, with those pieces, maybe some graphic organizers where they could have drawn and to organize their thoughts better maybe. Something we did not do. Of course when you are in summer school you are working with someone you've never worked with before. You're learning how to jell, how everything works together. But last week, things really started coming together and I can sure see, if we were to start over again at this point, some sure different things that we could have done to make it really incredible. Like dividing up the kids and saying, "These belong to you, these belong to me." We didn't do that and I think that would have helped you too. Did I even answer the question "Did drawing affect students' writing ability?" I think it does help them to visualize, to sequence, and to find more details to write about that subject.

Comment [J29]: Teacher thought zooming in was fun

Comment [J30]: Writing pieces can be broad or specific, matches with drawing activity

Comment [J31]: Believes graphic organizers would help organized thoughts

Comment [J32]: Working with a new teacher is hard, do not feel comfortable to express thoughts

Comment [J33]: After a couple of weeks begin to work well together

Comment [J34]: Sees ways to change camp for the better

Comment [J35]: Create small groups

Comment [J36]: Drawing helps students visualize, sequence, find details, six traits, ideas on paper

Comment [J37]: Kids enjoy art, motivation tool for writing

Comment [J38]: Motivation, more excited to write because art was involved

Comment [J39]: Art is independent and can do on own level, not yet self conscious about art ability

Comment [J40]: Other teacher modeled art work, because other teacher did not feel comfortable, maybe the older you are the less you need to draw your ideas and you lose your art ability

Comment [J41]: Views art as a gift

Comment [J42]: Kids enjoy art, not inhibited, represent ideas through visualization

Comment [J43]: Struggling writers struggle with what to write and write what they think, drawing helps them think, ideas, six traits

How do the children respond to the art being integrated?

L: Oh the kids love it. I think they're a lot more excited about writing, especially this lower group of kids. I think art is something everyone can do on their own level and I don't think at this age they feel intimidated like I would. I am not a great artist. That's why Mrs. M did a lot of our artwork...modeled a lot of our artwork. At this age you realize, "Gee, I don't that gifting." But the kids aren't intimidated and they enjoy it all so they are not inhibited to represent something through visualization. I think integrating art into the writing process is very helpful for them because they do put down what they think. If they cannot write what they're

D-8 Sample Initial Coding

Student	Artistic Stage	Why	Writing Level	Why
Kendrick	Preschematic	6 figures lying on side & didn't show motion. Bridge not grounded to base line; scale of bridge large compared to rest of drawing	Not Yet	I= 1 dictated; O=1 relied on dictation; C=2 wrote left to right w/ letters facing same direction
Brittany	Schematic	Color represents object, uses base and sky line, shapes and objects easily definable	Developing	I=4 used word wall and adjectives; O=3 stayed on topic; C=3 used lower case letters, spaces, sight words correct, left to right writing
Jose	Schematic	Objects place in haphazard way throughout picture, objects are recognizable and begin to show detail	Developing	I= 3 topic is broad but can see where he is going, support is attempted but ideas are not fleshed out; O= 2 no real conclusion, connections between organization supports topic, attempts paragraphs, transitions are limited; W=2 words non-specific and lacked details; S= 3 writes multiple sentences, writes complete sentences some repetitive phrases; C= 3 uses capitals and lower case letters consistently, uses periods and question marks correctly, uses paragraphs to separate ideas

Student	Artistic Stage	Why?	Writing Level	Why?
Jacob	Schematic	Draws on horizon base line, flowers rooted to the ground, color represents nature, turkeys with discernable eyes	Emerging	I= 3 general idea where reader had to infer because of lack of ideas; O=1 no clear sense of direction; V = 3 attempts to connect with audience, expressed personal thought; W =2 writes easy-to-read words, writes decodable words; S= 2 sentences hard to follow & didn't connect well; C= 2 spells many sight words, uses periods often correctly, uses capitals correctly
Beyonce	Schematic	Overlapping of objects, small to large evident, sky line, color represents nature	Developing	I= 3 writer is writing from knowledge, somewhat narrowed topic; O= 3 attempted introduction, conclusion did not tie up story; V= 3 uses we and personal options; W=(3)uses simple familiar words, writes decodable sentences, no figurative language; S= 3 repeats beginning word, invite expressive oral reading; C= 4 indented for paragraph, capital letters correctly and uses punctuation effectively

D-9 Writing Level Continuum



(5) Strong:
Shows control and skill in this trait; many strengths present



(4) Effective:
On balance, the strengths outweigh the weaknesses; a small amount of revision is needed



(3) Developing:
Strengths and need for revision are about equal; about half-way home



(2) Emerging:
Need for revision outweighs strengths; isolated moments hint at what the writer has in mind



(1) Not Yet:
A bare beginning; writer not yet showing any control

Adapted from the Northwest Regional Educational Laboratory (2004)

D-10 Sample Mini-lesson Transcript

Transcript:

RMB: *(using butcher paper at head of classroom)* To find the middle, or divide something into thirds, I want to find the middle of the middle. I am going to put my hand and divide this in half so there are two even spaces. Then I am just going to take one side and find the middle of that. You tell me when I am in the middle; raise your hand when I am in the middle. Yep about here, that's right. So I am going to take my pen right here and mark down like that. Then I am going to pick my hand up and find the middle of this part. Where would that be, you tell me when I get to the middle. Okay, about here, there you go.

Comment [J1]: Using butcher paper to demonstrate how to create an organizer, visual tool

Comment [J2]: Visual and kinesthetic style of learning

Student: The middle part is bigger.

RMB: The middle part is a little bit bigger but that's ok. It gives you an idea about how to find thirds.

Comment [J3]: Space relationship

(moves over to Elmo system) So now I have to label these though. I don't want to have to write out "beginning" I want to make a symbol or a sign that will show that. I could use #1 or a "B". I am going to use a "B".

Comment [J4]: Visual tool

(writes letters on top of boxes which is projected onscreen by the Elmo system.) I am going to put it at the top of the box. Then in the middle box, I could put an "M" and at for the end of the story, I could put "E". Do that now. Check your partner's and see if the person next to you has what you have.

Comment [J5]: Partner work, community

LY *(to KM)* What goes there? *(pointing to KM's beginning box)*

(KM writes a 'B' on his page w/ LY assisting him.) KM, what does this 'B' stand for?

Comment [J6]: Recall directions verbally while pointing to letter

KM: Beginning?

RMB: Do they have that? Is there anybody that needs a hand with that? Do you have that? You need to do that then.

(camera moves to JL who has completed labeling his paper w/ B, M, and E.)

Comment [J7]: Representative student

LY: Very good. What does 'M' stand for JL?

J: Middle

LY: Middle. Draw the middle of our story in here.

Comment [J8]: Recalling directions, reiterating story structure

(camera moves to other students papers and shows them with "B, M, and E" written over the boxes.

RMB: *(pointing to a student's paper)* That looks good, and you have yours labeled already. I like your nice straight lines.
(moves to another student's work) You need to...you have yours all finished. That looks nice.

Comment [J9]: Positive feedback

(moves to another student) Oh good, I can see where yours is labeled at the top.

Comment [J10]: Checking to see if students followed directions

(moves to head of class) Now, I am going to choose one thing to write about and then, you are going to be choosing your own thing when I am finished. So, put down your pencils for a minute please.

Comment [J11]: Modeling how to brainstorm

(points to butcher paper on board titles 'Summer Activities') I am going to look at the summer activities that we brainstormed about. I am going to choose one of my favorite activities, swimming.

Comment [J12]: Uses list of class created ideas to choose what to write about

(points to each activity in turn) I could write a lot about swimming. Playing in the sprinkler, I could write a lot about that. Visiting relatives, yes, weddings, I haven't been to very many weddings so I can't write too much about that. Sea World, I've never been to Sea World so I

Comment [J13]: Think aloud about how to choose the topic that is right for you

D-11 Primary Student Six-Trait Analytical Model Trait Rubrics

Ideas				
1 point	2 points	3 points	4 points	5 points
<ul style="list-style-type: none"> • Makes marks on paper • ‘Reads’ won writing • Invents meaning • Dictates a clear story • Uses art to convey story • Recognizes print has meaning 	<ul style="list-style-type: none"> • Uses words and pictures to express ideas • Likes to come up with personal ideas for writing • Notices details in pictures 	<ul style="list-style-type: none"> • Uses text to create interpretable message • Has clear main idea expressed in more than one sentence • Creates decodable writing 	<ul style="list-style-type: none"> • Creates clear message • Uses multiple sentence to add detail • Connect images to text • Creates fully decodable writing 	<ul style="list-style-type: none"> • Uses multiple sentences to enrich ideas or extend story • Incorporates significant detail to enhance meaning • Creates writing that explains, gives directions, tells a story, describes • Chooses personally important topics

Organization				
1 point	2 points	3 points	4 points	5 points
<ul style="list-style-type: none"> • Fills space randomly • Can dictate sequential story or how-to piece • Can point to illustrations that go with text • Can “hear” beginnings/endings in stories read aloud 	<ul style="list-style-type: none"> • Can create picture and text that go together • Creates layout with more purpose/balance • May use two or more pictures to express story or message 	<ul style="list-style-type: none"> • Consistently creates image and text that complement each other • Stay focused on message • Often creates labels/lists • Can organize recipes, all about and how-to pieces, directions, and simple stories 	<ul style="list-style-type: none"> • Writes multiple sentences or images that suggest development / sequencing • Uses connecting words: first, then, next, once, after, and, but, or, so, because • Uses identifiable beginning and end • Stays focused on message 	<ul style="list-style-type: none"> • Writes a true lead (usually the opening sentence) • Provides closure (usually with final sentence) • Follows logical order, sequence • Creates easy-to-follow text • Uses elaborate transitions: after a while, the next day, because of this

Adapted from *Creating Young Writers*, Vicki Spandel (2004)

Voice				
1 point	2 points	3 points	4 points	5 points
<ul style="list-style-type: none"> • Creates bold lines • Uses colors • Expresses voice in dictation • Responds to voice in text read aloud 	<ul style="list-style-type: none"> • Incorporates voice into art through color, images, etc. • Uses exclamation points/underlining to show emphasis • Uses BIG LETTERS to show importance, strong feelings • Shows preference for text/art with voice 	<ul style="list-style-type: none"> • Uses expressive language • Often incorporates definite tone/flavor • Creates tone that reflects feelings • Puts moments of voice throughout most text 	<ul style="list-style-type: none"> • Writes/draws with personal style • Elicits emotional response from reader • May use conventional devices (exclamation points, underlining) to enhance voice • Shows beginning awareness of audience: use of <i>you</i> conversational tone, direct questions 	<ul style="list-style-type: none"> • Creates lively, engaging, personal text • Is able to sustain voice • Provokes strong reader response • Creates voice that is easy to describe: <i>joyful, funny, moody, sarcastic, fearful, angry, wistful</i>

Word Choice				
1 point	2 points	3 points	4 points	5 points
<ul style="list-style-type: none"> • Scribbles • Creates letter “shapes” • Uses favorite words in dictation 	<ul style="list-style-type: none"> • Labels pictures • Creates letter strings that contain one- and two-letter words • Repeats “comfort” (familiar) words in own text 	<ul style="list-style-type: none"> • Writes easy-to-read letters • Writes decodable words/sentences • Uses many simple, familiar words • Uses sight words frequently • Repeats some words 	<ul style="list-style-type: none"> • Writes easy-to-read words • Writes with variety – dares to try new, less familiar words • Uses some strong verbs • Uses words to create images or add clarity, detail 	<ul style="list-style-type: none"> • Uses vivid, expressive language • Writes with vocabulary that may well extend beyond spelling ability • Uses many strong verbs • Repeats words only for emphasis / effect

Adapted from *Creating Young Writers*, Vicki Spandel (2004)

Sentence Fluency				
1 point	2 points	3 points	4 points	5 points
<ul style="list-style-type: none"> • Dictates sentences • Enjoys poetry, rhythmic language 	<ul style="list-style-type: none"> • Creates letter strings that suggest sentences • Writes text with a “sentence look” that may not be translatable • Dictates multiple sentences 	<ul style="list-style-type: none"> • Writes letter strings that form readable sentences • Writes more than one sentence • Usually writes sentences that complete a thought • Favors patters in sentences (<i>I can play. I can fly</i>) 	<ul style="list-style-type: none"> • Consistently writes multiple sentences • Writes complete sentences • Creates easy-to-read text • Begins to show variety in sentence lengths, patterns, beginnings 	<ul style="list-style-type: none"> • Can write two paragraphs or more • Consistently writes in complete sentences • May use fragments for effect • Creates text that is easy to read with expression

Conventions				
1 point	2 points	3 points	4 points	5 points
<ul style="list-style-type: none"> • Does not use recognizable conventions in own text • Can point to conventions in print • Plays with letter or number shapes 	<ul style="list-style-type: none"> • Writes own name • Writes one to several sight words • Creates letters that face the correct way • Often writes left to right 	<ul style="list-style-type: none"> • Uses capitals and lower case – not ALWAYS correctly • Uses periods, commas, question marks, and exclamation points • Puts spaces between words • Creates readable, phonetic versions of harder words • Writes left to right 	<ul style="list-style-type: none"> • Uses capitals and lower case with fair consistency • Uses periods, commas, question marks, exclamation points correctly • Correctly spells ever-growing range of sight words and some challenging words • Writes left to right, notices margins 	<ul style="list-style-type: none"> • Uses wide range of conventions skillfully and accurately • Creates easy-to-read text with few errors • Uses paragraphs, often in the right places • Spells most sight words and many challenging words correctly • Writes left to right and respects margins

Adapted from *Creating Young Writers*, Vicki Spandel (2004)

D-12 Intermediate Student 6+1 Writing Trait Rubrics

Ideas		
1 point	3 points	5 points
<p><i>As yet, the paper has no clear sense of purpose or central theme. To extract meaning from the text, the reader must make inferences based on sketchy or missing details. The writing reflects more than one problem:</i></p>	<p><i>The writer is beginning to define the topic, even though development is still basic or general.</i></p>	<p><i>This paper is clear and focused. It holds the reader's attention. Relevant anecdotes and details enrich the central theme.</i></p>
<ul style="list-style-type: none"> • The writer is still in search of a topic, brainstorming, or has not yet decided what the main idea is. • Information is limited or unclear or the length is not adequate for development. • The idea is a simple restatement of the topic. • The writer has not begun to define the topic in a meaningful way. • Everything seems as important as everything else; the reader has a hard time sifting out what is important. • The text may be repetitious, or may read like a collection of disconnected, random thoughts with no discernable points. 	<ul style="list-style-type: none"> • The topic is fairly broad; however, you can see where the writer is headed. • Support is attempted, but doesn't go far enough yet in fleshing out the story line. • Ideas are reasonably clear, though they may not be detailed, personalized, accurate, or expanded enough to show in depth understanding or strong sense of purpose. • The writer seems to be drawing on knowledge or experience, but has difficulty going from general observations to specifics. • The reader is left with questions. More information is needed to "fill in the blanks." • The writer generally stays on topic but does not develop a clear theme. The writer has not yet focused the topic past the obvious. 	<ul style="list-style-type: none"> • The topic is narrow and manageable. • Relevant, telling, quality details give the reader important information that goes beyond the obvious or predictable. • Reasonably accurate details are present to support the main ideas. • The writer seems to be writing from knowledge or experience; the ideas or fresh and original. • The reader's questions are anticipated and answered. • Insight – an understanding of life and a knack for picking out what is significant – is an indicator of high level performance, though not required.

Adapted from the Northwest Regional Educational Laboratory (2004)

Organization		
1 point	3 points	5 points
<p><i>The writing lacks a clear sense of direction. Ideas, details, or events seem strung together in a loose or random fashion; there is no identifiable internal structure. The writing reflects more than one of these problems:</i></p>	<p><i>The organizational structure is strong enough to move the reader through the text without too much confusion.</i></p>	<p><i>The organization enhances and showcases the central idea or theme. The order, structure, or presentation of information is compelling and moves the reader through the text.</i></p>
<ul style="list-style-type: none"> • There is no real lead to set-up what follows, no real conclusion to wrap things up. • Connections between ideas are confusing or absent. • Sequencing is random and needs lots of work. • Pacing feels awkward; the writer slows to a crawl when the reader wants to move on, and vice versa. • Problems with organization make it hard for the reader to understand the main point or story line, with little or no attempt at paragraph breaks. 	<ul style="list-style-type: none"> • The paper has a recognizable introduction and conclusion. The introduction may not create a strong sense of anticipation; the conclusion may not tie-up all loose ends. • Transitions sometimes work; at other times, connections between ideas are unclear. • Sequencing shows some logic, but not under control enough that it consistently supports the development of ideas. The structure may be predictable and taking attention away from the content. • Pacing is fairly well controlled, though the writer sometimes lunges ahead too quickly or spends too much time on details that do not matter. • The organization sometimes supports the story line, with an attempt at paragraphing. 	<ul style="list-style-type: none"> • An inviting introduction draws the reader in; a satisfying conclusion leaves the reader with a sense of closure and resolution. • Thoughtful transitions clearly show how ideas connect. • Details seem to fit where they've placed; sequencing is logical and effective. • Pacing is well controlled; the writers knows when to slow down and elaborate, and when to pick up the pace and move on. • The choice of structures matches the purpose and audience, with effective paragraph breaks.

Adapted from the Northwest Regional Educational Laboratory (2004)

Voice		
1 point	3 points	5 points
<p><i>The writer seems indifferent to the topic and the content. The writing lacks purpose and audience engagement.</i></p>	<p><i>The writer seems sincere, but not fully engaged or involved. The writing has discernable purpose, but is not compelling.</i></p>	<p><i>The writer speaks directly to the reader in a way that is individual, compelling, and engaging. The writer crafts the writing with an awareness and respect for the audience and the purpose for writing.</i></p>
<ul style="list-style-type: none"> • The writer’s ideas and language fail to connect with the audience. • The writer has no clear purpose, and the chosen style does not match the content or ideas. • The writing is risk free, and reveals nothing about the author. • Expository or persuasive writing is lifeless and mechanical, or lacks accurate information. • Narrative: the development of the topic is so limited that no point of view is discernable. 	<ul style="list-style-type: none"> • The writing attempts to connect with the audience in an earnest, pleasing, but personal manner. • The writer seems aware of a purpose, and attempts to select content and structures that reflect it. • The writer occasionally reveals personal details, but primarily avoids risk. • Expository or persuasive writing lacks consistent engagement with the topic, and fails to use ideas to build credibility. • Narrative writing is sincere, but does not reflect a unique or individual perspective on the topic. 	<ul style="list-style-type: none"> • The writer connects strongly with the audience through the intriguing focus of the topic, selection of relevant details, and the use of natural, engaging language. • The purpose of the writing is accurately reflected in the writer’s choice of individual and compelling content, and the arrangement of ideas. • The writer takes a risk by the inclusion of personal details that reveal the person behind the words. • Expository or persuasive writing reflects a strong commitment to the topic by the careful selection of ideas that show why the reader needs to know this. • Narrative writing is personal and engaging, and makes you think about the author’s ideas or point of view.

Adapted from the Northwest Regional Educational Laboratory (2004)

Word Choice		
1 point	3 points	5 points
<i>The writer demonstrates a limited vocabulary or has not searched for words to convey specific meaning.</i>	<i>The language is functional, even if it lacks much energy. It is easy to figure out the writer's meaning on a general level.</i>	<i>Words convey the intended message in a precise, interesting, and natural way. The words are powerful and engaging.</i>
<ul style="list-style-type: none"> • Words are so nonspecific and distracting that only a very limited meaning comes through. • Problems with language leave the reader wondering. Many of the words just don't work in this piece. • Audience has not been considered. Language is used incorrectly making the message secondary to the misfires with the words. • Limited vocabulary and/or misused parts of speech seriously impair understanding. • Words and phrases are so unimaginative and lifeless that they detract from the meaning. • Jargon or clichés distract or mislead. Redundancy may distract the reader. 	<ul style="list-style-type: none"> • Words are adequate and correct in a general sense, and they support the meaning by not getting in the way. • Familiar words and phrases communicate but rarely capture the readers imagination. • Attempts at colorful language show a willingness to stretch and grow but sometimes reach beyond the audience. • Despite a few successes, the writing is marked by passive verbs, everyday nouns, and mundane modifiers. • The words and phrases are functional with only one or two fine moments. • The words may be refined in a couple of places, but the language looks more like the first thing that popped into the writer's mind. 	<ul style="list-style-type: none"> • Words are specific and accurate. It is easy to understand just what the writer means. • Striking words and phrases often catch the reader's eye and linger in the reader's mind. • Language and phrasing are natural, effective and appropriate for the audience. • Lively verbs add energy while specific nouns and modifiers add depth. • Choices in language enhance the meaning and clarify understanding. • Precision is obvious. The writer has taken care to put just the right words or phrase in just the right spot.

Adapted from the Northwest Regional Educational Laboratory (2004)

Sentence Fluency		
1 point	3 points	5 points
<p><i>The reader has to practice quite a bit in order to give this paper a fair interpretive reading. The writing reflects more than one of the following problems:</i></p> <ul style="list-style-type: none"> • Sentences are choppy, incomplete, rambling or awkward; they need work. Phrasing does not sound natural. The patterns may create a sing-song rhythm, or a chop-chop cadence that lulls the reader to sleep. • There is little to no “sentence sense” present. Even if this piece was flawlessly edited, the sentences would not hang together. • Many sentences begin the same way – an may follow the same patters in a monotonous pattern. • Endless connectives (<i>and, and so, but then, because, and then, etc.</i>) or a complete lack of connectives create a massive jumble of language. • The text does not invite expressive oral reading. 	<p><i>The text hums along with a steady beat, but tends to be more pleasant or businesslike than musical, more mechanical than fluid.</i></p> <ul style="list-style-type: none"> • Although sentences may not seem artfully crafted or musical, they get the job done in a routine fashion. • Sentences are usually constructed correctly; they hang together’ they are sound. • Sentences beginnings are not ALL alike; some variety is attempted. • The reader sometimes has to hunt for clues (e.g., connecting words and phrases like <i>however, therefore, naturally, after a while, on the other hand, to be specific, for example, next, etc.</i>) that show how sentences interrelate. • Parts of the text invite expressive oral reading; others may be stiff, awkward, choppy or gangly. 	<p><i>The writing has an easy flow, rhythm, and cadence. Sentences are well built, with strong and varied structure that invites expressive oral reading.</i></p> <ul style="list-style-type: none"> • Sentences are constructed in a way that underscores and enhances the meaning. • Sentences vary in length as well as structure. Fragments, if used, add style. Dialogue, if present, sounds natural. • Purposeful and varied sentence beginnings add variety and energy. • The use of creative and appropriate connectives between sentences and thoughts shows how each relates to, and builds upon, the one before it. • The writing has cadence; the writer has thought about the sound of the words as well as the meaning. The first time you read it aloud is a breeze.

Adapted from the Northwest Regional Educational Laboratory (2004)

Conventions		
1 point	3 points	5 points
<p><i>Errors in spelling, punctuation, capitalization, usage, and grammar and or paragraphing repeatedly distract the reader and make the text difficult to read. The writing reflects more than one of these problems:</i></p>	<p><i>The writer shows reasonable control over a limited range of standard writing conventions. Conventions are sometimes handled well and enhance readability; at other times, errors are distracting and impair readability.</i></p>	<p><i>The writer demonstrates a good grasp of standard writing conventions (e.g., spelling, punctuation, capitalization, grammar, usage, paragraphing) and uses conventions effectively to enhance readability. Errors tend to be so few that just minor touch-ups would get this piece read to publish.</i></p>
<ul style="list-style-type: none"> • Spelling errors are frequent, even on common words. • Punctuation (including terminal punctuation) is often missing or incorrect. • Capitalization is random and only the easiest rules show awareness of correct use. • Errors in grammar or usage are very noticeable, frequent, and affect meaning. • Paragraphing is missing, irregular, or so frequent (every sentence) that it has no relationship to the organizational structure of the text. • The reader must read once to decode, the again for meaning. Extensive editing (virtually every line) would be required to polish the text for publication. 	<ul style="list-style-type: none"> • Spelling is usually correct or reasonably phonetic on common words, but more difficult words are problematic. • End punctuation is usually correct; internal punctuation (commas, apostrophes, semicolons, dashes, colons, parentheses) is sometime missing/wrong. • Most words are capitalized correctly; control over more sophisticated capitalization skills may be spotty. • Problems with grammar or usage are not serious enough to distort meaning but may not be correct or accurately applied all of the time. • Paragraphing is attempted but may run together or begin in the wrong places. • Moderate editing would be required to polish the text for publication. 	<ul style="list-style-type: none"> • Spelling is generally correct, even on more difficult words. • The punctuation is accurate, even creative, and guides the reader through the text. • A thorough understanding and consistent application of capitalization skills are present. • Grammar and usage are correct and contribute to clarity and style. • Paragraphing tends to be sound and reinforces the organizational structure. • The writer may manipulate conventions for stylistic effect – and it works! The piece is very close to being ready to publish.

Adapted from the Northwest Regional Educational Laboratory (2004)

D-13 Percent Agreement Worksheets

Table D-6.1. Focused Code Agreement for Reliability Sample Cases

Case	Coder	Perception	Learning to See	Opened Eyes	Flexibility of Thinking	Total
LY	Agreement	11	4	11	9	35
LY	Erin	11	8	11	10	40
LY	Laurie	11	4	12	9	36
Shannon & Beyonce	Agreement	13	4	0	5	22
Shannon & Beyonce	Erin	13	4	0	5	22
Shannon & Beyonce	Laurie	13	4	0	5	22
Jose	Agreement	6	5	0	2	13
Jose	Erin	7	6	0	2	15
Jose	Laurie	6	5	0	2	13
Jacob & Adam	Agreement	19	10	3	3	35
Jacob & Adam	Erin	19	10	3	5	37
Jacob & Adam	Laurie	24	18	3	3	48
Fieldnotes 6/18	Agreement	1	1	0	1	3
Fieldnotes 6/18	Erin	3	3	0	1	7
Fieldnotes 6/18	Laurie	1	1	0	1	3
Fieldnotes 6/14	Agreement	0	2	1	1	4
Fieldnotes 6/14	Erin	0	4	1	1	6
Fieldnotes 6/14	Laurie	0	2	1	1	4
Fieldnotes 6/11	Agreement	0	5	0	0	5
Fieldnotes 6/11	Erin	0	7	0	4	11
Fieldnotes 6/11	Laurie	1	5	1	0	7

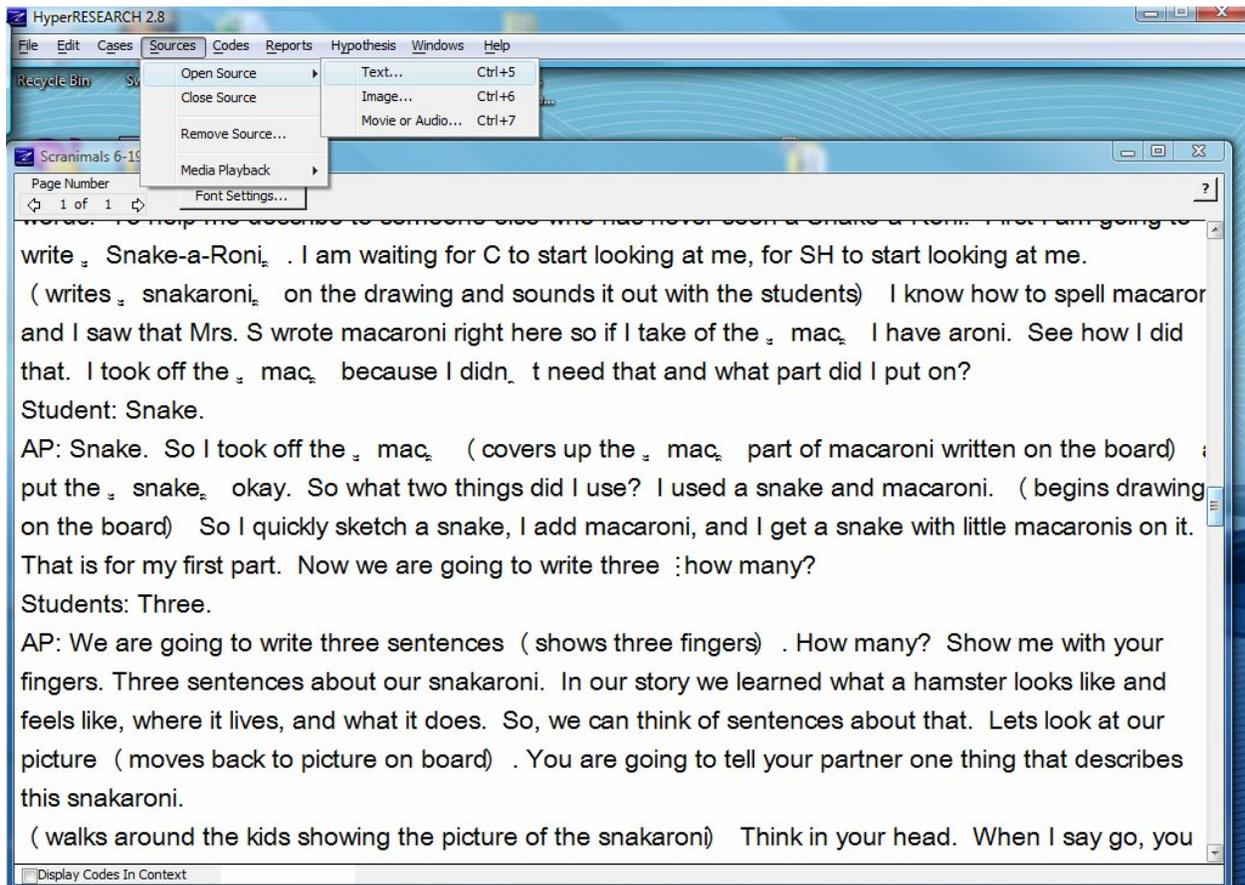
Table D-6.2. Initial Code Agreement for Reliability Sample Cases

Case	Coder	Art Stage	Writing Level	Total
Chris (Nature Center)	Agreement	1	1	2
Chris (Nature Center)	Erin	1	1	2
Chris (Nature Center)	Laurie	1	1	2
Brittany (Nature Center)	Agreement	1	1	2
Brittany (Nature Center)	Erin	1	1	2
Brittany (Nature Center)	Laurie	1	1	2
Jose (Nature Center)	Agreement	1	1	2
Jose (Nature Center)	Erin	1	1	2
Jose (Nature Center)	Laurie	1	1	2
Jacob (Nature Center)	Agreement	1	1	2
Jacob (Nature Center)	Erin	1	1	2
Jacob (Nature Center)	Laurie	1	1	2
Beyonce (Nature Center)	Agreement	1	1	2
Beyonce (Nature Center)	Erin	1	1	2
Beyonce (Nature Center)	Laurie	1	1	2
Chris (Fishing)	Agreement	1	1	2
Chris (Fishing)	Erin	1	1	2
Chris (Fishing)	Laurie	1	1	2
Brittany (Fishing)	Agreement	0	1	1
Brittany (Fishing)	Erin	1	1	2
Brittany (Fishing)	Laurie	1	1	2

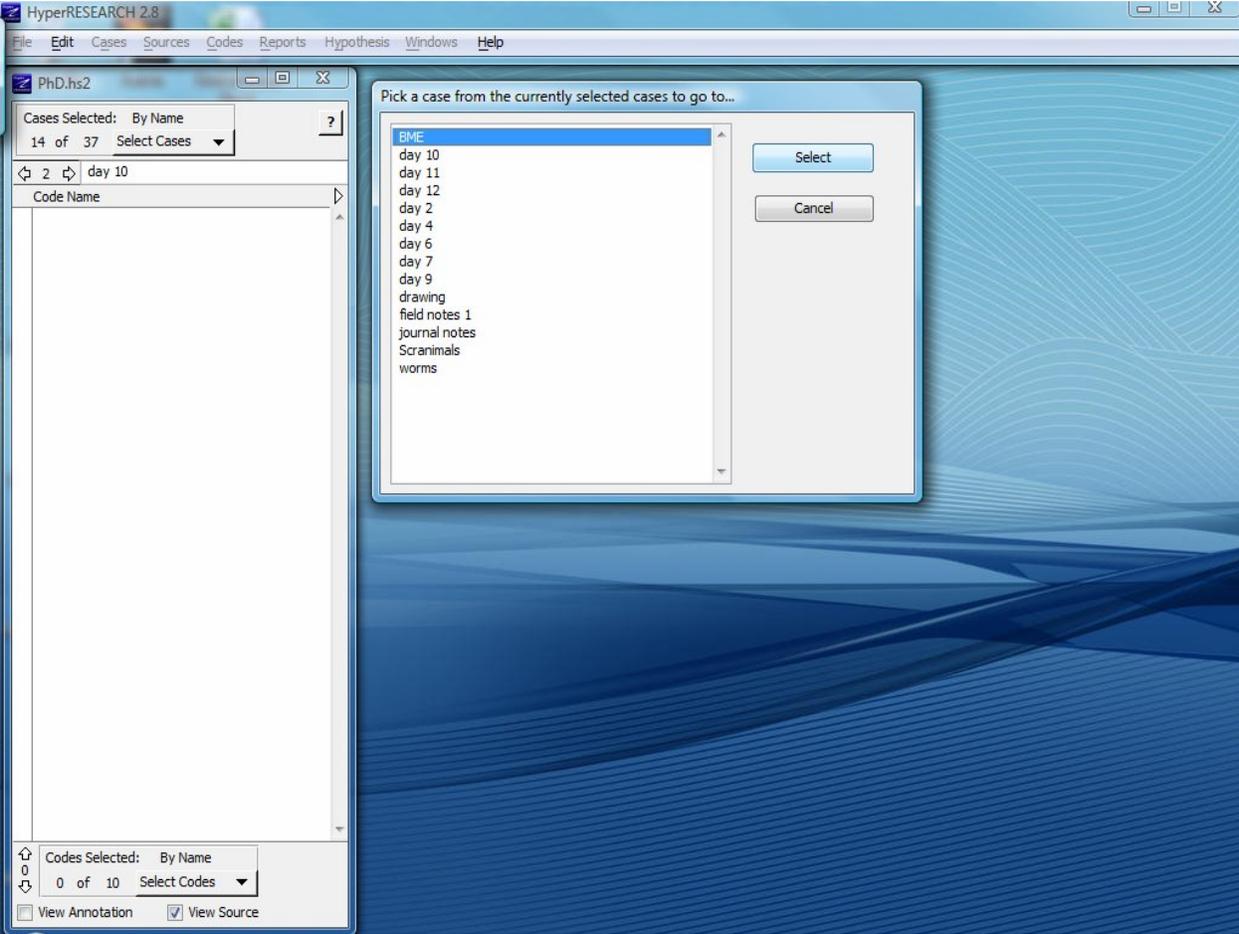
Case	Coder	Art Stage	Writing Level	Total
Jose (Fishing)	Agreement	1	1	2
Jose (Fishing)	Erin	1	1	2
Jose (Fishing)	Laurie	1	1	2
Jacob (Fishing)	Agreement	0	0	0
Jacob (Fishing)	Erin	1	1	2
Jacob (Fishing)	Laurie	1	1	2
Beyonce (Fishing)	Agreement	1	1	2
Beyonce (Fishing)	Erin	1	1	2
Beyonce (Fishing)	Laurie	1	1	2
Miley (Final)	Agreement	1	0	1
Miley (Final)	Erin	1	1	2
Miley (Final)	Laurie	1	1	2
Jonah (Final)	Agreement	1	1	2
Jonah (Final)	Erin	1	1	2
Jonah (Final)	Laurie	1	1	2
Shannon (Final)	Agreement	0	1	1
Shannon (Final)	Erin	1	1	2
Shannon (Final)	Laurie	1	1	2
Avril (Final)	Agreement	1	1	2
Avril (Final)	Erin	1	1	2
Avril (Final)	Laurie	1	1	2
Zena (Final)	Agreement	1	0	1
Zena (Final)	Erin	1	1	2
Zena (Final)	Laurie	1	1	2

Appendix E - HyperRESEARCH, 2.8 Screen Captures

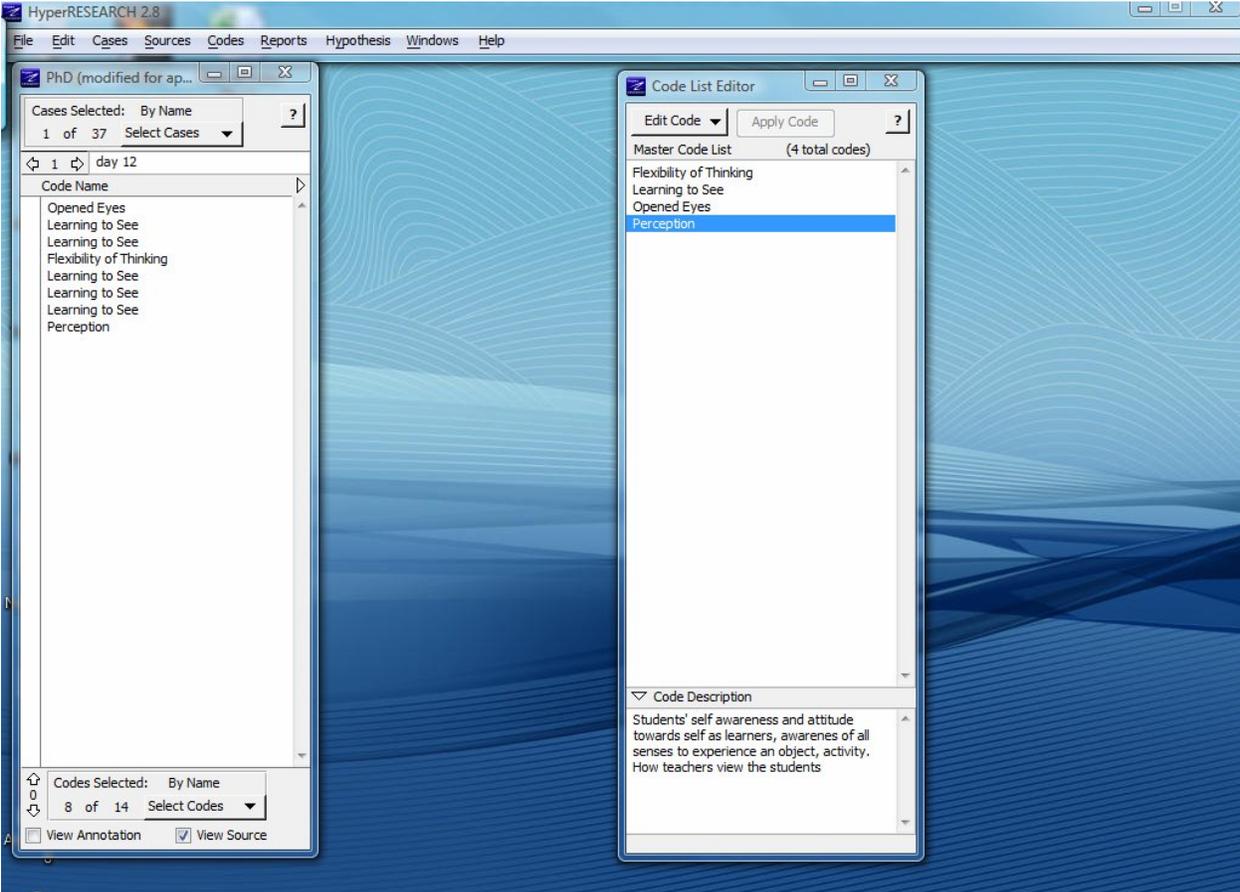
E-1 Source File Screen Capture



E-2 Case Screen Capture



E-3 Code Screen Capture



E-4 Coded Interview Screen Capture

