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# The Art in Teaching Writing

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# THE ART IN TEACHING WRITING

A Thesis  
Presented to  
The Faculty of the Department of Literacy  
Western Kentucky University  
Bowling Green, Kentucky

In Partial Fulfillment  
Of the Requirements for the Degree  
Master of Education - Literacy

By  
Sally Helene Tooley

August 2009

## THE ART IN TEACHING WRITING

Recommended April 23, 2009

Pamela W. Petty  
Director of Thesis

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Dean, Graduate Studies and Research Date

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Abstract  
THE ART IN TEACHING WRITING

Sally Helene Tooley

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The purpose of the study was to determine how exceptional writing teachers utilize visual images in their teaching of writing. Specifically, the researcher was interested to discover how drawing might be used as a learning tool in the various stages of the writing process. Nine elementary teachers - recognized as exemplary teachers of writing, completed a detailed questionnaire in reference to their writing instruction. All of the teachers surveyed value visuals highly and recognize the potential impact that drawing can have on writing. However, not all of these teachers are utilizing drawing or visual strategies in their writing instruction on a regular basis. Descriptions of writing instruction and types of visuals used, along with examples, are provided. Additional information was gathered by conducting a case study and observing the instruction of one of the teachers, a particularly information-rich sample, who does integrate drawing and writing. This teacher's beliefs and resulting purposeful instruction are described as evidence for how others might incorporate these valuable strategies. The data reported here highlights the use of visuals and drawing as instructional tools in writing instruction and supports the conclusion that these strategies can be incorporated into the teaching of writing for more effective instruction.

## The Art in Teaching Writing

### INTRODUCTION – *A Sketch*

#### *The Challenges of Teaching Writing*

The teaching of writing is a multifaceted subject that does not come with a manual. There is no “one size fits all” curriculum. Developing writers takes time and in today’s assessment-driven classrooms, time is a rare commodity. It also requires that teachers address the needs of diverse students, as each writer has strengths and weaknesses and each requires individual feedback on his or her writing. Although challenging, writing is worth teaching because it is an essential skill for success both in school and workplace. Writing is a means of social communication, personal reflection, and a method to show not only what has been learned, but also the thoughts behind those results.

Quality of student writing has long been a cause for concern in American education. A recent Writing Commission report (National Commission on Writing, 2003) stated,

Although many models of effective ways to teach writing exist, both the teaching and practice of writing are increasingly shortchanged throughout the school and college years. Writing, always time-consuming for student and teacher, is today hard-pressed in the American classroom. Of the three “Rs,” writing is clearly the most neglected. (p. 3)

The commission acknowledges four challenges in the teaching of writing: time, assessment, technology integration, and teacher support. They comment, “It is small wonder that students do not write well. Most do not have sufficient time to practice the art” (p. 66). They call time writing’s “ally” and call on policymakers to help schools find the time needed for writing instruction to be effective.

Findings from the Nation's Writing Report Card (Greenwald, Persky, Campbell, & Mazzeo, 1998) state that most students' writing is at the basic level, with few displaying proficient achievement. At grade four, 84% are at or above the basic level, with only 23% at or above proficient (p. 3). At grade eight, 84% are at or above the basic level, with 27% at or above proficient. At grade 12, 78% are at or above basic, with only 22% at or above proficient. Merely one percent at each of those grade levels is considered advanced. While students are able to write, they are not producing writing at the sophisticated levels needed for our progressive economy.

To accommodate for more time required for writing instruction, The National Commission on Writing (2003) recommends the teaching of writing across the curriculum. Students should write to learn and learn to write. Many teachers, newly faced with incorporating writing assignments into their course objectives, are uncertain of what exactly they should be doing. Indeed, teachers who have taught writing for years know that there is no one right method. While there are many resources available, from the colleague down the hall to the Internet, deciding which instructional practices are most effective can be overwhelming. Teacher journals are filled with articles and personal testimonies touting the benefits of one method or another. It is not easy for teachers to determine which practices are most successful in the teaching of writing.

The good news is, according to The National Writing Project and Carl Nagin (2003), that researchers and educators have made significant strides in the past three decades in understanding how best to teach writing. More resources are available to teachers, and writing trainings and seminars are readily accessible. The National Writing Project (NWP) began in the mid-seventies and is a professional development network

that works with teachers of all grade levels and subject areas to improve the teaching of writing. There are nearly 200 NWP sites at universities and colleges in all 50 states, with the goal of having a site available to every teacher in America. Each NWP site hosts a summer invitational institute and provides professional development opportunities throughout the school year. Approximately 100,000 teachers are served each year.

### *Combining Visual and Verbal Communication*

Today's students are bombarded by visual images through television, billboards, and electronic media. It is imperative that we prepare them to navigate the visual world in which they live. On any given day, we might study weather charts, make lists, watch television, enjoy a movie, navigate using maps, read signs, scan the Internet, examine catalogs, compare product labels, and review brochures. Students must combine visual and verbal information to make sense of these texts. Filmmaker, Martin Scorsese (in Cruickshank, 2006), comments that teaching visual literacy is essential "because so much in today's society is communicated visually and even subliminally. Young people have to know that this way of communicating is a very, very powerful tool" (p. 2).

Author and teacher trainer, Steve Moline (1995), claims that visual texts are complex and can be just as demanding to produce as verbal texts. Moline gives the example of a metropolitan street map and reminds us that visual texts make information "more accessible, more memorable, and more concise" (p. 2). A complete literacy program, according to Moline, needs to include both drawing and writing as means to communicate information. Students need to be taught how to explain information through diagrams, graphs, tables, and maps as well as determining which method is most effective for the information to be conveyed.

Graves (1994) considers drawing to be a natural part of children's progression in writing. He calls drawing an unconscious "rehearsal" for the writing that follows. He states that drawing allows children to think about what they want to say before they have to write it and also helps children with context as they later reread their written texts.

Research supports a strong connection between visual images and language. Dyson (1986) has studied the fluidity of children's symbol making, the relationships between talking, drawing, and writing. Her findings illuminate distinct differences in how children use language, drawing, and writing. This study demonstrates clear relationships between talking, drawing, and the writing process in young children's early literacy.

A research-supported program titled Picturing Writing (Olshansky, 2003) has students create works of art and use them as springboards for writing inspiration. Findings from this study indicate that connecting visual and verbal imagery assists students in expressing themselves. Students are motivated by the inclusion of the painting in the writing time. While the paintings provide inspiration, they also enable the students to remain focused on their writing topic.

A notational system called "pictography" is taught to children with language disorders (Ukrainetz, 1998). With pictography, students use quick drawings of stick figures to draft narrative stories. A research study involving 61 elementary students in three classrooms shows that pictography is faster than writing or drawing and results in longer oral narratives with more organization and more action sequences (McFadden, 1998).

A study with third grade students (Norris, Reichard, & Mokhtari, 1997) provides

further evidence for the positive impact that drawing can have on student writing.

Results indicate that utilizing drawing as a pre-writing activity has a positive impact on student writing. The group that drew produced more words, more sentences, and more ideas, with better overall writing performance than that of the control group. Students in the drawing group were also more enthusiastic about writing and made better use of their time.

There are many who propose that integration of the arts leads to increases in student achievement. Author Eric Jensen (2001), in his book, *Arts with the Brain in Mind*, proposes the arts to be the best vehicle for helping at-risk students stay in school and succeed. However, he warns that the arts are not a quick fix or something to be implemented simply to boost test scores. Jensen claims that the arts can do more than any other discipline in that they produce more thoughtful, reflective, and creative learners. He recognizes the quality of the model of the independent, arts-centered Waldorf schools, with their 50-year reputation for excellence and makes specific recommendations for integrating the arts throughout the curriculum at all grade levels.

Betty Edwards (1999), author, teacher, and artist, observes that although some schools and districts have turned to the arts as a means to repair failing educational systems, most continue to think of arts education as “enrichment”. Edwards, however, sees the arts as being crucial for training specific ways of thinking. The methods taught in her classic book, *The New Drawing on the Right Side of the Brain*, train students to see the “whole picture”. She states that these skills in visual and perceptual ways of thinking are essential for critical thinking and problem solving.

In *Visual Impact, Visual Teaching: Using Images to Strengthen Learning*,

Timothy Gangwer (2009) describes attributes of a visual teacher and lists six methods of visual learning: investigating, chronicling, expressing, communicating, inspiring, envisioning (p. 7). He also encourages teaching critical visual thinking by having students identify and evaluate visual evidence, or teaching students to think critically with pictures.

There are many research-proven best practices that involve integration of art and writing. Using visuals effectively has become increasingly important to educators in today's visually stimulated world. Here, select studies and instructional practices have been highlighted which have had an impact on developing visual literacy, student writing, and writing instruction.

### *Purpose of Study*

The purpose of this study is to determine how elementary teachers, who meet the criteria of being exceptional teachers of writing, utilize visual images in their teaching of writing. Specifically, the researcher is interested in how drawing is used as a learning tool in the classroom setting by both teachers and students and especially how drawing is used in the various stages of the writing process.

### *Need for Study*

Writing is clearly an important subject to teach. It gives students opportunity for expression as well as a means to demonstrate learning. With the current time constraints in today's assessment-driven classrooms, it is imperative that educators make the most of every minute. While there are many opinions about how writing should be taught, there is not one set method for effective instruction. Research shows the validity of certain methods and programs, but it is also worth studying writing instruction from the



perspective of expert writing teachers. It is from these teachers, their instructional practices and their perceptions, that we will learn what works and how to make it available to all students.

### *Limitations and Delimitations*

This is designed to be a small-scale study, implemented with select classroom teachers in two school districts. There will not be a control group, nor will teachers be randomly selected to participate in the study. Only one teacher will be selected for observation and in-depth study. This provides limitations specific to that teacher's perspective and her use of the strategies under observation. The case study is also focused at the primary level with one particular population of students and may not be able to be generalized to other populations. The case study observations take place within a limited period of 33 hours (nine separate occasions) over a period of four weeks in the spring of the school year. Findings may have varied if observations had been conducted regularly throughout the school year.

### *Definitions of Terms and Abbreviations*

Ekphrastic poetry – poetry inspired by works of art

Interactive white board - a large, touch-sensitive board that allows the teacher and students to access the computer and Internet, includes document camera and overhead projector

Learning Styles - ways that individuals concentrate on, process, absorb, and recall new information or skills (Stevenson & Dunn, 2001)

Media literacy – “the ability to access, analyze, evaluate and create messages in all media forms” – Aspen Institute, 1992 (<http://www.amlainfo.org/media-literacy>)

Multiple Intelligences theory - everyone has at least eight types of intelligence, including linguistic, logical-mathematical, musical, spatial, bodily-kinesthetic, naturalist, interpersonal, and intrapersonal intelligences (Gardner, 1983)

National Writing Project (NWP) - a professional development network that works with teachers of all grade levels and subject areas to improve the teaching of writing

Pictography – a notational system using quick drawings of stick figures to draft narrative stories

Storyboarding – a series of boxes on a page or several Post-it notes with quick drawings used to map out a story before writing it out in words

Stickwriting – see pictography

Visual or Visual aid – an instructional device (such as a diagram, video, or model) that presents information visually and aids comprehension

Visual literacy – the ability to understand and create visual messages (Gangwer, p. 2, 2009)

Visual learner – one who prefers to learn with the aid of visual stimulation, i.e. drawings, charts, diagrams, videos, or photographs

Writer's Workshop – a framework for writing instruction which includes time for writing instruction, student writing, conferencing about writing, and sharing writing as students work through the stages of the writing process

Writing process – includes the stages of prewriting, drafting, revising, editing, and publishing

### *Organization of Study*

This paper is organized into five chapters. Chapter One includes the introduction to the study, the background and need for the study. This chapter also presents statement of the problem, purpose, limitations and delimitations, definitions of terms, and organization of the study. Chapter Two provides historical background as well as a review of the current research on the topic of visual literacy and best practices in incorporating visual images into writing instruction. Chapter Three outlines the research methods and procedures, including participant selection process, descriptions of survey instruments, data collection methods, and overview of participants. Chapter Four discusses the findings of the study in both the detailed questionnaire and the case study observations. Chapter Five provides a summary of the study, implications for literacy instruction, and conclusions. Appendices include The Drawing and Writing Survey for Elementary Teachers (Appendix A) and follow up and clarifying questions (Appendix B) asked of the teacher under observation.

## LITERATURE REVIEW – *Painting the Background*

### *Historical Background*

Writing instruction has come a long way from the days of focus on fancy penmanship. In recent decades there has been a shift from product to process. Much of the writing assigned in American classrooms of the 1960s was largely prescriptive and product focused. Students were taught to follow a multi-step formula to produce good writing. Correctness was emphasized. It was also assumed during this time that students needed to master reading before they should be taught to write.

A focus change in the 1970s and 1980s led to more writing taught as a process. The writing process is a concept that has been promoted by The National Writing Project which encourages teachers to include teaching the steps of prewriting strategies, drafting, revising, editing, and publishing student work within their writing instruction. Students were taught to write to express themselves and to show their thinking; however, at times correctness was not emphasized. When process was valued without teaching correctness – never reaching a polished final draft nor requiring grammatical correctness, student writing suffered.

Today, teachers attempt to balance process and product strategies in writing instruction. While it is important to teach writing as a process and allow ample time for students to develop as writers, it is also important to imbed instruction of writing conventions including punctuation and grammar. Some teachers find that implementing a Writer's Workshop model is helpful to maintaining the process/product balance. In a workshop, students have time to move through the stages of the writing process while receiving individual and small group instruction as well as feedback on their writing from

the teacher and their peers. Educators recognize that reading and writing are complimentary subjects and they are both included in kindergarten and preschool instruction.

The now common use of word processing in writing has also changed the writing process in that revisions and polished final drafts are much easier to produce. This facilitates the view of writing as a recursive process. Student selection of topics is more likely to be inquiry-driven. Assessment practices have changed as well, including use of portfolios in which students select their best pieces and are able to reflect on their growth as writers. In today's classrooms, students learn about audience and voice. Writing is taught and not merely assigned. It is a means of self-expression as well as a way for students to take a stand and it is used across the curriculum as a method to demonstrate learning and thinking.

### *Theory*

Vygotsky (1967/2004) proposed that there are differences between oral and written language. His work with children led him to believe that the difficulty of writing is due to the "laws" of written language which children have not yet mastered. He states that verbal creativity is not developed until puberty, and until then drawing is often children's best means of expressing themselves. When children are presented with a task that is too difficult for them, they behave in a manner which makes them seem younger than they really are. Vygotsky acknowledges that children need intrinsic motivation to write and recommends that teachers provide an understandable topic, engage the children's emotions, and encourage them to express their thoughts. Motivation to write should precede mastering writing skills.

Dyson (1986) observed in her research with young children that there are distinct differences in how students use the symbol systems of drawing, speech, and writing. Children vary in their dependence upon these symbol systems due to individual differences in how they use these media. Dyson theorizes that the development of symbol systems is supported by student drawing and leads to higher-order thinking and success with writing tasks.

Smagorinsky (in Zoss, Smagorinsky, & O'Donnell-Allen, 2007) extends Dyson's ideas and proposes that visuals benefit writers of all ages and developmental phases by offering a non-linguistic means of expression. Art allows students to step back, reflect, and have something significant to write. Smagorinsky recommends providing opportunities for students to participate in dynamic composition and meaning construction.

While much of educational research has focused on particular methods or approaches, Pressley, Rankin, and Yokoi (1996) recommend studying teachers from the perspective of their expertise. Consistent with expert theory (Chi, 2006), Pressley et al. assume that effective teachers have an understanding of the nuances of their instruction based on the decisions they make and their beliefs about student learning. This understanding is able to be related to others just as professionals in other fields relate their expertise. They claim that this unique perspective allows effective teachers' to relate their knowledge, theories, and beliefs in response to specific questions.

### *Brain Research*

Educational implications of brain research of the past focused on categorizing students as "right-brain" or "left-brain" dominant with little that could be done to impact

learning. With new technologies such as magnetic resonance imaging (MRI) in brain research, we understand more now about the right and left hemispheres of the brain and their inter-relatedness. We know more about how the brain processes visual information and have discovered many research-based teaching practices which impact learning.

The saying, “a picture is worth a thousand words” may be underestimating things. The brain processes visual stimuli at an astonishing speed. A study by the 3M Corporation established that the brain processes visuals sixty thousand times faster than it processes text and demonstrated that incorporating visuals into classroom instruction improved learning up to 400 percent (as cited in Gangwer, 2009).

*The Mozart Effect* highlights research-based teaching practices such as music, drama, direct experiences, emotion, and context as methods for helping students to learn and retain information (Campbell, 1997). Researchers have found that the brain is able to work best within the conditions of teamwork, a positive classroom environment, sufficient processing time, preference, meaningful subject matter, absence of threat, instant feedback, and mastery (Marzano, Pickering, & Pollack, 2001). In many schools, districts, and states, initiatives are being made to incorporate brain-compatible learning strategies to enhance the effectiveness of teacher instruction.

Paivio’s (in Sadoski, Kealy, Goetz, & Paivio, 1997) dual coding theory explains that cognition entails simultaneous processing in two memory systems, one for verbal representations and processes and one for images. Reading comprehension and recall are improved when words are paired with visuals because of the parallel processing in the two memory systems. Sadoski et al. propose that using concreteness and imagination in composition may lead to improved student writing.

Multimodal instruction involving learning from both text and pictures has been shown to improve learning in contrast with unimodal instruction through written instruction only (Gellevij, Van-der-Meij, deJong, & Pieters, 2002). This corroborates dual coding theory and demonstrated that the subjects' working memories were not overloaded by the addition of visuals. In a study with undergraduate teacher education students, training time was faster and learning was significantly improved when the multimodal approach was implemented.

A recent brain research study confirmed gender differences in neural processing for students presented with language tasks (Burman, Bitan, & Booth, 2008). Findings indicate that when presented with language tasks, boys and girls preferentially utilize different brain areas for performing necessary cognitive functions. The boys used different brain areas depending on whether the language task was presented visually or orally and did not convert sensory information to language as well as girls. Because these differences are not seen in adults, it is suggested that they are due to developmental differences in maturation rates.

In another study, both gender and age differences were found in audiospatial and visual working memory tasks (Vuontela et al., 2003). Visual tasks were performed faster and more accurately and were perceived to be easier. Gender differences were greatest in the group of six to eight year olds, with females outperforming males. Performance in both working memory systems improved with the age of the child. As in the previous study mentioned, these researchers also attribute differences to varying developmental maturation rate between boys and girls. The researchers hypothesize that visual working memory matures earlier than the auditory working memory system.



There is a restlessness afoot among some parents and educators who feel that visual learners are neglected in the school system. So, you may ask, does brain research support such a thing as a “Visual Learner”? Yes. But it’s not a single type. Visual learning is more like a kaleidoscope than a single shade of color. That’s because there is a remarkable diversity to the organization visual abilities in the brain. Expertise at visual learning may mean a preference for learning by seeing visual relationships or pictures, a preference for learning by reading text, expertise at translating verbal information into visual pictures or imagining visual permutations, visual sensitivity to detail, color, texture, or motion, or a spectacular memory for visual information. (Landon, 2005, para. 1)

### *Learning Styles and Multiple Intelligences*

Learning styles are distinct ways that individuals concentrate on, process, absorb, and recall new information or skills (Stevenson & Dunn, 2001). Students often master new material most efficiently when they make the most of the strengths of their preferred learning-style. According to Stevenson and Dunn, student learning styles vary according to age, achievement level, culture, and global versus analytic processing. It comes as a surprise to no one that individuals learn in different ways. We each have our strengths and weaknesses, our preferences for how we learn. Stevenson and Dunn list the following distinct learning styles:

1. environmentally
2. emotionally
3. sociologically
4. physiologically (auditory, visual, tactile, and/or kinesthetic)
5. globally versus analytically (p. 2)

According to Multiple Intelligence (MI) theory, as posed by Gardner (1983), everyone has at least eight types of intelligence, but no two people have the same combination of intelligences. These forms of intelligence include linguistic, logical-mathematical, musical, spatial, bodily-kinesthetic, naturalist, interpersonal, and

intrapersonal intelligences. Linguistic and logical-mathematical are the two intelligences he lists as being unfairly privileged in American schools, with reading textbooks, listening to lectures, and written exams as students' primary activities. Gardner encourages teachers to instruct and assess learning in ways that support all students by benefiting from the multiplicity of intelligences.

Although Gardner's theory was not intended for educators, it is in the classroom that his theory has been venerated. Research data show (Kornhaber, 2004) teachers gravitate to the idea of multiple intelligences because it compliments teacher beliefs about teaching to "the whole child" and that students learn in a variety of ways. Kornhaber reports that schools implementing MI strategies have described many beneficial results, including high levels of student engagement and a focus on high-quality student work.

### *Current Literature*

Today's students are bombarded by visual images through television, billboards, and electronic media. It is imperative that we prepare them to navigate the visual world in which they live. On any given day, we might study weather charts, make lists, watch television, enjoy a movie, navigate using maps, read signs, scan the Internet, examine catalogs, compare product labels, and review brochures. Students must combine visual and verbal information to make sense of these texts.

### *Images and Instruction*

Some of the first in the education field to comment on the use of visuals in instruction were Hoban, Hoban, and Zisman (1937). They claimed that visuals were not achieving their full potential value in the learning process because educators failed to use

them wisely. They acknowledge four principles that teachers should consider when integrating visual aids in instruction. (a) “The value of visual aids is a function of their degree of reality” (p. 22). While the realism is in the eye of the student, the teacher needs to be aware that a poor visual can easily lead to misinformation. (b) “The value of visual aids is a function of the nature and extent of the pupils’ previous experience” (p. 23). Concrete experiences are most helpful in mastering new information, and the scale continues from concrete objects to models, video, pictures, maps and diagrams, and words. The effectiveness of the visual depends upon the learners’ ability to grasp an abstract concept and the amount of support required through the visual aid. (c) “The value of visual aids is a function of the objectives of instruction in the particular classroom situation” (p. 24). They provide the example of a lesson in which the objective is to point out the necessity of a cotton gin; a boll of cotton for students to handle and try to extract seeds would make a better visual aid than a video of a cotton gin working to remove the seeds. By keeping lesson objectives in mind, teachers can plan for including particular visuals where necessary to assist in reaching those objectives. (d) “The value of visual aids is a function of the intellectual maturity of the learner” (p. 25). Individual differences are noted and it is mentioned that teachers should make accommodations to provide more concrete experiences and more practice with generalizing concepts for those students who need assistance. These guiding principles still hold wisdom for educators today.

Weaver and Bollinger (1949) state that the “most effective visual aids are those specifically designed to satisfy special needs” (p. 61). They list seven purposes of educational visuals:

- explain an abstract idea or principle
- show relationships
- show sequence of procedure
- set standards of workmanship
- show materials of construction
- clarify by enlargement
- increase understanding by reduced size (Chapter V)

Weaver and Bollinger also detail characteristics of good visual aids which can be used as a measurement. While most of their ideas focus on graphic design, accuracy, and clarity, their initial point states that a good visual “should explain an abstract idea, show a relationship, or present a sequence of procedure that cannot be explained without it” (p. 88). They explain that visuals are especially helpful when students have difficulty grasping an idea, when teaching time is at a premium and a process must be grasped quickly, or when an abstract idea is being taught. They offer suggestions for teachers to remember when using visual aids, including reminders to use the visuals as aids and not to expect the visuals to instruct by simply showing them. Although this guide was written several decades ago, the basic principles and purposes of visuals have not changed. Modern advances in technology and changes in communication using technology provide even more for educators to consider when planning effective instruction.

Media literacy has received consideration in recent years, as those in the media industry, as well as educators, have brought attention to the need for educating young people in this powerful form of communication. The George Lucas Educational Foundation (n.d.) recognizes that schools have not kept up with changes in how people communicate with modern technology and they are committed to providing tools and resources to teachers in order that students might develop the skills needed for our

diverse society. Through their website (<http://www.edutopia.org>), the *Edutopia* magazine, and Edutopia video, classrooms and programs are showcased where teachers are incorporating technology and best teaching practices with positive results. One recent article highlights a teacher who uses visuals to enhance his ninth-grade algebra course. Another article showcases the Visual Thinking Strategies art curriculum used in partnership between schools and local art museums to foster critical thinking.

The National Association for Media Literacy Education (NAMLE) (n.d.) is a membership group for educators committed to encouraging media literacy. Their goal is to ensure that all people have the skills needed to critically analyze and create messages using the wide variety of communication tools now available. Through conferences, and their website (<http://www.amlainfo.org>), they provide information to educators about best practices in media education. One such endeavor, the M.E.A.L. Project (Media, Education, Arts, and Literacy), was implemented in middle schools in San Francisco and provided students the opportunity to incorporate media into all curricular areas through making videos. Improvements in creative and critical thinking skills were documented.

The Center for Media Literacy has developed a MediaLit Kit, available free to educators through their website (<http://www.medialit.org>). With the kit, teachers have the necessary tools to teach students about evaluating media messages. Core concepts for media education are:

- All media images are constructed.
- Media messages are constructed using a creative language with its own rules.
- Different people experience the same media message differently.
- Media have embedded values and points of view.
- Most media messages are organized to gain profit and/or power (n.d., p. 1)

The Center for Media Literacy advocates a philosophy of empowerment through education and believes that (a) media literacy is education for life in a global media world, (b) the heart of media literacy is informed inquiry, and (c) media literacy is an alternative to censoring, boycotting or blaming ‘the media’ (n.d., p. 2).

Another group, the Visual Teaching Alliance (n.d.), provides research-based, hands-on professional workshops for educators covering topics such as visual literacy, media literacy, and creative thinking strategies. Educational consultant and director of the Visual Teaching Alliance, Timothy Gangwer (2009) attributes the rising importance of visual literacy in the classroom to the availability of technologies for accessing information and entertainment. He challenges educators to prepare students for the world in which they will live and work by teaching them the way today’s students learn best – with visual stimulation and active learning.

In, *Visual Impact, Visual Teaching: Using Images to Strengthen Learning*, Gangwer (2009) describes four key elements of visual learning theory: full-spectrum visual literacy, active and performance-based learning, dynamic translation, and a multidisciplinary approach. Full-spectrum visual literacy involves the ability to encode and decode visual imagery for the purpose of communication. Students should be able to express thoughts and ideas visually as well as translate the content and meaning of imagery. Active and performance-based learning challenges students to experience and encounter by applying knowledge to new and authentic situations. Dynamic translation is a means for students to express ideas in a different format. The multidisciplinary approach includes writing, creative expression, and visual thinking while considering various learning styles.

Gangwer (2009) recommends teachers make use of visuals and computer presentation. Specific examples are given for using graphic organizers and glyphs (a symbol, such as a graph, that conveys nonverbal information) as a “visual language,” stating, “Translating thought into a visual increases the likelihood of retention, promotes comprehension, clarifies information, and becomes a product of authentic assessment” (p. 53). Gangwer also proposes photography as an inexpensive and effective classroom tool to teach visual learning skills.

The three levels of visual communication are listed as passive, neutral, and active imagery. Passive images are not clear in their focus, or confuse the viewer because of contradictory visual information. Neutral images are more focused and have a simple background so that the selected image will stand out. Active images are noted for having strong visual elements, such as line or color; active images tell a story.

Gangwer (2009) describes the visual teacher as one who uses images to improve student learning. The visual teacher has students evaluate both still and moving images and the symbols used within these media. The visual teacher creates assignments that reflect the methods of visual learning and allow students to apply and demonstrate visual thinking. The visual teacher provides feedback to students concerning images they have created, based on the methods of visual learning. Gangwer lists six methods of visual learning used by visual teachers to impact student learning:

- Investigating – using images to learn about and better understand the world
- Chronicling – freezing moments of time through documentation
- Expressing – using images to reveal thoughts and feelings, translating the abstract to the concrete
- Communicating – using images to share information with others

- Inspiring – using images to express and communicate to change behavior or attitude
- Envisioning – using images to encourage new connections and relationships (p. 77-78)

Gangwer (2009) encourages teaching critical visual thinking to inspire creativity and encourage divergence. Critical visual thinking is the identification of visual evidence and the ability to form those images into language for the purpose of decision-making. By having students identify and evaluate visual evidence, or teaching students to think critically with pictures, logical thinking and reasoning skills can be developed. Six psychological guidelines for critical visual thinking include: lucidity, veracity, purpose, intensity, dimension, and coherence. Socratic teaching is also suggested for teaching students to think critically. Gangwer recommends that students practice these skills by playing chess, and having teachers incorporate instructional methods such as Title Paraphrase Connotation Attitude Shifts Title Theme (TPCASTT) for analyzing poetry, and de Bono's (1999) Six Thinking Hats, a systematic thinking technique that enhances focus and productivity.

Gangwer's (2009) book, *Visual Impact, Visual Teaching* could be a valuable resource to any teacher. Along with the background information provided, there are numerous suggestions for incorporating visuals in any lesson. The user-friendly advice on using technology and digital images in the classroom is also helpful. Subject-specific visual learning activities are listed in chapter six of the text, with an average of 50 lesson ideas in each subject area which can be easily modified for students of all ages.

### *Writing Instruction*

In the past several decades much educational reform has taken place. Schools and districts are taking measures to ensure the success of each student. State curriculum has



increasingly become mandated, and in recent years, the No Child Left Behind Act has brought about national reform. These reforms often include high-stakes testing, and in this climate, educators must continuously strive for more effective teaching strategies. One subject teachers often cite as an area in need of improvement is writing and writing instruction.

Writing is a complex subject; there is no “one right way” to teach it. Today’s teachers are hard pressed to find time for developing writers and providing individual feedback to their writing. Despite the barriers, teaching writing well is a worthwhile endeavor. It is an essential skill for success both in school and workplace. Writing is a means of communication, reflection, and a way to demonstrate learning.

Graves (1994) remarks that good writing is not the result of a particular methodology. He recommends setting up conditions for learning within a classroom that will encourage good writing. Time, choice, response, demonstration, expectation, room structure, and evaluation are all elements for teachers to think about. He considers teachers to be the chief “condition” for effective writing and encourages them to write with their students.

Based on theory and research in literacy and the teaching of writing, Bromley (2003) gives teachers five guidelines for sound writing instruction. These guidelines balance process-focused instruction with skills and product instruction. When used as a framework, they help teachers integrate writing across the curriculum, utilize scaffolding, and teach meaningful writing lessons. These guidelines for sound writing instruction are

- Writing goals that guide students, teachers, and schools.
- An environment that provides writing tools, time, and models.
- Direct instruction in composing and the conventions of writing.

- Choice and authenticity in writing for a variety of purposes and audiences.
- Writing to construct meaning across the curriculum in a variety of forms (p. 146)

One example of writing across the curriculum is from a high school biology teacher, Robert Tierney, who found that students who had writing incorporated into the curriculum had greater retention of subject matter (National Writing Project & Nagin, 2003). Writing assignments for the experimental group included reading logs, neuron notes or learning logs, practice essays, end-of-class summaries, group writing, and essay tests. It is also significant to mention that students wrote to a specific audience other than the teacher as the examiner. In addition to scoring higher on tests, the teachers commented that the students in the experimental group learned the subject matter more thoroughly.

In a comparison of classroom writing practices (Bridge & Hiebert, 1985), researchers sought to understand current classroom writing practices as well as their influencing factors. The purpose of the study was to examine the number and types of writing experiences in which elementary teachers and students engage throughout the school day. Teachers' perceptions of writing instruction and evaluations of writing textbooks were analyzed because of their influence on instructional practices. The design of this study, utilizing both observations and a teacher survey, allowed researchers to see discrepancies between teachers' practices and their stated beliefs.

Observations were conducted in six classrooms in two typical schools. In each classroom, an average-ability boy and girl were randomly selected and observed for an entire school day at three different points during the spring semester. Teacher and student behaviors were recorded at one-minute intervals. Teacher perceptions were

ascertained through a questionnaire that addressed frequency of writing tasks, adequacy of their undergraduate and where applicable, graduate, training in the teaching of writing, and the frequency with which they participated in various writing activities.

Results from observations indicate the average percentage time for writing to be 17% of the school day. This includes writing time in all subject areas, not only those times when writing proficiency was the aim of the lesson. Students spent the majority of their writing time in handwriting, transcription, or paraphrasing activities and very little time in crafting or revision. Teachers spent the greater part of their time transcribing. Surveys and observational notes were evaluated for similarities and differences.

As a portion of this study, Bridge and Heibert (1985) conducted a textbook analysis of twelve currently used texts. Their conclusions corroborated the findings of previous studies, showing that most texts provided opportunities for cosmetic revisions only. Nearly all activities involved copying verbatim from the text for grammar or punctuation corrections and fill in the blank answers.

Analyses of data highlight a failure to recognize writing as a holistic process. Researchers attribute this to a lack of teacher preparation for teaching writing, textbooks which support fragmented tasks with grammar and punctuation, an emphasis on product rather than process, and conformation to peer practices and administrative mandates. Bridge and Heibert (1985) recommend change for preservice and graduate teacher instruction as well as in-service instruction for existing teachers. They highlight the gap between current writing instruction practices and practices recommended by theorists and researchers, which teach writing as a process for the purpose of communicating with an audience.

The Bridge and Heibert (1985) study, conducted before the latest reform movements in education, highlights the extent to which reform was needed in the area of writing instruction. A more recent study (Brindley & Schneider, 2002) shows the results of teachers' amended writing instruction but bemoans the fact that instructors now teach to the test. This study examined teachers' perceptions about writing development and writing instruction. A survey was sent to all 504 fourth-grade teachers within one large school district and 125 teachers responded. Surveys were analyzed both across-case to determine general trends and emerging themes and within-case for a more in-depth look at nine specific information-rich surveys.

Results show a wide range of teacher perspectives concerning writing instruction and writing development. Discrepancies between teachers' beliefs and instructional practices also emerged in the data. For example, 68% of teachers state that drawing is a necessary part of writing, but none of the teachers list drawing in their description of student writing behaviors or as a part of their instruction. Incongruities between teachers' ideals of writing instruction and classroom instructional practices are attributed to assessment pressures.

Almost all of the teachers mentioned pressures from testing, listing their instructional strategies as practicing with testing prompts, indicating that the teachers equate writing instruction with assigning activities or topics. Researchers note that the teachers' responses indicate a belief that having students practice with prescriptive test formats will lead to higher testing scores. Despite the testing pressure, many teachers commented that their writing instruction has improved as a result of the training they had received so that they might prepare students for testing. Many teachers model writing

more often, state that their instruction has moved beyond the basics of isolated skill instruction, and have higher expectations for students as a result.

Recommendations are made for changes in preservice and in-service training for teachers to assist teachers in handling the stress of testing pressures as well as to discuss the relationship between pedagogy and practicality for the classroom. The researchers propose that state and local policy makers and literacy researchers work together to make informed curricular decisions about writing instruction.

### *Barriers to Writing*

Writing is a difficult process. Writers of all ages and experience struggle with the writing process. Children's author Marc Brown (n.d.) states, "The writing for me is hard work and I always look forward to drawing the pictures." Indeed, many students would agree that writing is difficult. Some seem to view writing as punishment rather than an opportunity for expression. With too much focus on mechanics, rather than content, students can quickly become discouraged in their efforts.

The Nation's Writing Report Card (Greenwald, Persky, Campbell, & Mazzeo, 1998) shows females scoring higher on writing assessment than males. At each grade level tested, females outperformed males. Between 29 and 36 percent of females scored at or above the proficient level, while only 14 to 17 percent of males scored at that level. Knudsen's (1995) research with first through sixth grade students demonstrates a positive correlation between grade level, gender, and attitude toward writing and writing achievement. Older girls are more likely to be proficient writers as are those students with a positive attitude toward writing.

Despite the availability of assistance for special needs students, writing can be a daunting task. Many students with learning disabilities (LD) especially have difficulty with planning and organizing their writing. In a meta-analysis of research in the area of improving the content of expressive writing for students with LD, Baker, Gersten, and Graham (2003) evaluated 13 research studies. They summarize their findings and present strategies for planning, organizing and revising with LD students. They recommend teaching the steps in the process of writing a quality essay or narrative; improving quality through feedback and elaborated dialogue; and teaching students to understand different text structures and their relationship to writing genres (p. 110). Suggestions are also made for providing extra handwriting and spelling instruction at an early age because these skills have proven to make a difference for older students.

Delpit (in National Writing Project & Nagin, 2003) expresses concerns with “underteaching” or “teaching down” to minority students. She remarks that this can result from over-emphasizing either a skills-based or process-based approach to teaching writing. Delpit is not in favor of isolated drill-based instruction because it does not offer the opportunity for higher-order thinking skills. She also comments that the converse -- endless drafts without a polished product, do not require students to learn the basics of standard English. Delpit recommends integrating language skills into the framework of critical and creative thinking.

Another struggle for teachers is meeting the needs of the many English Language Learners (ELL) in today’s classrooms. One study, conducted with 14 elementary ELL students, evaluated the effect of a pen pal writing activity (Chang, 2001). Data analysis reveals significant differences between pre and post-test data with students making gains

in both quality and mechanics of writing. Having a real reader for their writing encouraged ELL students and increased their willingness to write. This study validates the concept that students need to have an authentic purpose for their writing.

A state-wide ELL program, “English Works in Indiana: Tools for the Classroom,” has been adopted in addition to existing curricula (Gangwer, 2009). The process teaches students to incorporate visuals and assists students in transitioning from visual communication to language acquisition. Photographs of the students’ school, community, and home are used to create individual journals. The three levels of this approach include: Level 1 visual thinking maps, Level 2 image mapping and visual links, Level 3 visual journals. Color coding is used for words to show parts of speech, verbs - green, nouns - red, and adjectives - blue.

Other experts also recommend the use of visual tools for teachers working with culturally diverse students (Sinatra, Beaudry, Stahl-Gemake, & Guastello, 1990). They state that visual approaches can help students from diverse backgrounds because they reshape and support the verbal. Three areas of visual learning are reviewed: input strategies, output strategies, and integrative strategies. In their study with 33 sixth graders and 36 seventh graders from a parochial school in Brooklyn, New York, a photo essay technique was used. The students were 85% Hispanic, 10% Black, and 5% Oriental. Almost all were well below grade level in reading according to standardized tests. An initial writing sample was gathered to use as a baseline. Semantic mapping allowed students to manipulate and organize images and their thinking before translating their thoughts to written word. Different patterns of organization were provided, such as sequential organization, thematic organization, and organization by classification.

Students worked in pairs to take photographs, and then individually organized them and wrote about such topics as “A Day at School,” “How the Parish Helps the Community,” and “Architecture in Williamsburg.” The essays written with the use of the photo essay technique showed significant improvement over the baseline writing sample. The researchers attribute the rise in scores to the increased ideas and vocabulary that the photos added as well as the use of the semantic maps, which added organization to student writing. Researchers also stress the importance of having students verbalize their stories as they prepare to write. Use of these visual literacy strategies provided experiences that allowed ELL students to fill in the holes in their background knowledge and allowed them to be more successful with a writing task.

Despite the apparent need for quality writing instruction, few elementary educators have been trained extensively in the subject. While at least one reading course is typically required in teacher education, writing instruction is scarce. Walmsley (1980) found in his survey of elementary teachers that they were not well versed in the field of writing. These teachers were not able to name authorities in the field of writing, nor could they name professional journals where they might access articles on writing instruction. He comments on this discrepancy in teacher education, encouraging teacher training institutions to restructure and include writing theory and practice in language arts courses as well as classes specifically for writing instruction.

In a pilot study addressing whether pre-service teachers should receive training in the area of visual literacy, researchers proposed that some teachers are unaware of issues in teaching visual communication while other teachers do cover visual literacy skills without using specific terminology (Box & Cochenour, 1995). In a random sample of 21



colleges and universities with teacher education programs, none listed required courses related to visual literacy. One institution offered an elective course titled, Visual Thinking and Visual Images. The researchers surveyed faculty to evaluate whether visual literacy was covered within any of their course offerings. Survey responses show that visual literacy is taught as a concept in only 29% of the institutions. Unanimously, respondents favored the idea of integrating visual literacy content into current courses, such as instructional technology courses. Respondents' replies demonstrated that the general population of faculty and students has a low level of awareness for the need for visual literacy. In contrast, the respondents rated all of the concepts of visual literacy to have high importance for teacher preparation programs. The researchers recommend looking for ways to integrate visual literacy into existing course offerings as well as evaluating in-service and graduate programs as possible means for training teachers in this vital topic. They offer the reminder that change comes with awareness, stating, "Such a powerful mode of communication should not be left to chance, nor should it be reasonably assumed that all people come naturally equipped with the kind of visual communication skills which are necessary for functioning in today's world.... [Teachers'] ability to communicate visually should be honed through training" (p. 9).

Like the teachers referred to in the Box and Cochenour study (1995), who never heard the term "visual literacy" but required students to create visuals and used other instructional media, many teachers unknowingly teach visual literacy concepts. Integration of visuals, including fine art, graphic organizers, quick sketches, and drawing, has found favor with many educators, who use art as a motivational tool as well as a

means of inspiring their students and breaking down the barriers to student writing proficiency.

### *Art in the Writing Process*

Which comes first, the writing or the illustration? For years, teachers have instructed students to finish their writing piece and then add an accompanying drawing at the publication stage. This technique encourages students to write less so they can draw, and the drawing is limited by the writing instead of enhancing it (Andrzejczak, Tranin, & Poldberg, 2005). As an example of the converse - drawing before writing, author J.K. Rowling, of the famed Harry Potter books, says she started the writing process by creating detailed drawings of her characters, leading to her vivid descriptions of the wizarding world (in Stahl, 2003). Art has the potential to be an integral part of the writing process at many stages, for all developmental levels, enabling students to organize thoughts graphically, visualize characters and settings for more detailed descriptions, sequence ideas and check for overall layout, and springboard their writing to the next level.

Ekphrastic poetry, poetry inspired by visual art, has been utilized by writers dating back to Homer and is a way to give students opportunities for meaningful expression (Moorman, 2006). Teacher, Honor Moorman, explains, “Both poetry and art speak to our imaginations through the power of images” (p. 47). Moorman gives students examples of ekphrastic poetry along with showing the artworks that inspired them. Students share, analyze, and discuss these pieces and then, with a field trip to an art museum, select their own artworks to examine and write about. Class discussion also covered the topic of similarities between the visual and verbal arts. Moorman found that

using ekphrastic poetry with children helped them to become more observant when reading, writing, and studying images.

Graves (1994) calls drawing an unconscious “rehearsal” for the writing that follows. He states that drawing allows children to think about what they want to say before they have to write it and also helps the child with context as they later reread their written texts. In a description of a first-grade writer’s process of composition, Graves notes that her drawing is used as an “idea bank” for her writing. Having spent the majority of her allotted writing time on her drawing; the child summarizes the entire drawing with a brief description. It is her drawing that contains the most information and the drawing is what her peers will respond to.

Dyson (1986) studied the fluidity of children’s symbol making, the relationships between talking, drawing, and writing. As a participant observer in a kindergarten classroom, Dyson conducted preliminary observations twice a week and selected four students for closer observation. These four students had varying approaches to drawing and writing tasks, which Dyson used to describe and interpret children’s symbolizing behaviors. After five months of observations, data was coded and analyzed to examine composing events, language functions, topics, and meaning elements. Three of the four students are described in depth as case studies.

Dyson’s findings illuminate differences in how children use language, drawing, and writing. There are even differences between the children who use talking extensively as they draw and write. Some used speech to show the action taking place, with noises, explosions, and countdowns. Others used talk that was more descriptive in nature, to describe in further detail characters frozen within a drawing.

Data analyses show drawing and talk provide varying amounts of support for children because of their individual differences in the ways they interrelate media. Dyson (1986) describes two students from the case studies as “dramatists.” These children talked throughout the time they drew and used their spoken words to develop their stories. Another child is described as a “patternner.” He relied more on known stories and completed pictures and less on talking as he developed his texts. For this child, the acts of talking, drawing, and writing are more separate. This study is an example to researchers studying early literacy; it demonstrates clear relationships between talking, drawing, and the writing process. Dyson recommends employing a variety of text-producing activities to help children transition into writing.

Children’s author and illustrator Doug Cushman (2002) invites inspiration for writing by pulling ideas from his sketches. He encourages children to scribble, use those scribbles to create characters and scenes, and use those sketches to ignite story ideas. In presentations, Cushman models the process for students and then allows them to try it independently. He encourages students to allow their scribble/sketches to take them in a variety of directions, including poetry, plays, comic strips, or mysteries. By utilizing this scribble method, Cushman claims that student writing may come as naturally as “spilling milk or having pillow fights” (para. 1).

Image to Word - Word to Image<sup>TM</sup> is a professional development workshop that is part of the Pacific Center for the Arts and Humanities in Education at the Pacific Resources for Education and Learning (Phillips, 2000). This is a federally funded program that strives to improve language arts through visual arts. The program provides standards-based integrated art education, including art history, art criticism, aesthetic

inquiry and art production. With Image to Word, students create paintings and produce written stories both in English and in their native languages. Allowing students a creative springboard has resulted in more descriptive writing in both languages while tying in students' cultural heritage.

Two other programs, Picturing Writing: Fostering Literacy through Art<sup>TM</sup>, and Image-Making Within the Writing Process<sup>TM</sup>, were designed by Beth Olshansky (2003) at the University of New Hampshire to provide art-based approaches to literacy for visual and kinesthetic learners. Picturing Writing includes experiences with literature, art, and writing within an Artists/Writers Workshop framework. In this program, students create crayon-resist artwork in response to literature selections, and then write poetry from their inspired works. In the Image-Making program, children first create collages with hand-painted textured papers and then write stories to accompany the art they created. Research studies on both programs have shown dramatic writing improvement, especially for those students most at-risk. With these and other arts-related literacy programs, it is the students' experience of creating a piece of art that forms the basis for the literacy experience. They create a visual first, using it to ignite ideas for writing.

In a case study that explored the connections students make between creating visual art and subsequent writing, researchers worked with two students familiar with the Picturing Writing program (Andrzejczak et al., 2005). Students were observed during instruction and class discussion as well as while they painted and wrote. Teachers, parents, and students were each interviewed. Data were coded using three predetermined categories: motivation, aesthetic perception, and individual response; and a category emerged from student and teacher feedback: creative process. Findings from this study

indicate that connecting visual and verbal imagery assists students in expressing themselves. Both students were motivated by the inclusion of the painting in the writing time. One student, who hated writing during the previous year in school, was described by his teacher to be a “minimalist.” With Picturing Writing, he gave his best effort and no longer treated writing like a chore. The other student enjoyed the Picturing Writing enough to continue her art and writing at home. The students also had an increase in their interest and observation of nature, which was reflected in their paintings. Within the creative process, the students do not always have complete control over the artwork, due to the use of watercolors and especially the wet-on-wet technique. Colors may run together or speckles may appear. These “happy accidents” inspired students rather than frustrating them, leading to new ideas for writing. While the paintings provided inspiration, they also enabled the students to remain focused on their writing topic. The researchers recommend the creation of “robust artworks,” as they contribute cognitive benefits and allow students to learn media skills, vocabulary, and aesthetic perception. Future research is recommended with students of varying ages, as well as special education and English language learners. The authors noted that it was the creating of the art that allowed students the distance to elaborate and write articulately.

Olsen (1992) argues for changes in instruction to better meet the needs of all learners. Based on her teaching and observation of students, she remarks that students have high visual and high verbal skills, high visual and low verbal skills, low visual and high verbal skills, or low visual and low verbal skills. A typical class has approximately a fourth of the students in each category. She recommends integrating drawing and writing to better motivate and support student writing. Her visual-narrative method

(Olsen & Wilson, 1979) incorporates students' visual stories with verbal narratives, resulting in rich multimedia presentations. In one classroom project, titled "Worldmaking," students first drew and brainstormed characters, then created environments for their worlds. They drew plot ideas and prepared storyboards with individual square illustrations that were later developed into slides. Verbal narratives were written after the artwork was complete and the narratives were recorded to accompany the slide presentations. Olsen and Wilson describe numerous other classroom projects, including illustrating vocabulary words, drawing assembly line production, writing a narrative based on a favorite artwork and developing their own accompanying artwork, as well as other activities involving the use of both words and pictures. They assert that "for most children, their words feed their drawings and their drawings feed their words" (p. 30). They encourage teachers to provide opportunities for transactions between the two symbol systems, allowing for the development of both.

Ernst (1998) also favors the idea of pairing art and writing; as an art teacher, she has found benefits from having students both sketch and write in their artist notebooks. While some students prefer to draw first and then write, she also gives examples of others who plan their paintings by writing vivid descriptions of the scenes. Having students reflect on their own creative processes through writing reveals the thinking, planning, and discovering that takes place as students create their artworks. A workshop approach is used to provide a balance between instructional time, student work time, and time for sharing of student work. Ernst also mentions the positive benefit of having students become more critically reflective as they view and write about art.

Another approach, used within literature circles, is the Sketch-to-Stretch strategy. This strategy is not to be confused with drawing a favorite part of the story, as it relies on use of line, color, shapes, and symbols to convey metaphorical meaning (Whitin, 2002). Students are encouraged to substantiate their choices of color, shape, and line, by providing a brief written statement to accompany their final sketches. A time for sharing and discussion is included as a portion of the process. Whitin comments that this strategy allows for diversity within student responses and sets a tone for respect in the classroom learning community.

Rief (1999), in her book, *Vision and Voice: Extending the Literacy Spectrum*, provides a practical guide for teachers that showcases the writing, music, and artwork of middle school students. She encourages free choice within parameters and asks teachers to slow down to allow students to “observe and view, interpret, and represent their worlds with more than words” (p. ix). Rief’s students keep reader’s-writer’s journals, which they fill with responses to what they are reading. Responses take the form of sketches, poetry, photographs, and song lyrics. Students are affirmed that their sketches matter as much as their words. Pieces from the students’ journals are “seeds” for more polished pieces that develop. Final pieces include such forms as cartoon strips, informational pamphlets, picture books, storytelling, illustrated poetry murals, musicals, songwriting, and book reviews. In this supportive setting, students learn about inquiry and research and work out their questions about themselves and the world we live in.

Rief (2007) also recommends the use of a technique called Drawing as Thinking, which she has learned from author Roger Essley (2008) and adapted for the classroom. Although many teachers think of drawing as appropriate for kindergarten students, Rief



uses drawing with middle school students. This method helps students develop into stronger writers and readers by teaching students to think visually. With this strategy, students use stick figures and key words to take notes, revise their writing, or demonstrate what they have learned from reading or viewing. Rief promotes visual thinking by having students use Post-it notes while reading to mark places in the text where they have questions or want to make a note. She also encourages teaching students to storyboard to help plan their writing pieces. She has students do quick sketches, draw stick figures, and include key words on square Post-it notes to plan overall story layout before students begin drafting. Students share their storyboards with one another to check for missing story elements or places where more details are necessary. As students receive feedback, they rearrange the squares, add or delete squares until they get the story they way they want it. Only then do they write the story from their notes. Essley (2008) comments that storyboards translate easily into written texts because they are linear, unlike graphic organizers, which can confuse students. He also recommends using storyboards because they truly are visual, unlike many graphic organizers which require students to fill in blanks with text alone. He encourages use of storyboarding across the curriculum to tap students' visual verbal skills, including support for reading comprehension and note taking.

Similar to storyboarding, a notational system called "pictography" is taught to children with language disorders (Ukrainetz, 1998). With pictography, students use quick drawings of stick figures to draft narrative stories. It differs from drawing a story, or summarizing a whole narrative into one detailed image, in that it is a series of simplified stick-figure drawings that are organized in a left-to-right, chronological order.

Arrows are used to separate thoughts or scenes. Pictography is in fact, an episodic graphic organizer. It is valuable for working with students on narrative structure as well as sequencing, vocabulary, sentence structure, and listening comprehension. A research study involving 61 elementary students in three classrooms showed that pictography was faster than writing or drawing and resulted in longer oral narratives with more organization and more action sequences (McFadden, 1998). The study also found that pictography worked well as a cooperative writing tool. One student focuses on the story while the other records ideas with stick drawings. The group using pictography also produced longer narratives than the drawing and writing groups. This technique is recommended to speech-language pathologists for individual language intervention and inclusive classroom settings.

There are many excellent teacher resources on the market for writing lesson ideas and instructions for implementing a writer's workshop. Horn and Giacobbe's (2007) book, *Talking, Drawing, Writing: Lessons for Our Youngest Writers*, includes practical ideas and step-by-step advice for teachers as well as giving examples of writing mini-lessons, assessment, and appropriate dialogue to use with young writers. It is not merely a book of lessons; Horn and Giacobbe show teachers how to watch and listen to students and how to respond. The book is highly recommended for early elementary classroom teachers and ELL teachers as well as others who work with young or inexperienced writers.

Horn and Giacobbe (2007) are well qualified to have written this text. As classroom teachers in Boston, they designed Writing in Kindergarten, a professional development project. They now work at the university level and provide in-service

training for teachers across the country. These teachers recognize that even the youngest learners have stories to tell, and start out the school year with oral storytelling. As children share their stories, it builds a climate of respect in the classroom and helps children to learn elements of writing craft before they are able to put them on paper. By the second or third week of school, these students who have told their stories orally are ready to record them. Drawing and Writing books are introduced to students as another way of “telling” their stories.

Horn and Giacobbe (2007) devote chapters three and four to drawing; a topic that these authors feel should be valued as a means of self-expression. In most classrooms drawing does not hold the same weight as the written word. Teachers spend time teaching students to write the sounds that they hear and work toward accurate spellings, but spend little to no time teaching children to draw more accurately the images that symbolize their thinking. Horn and Giacobbe make three statements about drawing:

- Most children like to draw. Given something to write with and something to write on, that’s what they do.
- Most children come to school already drawing. It’s something they feel they know how to do.
- For young children, drawing is writing; it gives them opportunities to do what writers do: to think, to remember, to get ideas, to observe, and to record. (p. 52)

Some simple and practical ways to support students as they draw are included.

Today’s writing teachers have more direction and resources than ever before. Many are told exactly what, how, and when specific topics should be taught and how they should be assessed. Those teachers might think they would not need another writing book on their shelves, but this one may help them to remain child-focused in the midst of school, district, state, and national mandates. Horn and Giacobbe’s (2007) book is a

valuable resource, not only for the information about teaching writing, but even more importantly for the insight into watching and listening to children and how those observations should guide our instruction. Horn and Giacobbe give teachers the gift of “seeing” into their classrooms as they read this guide. The language that they demonstrate and the way they affirm beginning writers is an example every teacher may find valuable.

A study with third grade students (Norris et al., 1997) provides evidence for the positive impact that drawing can have on student writing. In this experimental study, students wrote on self-selected topics on three occasions. These writing sessions lasted 30 minutes and were each about a week apart. An initial assessment of writing and creative ability was done, as well as collecting writing and drawing samples from the study. The initial assessment showed no significant differences between the control and experimental groups. The 60 students in the control group were only permitted to write, while the 59 students in the experimental group drew first before writing. There was a significant difference in the performances of the two groups. The group that drew produced more words, more sentences, and more ideas, with better overall writing performance than that of the control group. The results were consistent for both boys and girls, with no significant gender differences for any of the dependent variables. These results indicate that utilizing drawing as a pre-writing activity has a positive impact on student writing. Students in the drawing group were also more enthusiastic about writing and made better use of their time. The researchers recommend further research at other grade levels and with more diverse populations.

### *Digital Visual Images and Writing*

While some researchers are interested in the relationship between writing and visual images such as fine art, drawings, and collages, others are focusing on the use of technology, with digital visual images such as photographs, clip art, and presentation software. Over the past two decades, student classroom computer use has evolved from drill and skill practice games to using computers to support inquiry-based learning. Instead of merely learning from technology, students are learning with the aid of technology. Technology is being used to transform learning environments into complex, authentic, collaborative, learner-focused settings.

Interactive whiteboards (IWB), also known by their brand names, SMART Boards<sup>TM</sup> and Activboards<sup>TM</sup>, are one way that classrooms are being transformed by new technologies. An interactive whiteboard is a large, touch-sensitive board that allows the teacher and students to access the computer and Internet by touching the board with their hand or special pens. The document camera allows teachers to project an image from a book, student-work, or other tangible source. An overhead projector, mounted to the ceiling, shines the image from the computer or document camera onto the IWB. Sets of hand-held remotes are also available, which allow students to vote or choose answers to teacher inquiries. Visuals created on the IWB can be saved to the computer and printed.

Teacher training for this equipment typically includes initial full day training as well as follow-up training and on-call support from a technology team. The computer software includes hands-on teacher training software.

The Challenge Project (Baker, Clay, Scott, Arington, & Gratama, 2005) studied five schools using Activboards<sup>TM</sup> in Washington State. They found that the use of these

new technologies revolutionized the classrooms involved. The purpose of the study was to determine the extent to which teachers utilized the provided technology resources and examine the impact of the technology use on teaching practices and student learning. Findings from the Challenge Project reveal that teachers are using the equipment at high rates. The presence and use of the equipment has enhanced teacher instructional practices as well as positively impacting the rate and quality of student learning. It was also determined that successful implementation was contingent upon quality initial and on-going training for teachers.

There are innumerable ways to utilize imagery and technology in today's classrooms. The Internet is used as both a research tool and a venue for connecting students for communication. Software is readily available that facilitates the manipulation of digital photographs and images, such as Adobe Illustrator<sup>TM</sup> and Photoshop<sup>TM</sup>. Students are using presentation software, such as Microsoft's PowerPoint<sup>TM</sup> and Macintosh's Keynote<sup>TM</sup>, as early as kindergarten. Graphic organizers are easily accessed online, and there are specific organizational and brainstorming software programs for students, including Kidspiration<sup>TM</sup> and Inspiration<sup>TM</sup>. These helpful tools are being employed increasingly as teachers utilize computers as learning aids in today's technological classrooms.

One valuable resource, a free software download, RealeWriter<sup>TM</sup> (<http://www.realewriter.com>) allows students to create books to print or share in an on-line library. Students are able to create electronic books, called "Realebooks" by digitally inserting pictures and adding text. The electronic books can then be "published" on-line, shared by e-mail, or printed. In a study with middle-school students participating

in an after-school program, researchers found student attitudes toward writing were dramatically improved when students used RealeWriter™ to create their narratives (Tooley & White, 2007). Analysis of data indicates students were more excited about their Realebooks than their pencil and paper final products because they looked polished and could be easily shared.

This concurs with the findings of Goldberg, Russell, and Cook's (2003) meta-analysis of 26 research studies examining writing and the use of word processing technology. The results of this meta-analysis reveal that students are more engaged and motivated and write texts of greater length and higher quality when they use technology and not just pencil and paper. Effects on length and quality were more profound for middle and high school students than for elementary students.

In reviewing another 35 studies that were not a part of the meta-analysis, researchers also describe a distinct difference in climate in classrooms where computers are used in writing, stating that the writing process in these classrooms was more collaborative and social as compared with pencil-and-paper classrooms. Some of these studies focused on revision of students' writing, showing that when students utilize word processors, they start revising earlier in the writing process before a rough draft is completed and overall they make more revisions between initial and final drafts.

In another study with twenty-five second graders, (Bailey, McGrady-Jones & McGowan, 1995) researchers studied the effects of students' use of clip art and graphic presentation software as a part of the writing process. These students participated daily in a Writer's Workshop, including the components of brainstorming, webbing, drafting, editing, publishing, and presenting. Analysis of data shows four strategies that students

use to integrate visuals in the writing process: (a) Visual Relationship, (b) Visual Organization, (c) Visual Sequencing, (d) Trial and Error or Visual Testing. “Using visuals during webbing and rough draft provided a means for students to structure ideas, either through visual organization, sequencing, relationship, or trial and error” (p 143). The storyboards were found to be a useful tool for maintaining and elaborating on the initial themes produced with the webbing activity and were especially useful for visual organizers and visual sequencers as they grouped their ideas. Based on analysis of results, researchers recommend the use of storyboards for writing lessons, even when computers are not available. They found that the integration of visuals had a positive effect on student engagement and motivation, and the final writings of 24 of the 25 children in the study demonstrated greater risks in vocabulary and sentence structure, fewer misspelled words, and more lengthy writing than their earlier works.

### *Other Influencing Studies*

Two additional studies that were of assistance in methodology formation for this research study are a survey-based study and an observation/interview study performed with teachers who were nominated as being effective in promoting literacy. The initial survey study examines the nature of effective primary literacy instruction (Pressley et al., 1996). Their hypothesis was that effective primary literacy would be found to be multifaceted as opposed to a singular approach. Treating the teachers as authorities, Pressley et al. explain that teachers should be able to relate their expertise of teaching through the focused inquiry of a questionnaire. The researchers explain that this information fills a gap in the research literature because they approach the teachers from the angle of their expertise and not based on a particular method those teachers are using.



Fifty reading supervisors were randomly selected from the International Reading Association's list of elementary language arts supervisors. These supervisors were asked to recommend the most effective teachers in kindergarten, first, and second grades within their jurisdiction. One hundred, thirty-five teachers were nominated, with 113 responding to the first survey and 86 of those responding to the second survey. The first short questionnaire asked teachers to make three lists of 10 teaching practices that they felt were essential to their literacy instruction. One list was for good readers, one for average readers, and one for weaker readers. The teachers responded with 300 practices that the researchers categorized and used to create the final questionnaire. This questionnaire asked teachers to respond objectively, with Likert scale ratings, and included all 300 items suggested from the teachers' initial surveys. As expected, teachers' answers vary somewhat according to grade level. However, the instructional differences do not vary greatly according to reading ability. Characteristics of learning environments and general teaching processes are described.

In the teaching of reading, meaning making takes 71% of instruction time and decoding 27%. For every basic skill taught, most teachers claim to teach it within the context of actual reading and writing, 88% of teachers report some isolated skill instruction to teach or provide practice. Spelling instruction increases with grade level. Phonics instruction is reported in the context of real reading, during writing, and through invented spelling. Forty-three percent of teachers use phonics workbooks or skill sheets, and 32% report using a phonics program. All teachers report teaching comprehension strategies to readers of all ability levels, and all report teaching critical thinking strategies.

In the teaching of writing, teacher responses show more variance due to grade level. While many kindergarten students dictate their stories, for example, this practice is less common with second graders. Journal writing is implemented in most classrooms several times a week. Teaching students to revise their writing, the teaching of mechanics, and assessment through portfolios are reported more often with older students. Motivation and accountability are addressed as well.

As a whole, teacher reports line up with best practices in literacy education. These teachers integrate whole-language with skills instruction as opposed to adhering to one extreme or the other. The study is limited by using a survey; the researchers are distant from the participants.

In a follow-up study, nine first-grade teachers were selected for classroom observations and interviews (Wharton-McDonald, Pressley & Hampston, 1998). Five of these teachers were considered by district language arts coordinators to be outstanding and four were typical in their ability to help students develop literacy skills. In addition to observations, researchers interviewed each teacher twice. At the second interview, an individualized model of literacy instruction, developed from classroom observation, was presented to the teacher for review and critique.

This study sought to contrast the views of teachers who were thought to vary in their effectiveness. The focus is on the teachers who have the highest-achieving students, to determine the behaviors and perspectives that set them apart. Characteristics pertaining to general teaching that distinguish the high achievement teachers are instructional density, extensive use of scaffolding, high teacher expectations, encouragement of self-regulation, expert classroom management, and awareness of

purpose. These findings concur with the previous survey study in addition to providing further substantiation for existing research. While some of the areas have been researched extensively, others are less established in the literature.

Other factors, specific to literacy instruction, were observed in the high achievement teachers including: integration of reading and writing activities, and instructional balance. In each of the high achieving classrooms, literacy was observed as a dialectical process, whereby both a parts-to-whole (skills approach) and whole-to-parts (whole-language) approaches were presented consistently. These teachers facilitated fluid instruction that integrated the two systems within single lessons, providing for students' simultaneous development.

Recommendations are made to extend research to other, more diverse populations and to include pre and post-test measures. Researchers are also interested in information concerning school and district policies and how they shape teachers' beginning literacy instruction.

These studies, though more vast in scope, influenced the methodology of this current study. In a like manner, this current study is seeking the perspective of teacher expertise. Through a more broad survey, and select observation and clarification questions, we may gain the elite knowledge of experts in the area of writing instruction.

### *Summary*

In summary, the literature shows that much is known about best practices in literacy instruction and more specifically there are many programs being implemented to positively impact the teaching of writing. Examining the function of visual images within writing instruction has become increasingly important to both educators and

researchers. Today's society is rapidly becoming more focused on visuals and multimedia and our children must learn to interpret the images they encounter. Research has examined best practices in writing instruction as well as effective ways to incorporate learning styles, multiple intelligences, digital media, and the arts throughout the curriculum and specifically within the subject of writing. This review of the literature focused on these subjects and the impact that they have on student writing. We must further explore the potential and efficacy of incorporating visuals within our writing instruction. This report highlights the use of visuals in writing instruction by teachers with expertise in the area of writing. It also provides an in depth examination of how one teacher incorporates visuals and student drawing into her teaching practices. The study's findings should increase our awareness and understanding of possible tools and methods for integrating visuals within effective writing instruction.

## METHODOLOGY – *Sketching an Outline*

The purpose of this study is to determine how elementary teachers, who meet the criteria of being exceptional teachers of writing, utilize visual images in their teaching of writing. Specifically, the researcher is interested in how drawing is used as a learning tool in the classroom setting by both teachers and students and especially how drawing is used in the various stages of the writing process.

Writing is an important subject to teach, providing essential skills used in everyday life and in the workplace. Writing gives students opportunity for expression as well as a means to demonstrate learning. With the current time constraints in today's assessment-driven classrooms, it is imperative that educators make the most of every minute. While there are many opinions about how writing should be taught, there is not one set method for effective instruction. Research shows the validity of certain methods and programs, but it is also worth studying writing instruction from the perspective of expert writing teachers. It is from these teachers, their effective instructional practices and their unique perceptions, that we will learn what works and how to make it available to all students.

### *Research Design*

Qualitative Research Methods: A Data Collector's Field Guide served as a guide for the planning of the research study and for data collection and analysis (Mack, Woodson, MacQueen, Guest, & Namey, 2005). This research study utilizes a combination of a single instrument survey and an information rich case study, in which the researcher chose to focus on the topic of using visuals and drawing as learning tools in elementary classroom writing instruction. One bounded case was selected to illustrate

this issue. Qualitative research methods employed included collection of survey information, direct observation, participant observation, and open-ended interviews.

This study is seeking the unique perspective of teacher expertise. Like other studies (see Pressley et al., 1996 and Wharton-McDonald et al., 1998) that have examined literacy instruction by surveying and observing and interviewing teachers considered to be experts in their field, this study seeks to gain the elite knowledge of experts in the area of writing instruction.

The use of observation in research is recommended to provide a check against what people say they believe and what they actually practice. Like the Bridge & Hiebert study (1985), a combination of questionnaire and observation is used for a more complete overview of current classroom teaching practices and the opportunity to see how teacher beliefs coincide with instructional practices. In this study, the teacher was observed, during writing instruction and at other times throughout the school day, to determine whether teaching practices aligned with survey and interview responses. The observations also allowed the principal investigator an in-depth look at this teacher's use of visuals and drawing as tools for enhancing student learning.

Follow up and clarifying questions were asked in person and via e-mail to accommodate the teacher's prior obligations and busy schedule. These types of follow up questions also worked well with the teacher's comfort level, providing time for thoughtful and well-constructed responses. The selected teacher is very articulate, not shy or reserved, and liked having time to be able to think about responses once the school day was over.

Data collection methods included surveys, observation field notes, and follow up

notes and e-mails. Surveys are used with nonexperimental research to describe the attitudes, beliefs, and practices of a group (Patten, 2007). Here, the survey was used to gather demographic information as well as look at teachers' beliefs about writing instruction and their instructional practices. Surveys were administered and returned in spring of 2008. These surveys were additionally used to assist in sampling. Observations were also conducted in spring of 2008, after evaluating the returned surveys and selecting a teacher for observation.

The perspective used for this study is that of expertise. Pressley et al. (1996) recommend studying expert teachers as this grants additional insight to the researcher that might not be obtained from a study which focuses on a particular teaching method or instructional approach. Consistent with expert theory (Chi, 2006), Pressley et al. assume that effective teachers are aware of the details of their instruction. They claim that expert teachers are able to relate their knowledge, as do experts in other fields, through focused questioning. The goal of this study was to find teachers who are teaching writing with excellence and determine how visuals are used in their instruction.

### *Description of Participants*

Participants for this study met the definition of "purposive sampling" (Sampling methods, n.d.) by targeting a particular group of people, in this case exceptional writing teachers. Teachers who were selected for participation in this study were determined to be exceptional teachers of writing as defined by the parameters set forth for this study. To meet the criteria for teacher selection, teachers had to have the following qualifications:

- Must have successfully completed the Kentucky Writing Project as detailed on the project website (<http://www.kywritingproject.org>).
- Must be currently employed as an elementary school teacher.
- Must be recognized in their schools as “teacher leaders” who have worked with other teachers in their school or district to promote best practices in the teaching of writing.

After determining the criteria for participation in this study, the researcher worked with the director of the Western Kentucky Writing Project to find teachers who met the criteria. Approval was obtained from the Human Subjects Review Board (Appendix C) and the two local school district boards (Appendix D).

The initial survey was mailed to 22 teachers who met these criteria. Eleven responded by the date asked for in the cover letter. An e-mail reminder was sent to each teacher who had not responded by that date. A total of 17 teachers responded by the cut-off date. Seven responded that they no longer met the criteria for the study because they were no longer elementary classroom teachers. Some are now teaching guidance, English Language Learners, gifted and talented students, managing reading grants, or are curriculum coordinators as opposed to regular classroom teachers. One teacher responded that she was not interested in participating at this time. The remaining nine returned surveys were usable for this study. Teachers volunteered to participate, meeting the requirement of The Belmont Report (1979). Compensation to participants included gift cards for completing the survey as well as additional gift cards for the observation and interview sessions.

Based on her survey responses, one teacher stood out as an information-rich source and was selected as a case study for observations and interviews. This teacher was initially chosen for meeting the criteria of being an excellent teacher of writing. She



participated in the Writing Project course at the local university and has been an elementary classroom teacher for the past 19 years. Her survey responses stood out because of how strongly she feels about the impact of using visuals and drawing with her students and how frequently she relies upon these tools in her teaching practices. She teaches first and second graders in a transition classroom. These students were selected for her classroom specifically because they struggle with reading. In addition, many of her students also have language delays and difficulties with writing and math.

The elementary school in which observations took place is located in a small suburb in the southeastern United States. Data from the 2006-2007 school year lists a student population of 592 preschool through sixth grade students (School Digger, 2008). Seventy-eight percent of the population is Caucasian, 5% African American, 5% Hispanic, 8% Asian, and 5% other. Eighteen percent of the population receives free or reduced lunch. The school is ranked 149<sup>th</sup> of 675 public elementary schools in the state, based on state math and reading test scores.

The observed teacher has 14 students, a slightly smaller class size than the school's teacher student ratio of 1:16 (Great Schools, 2008). She has 8 male and 6 female students; 9 are white, 2 are black, 1 is Hispanic, and 1 is listed as "other." Some of the biracial children are listed as white and some are listed as "other." Her class also has three students who speak English as a second language and one student identified with autism who receives special education services. One student is in the process of being tested for special education. Two additional students receive speech and language services.

There were no expected risks for the participating schools, students, or any of the teachers who were surveyed, observed, or interviewed. Access to consent forms, surveys, data output, and other written materials was restricted to the principal investigator's committee chairperson and the principal investigator. All materials including consent forms, surveys, observation notes, data outputs and other written materials will be kept in a locked file at Western Kentucky University for three years upon the completion of this study at which time they will be destroyed.

At no time will the name of the teacher, school, or school districts be identified in writing and only the investigator and committee chairperson will be privy to that information. The participating teacher will be referred to only as "Mrs. Duncan" and the school as an "elementary school in the southeastern United States."

### *Description of Procedures*

The principal investigator developed the Drawing and Writing Survey for Elementary Teachers (Appendix A) to gather information concerning teacher demographics as well as ascertain teacher beliefs and practices concerning the teaching of writing. The survey questions were designed in keeping with both current research in writing and knowledge of classroom teaching practices. Some questions were adapted from Brindley and Schneider's (2002) survey which studied the ways teachers balance their stated beliefs about how writing should be taught and their classroom practice which may be influenced by outside issues.

The first portion of the survey addresses teacher and class demographics and information. There are fourteen questions, asking teachers whether they consider themselves to be artists, visual learners, or writers as well as questions that address their

instructional beliefs, such as, “How important is it that you utilize visuals to teach your students effectively?”

The second section of the survey focuses on writing instruction and assessment, with teachers noting the time devoted to writing instruction and time allotted for students to write daily, as well as open-ended questions describing writing instruction and changes to writing instruction during their teaching careers.

The final portion of the survey addresses art and writing products created in the classroom, with a look at how students use drawing at various stages of the writing process and visual products that are created by students. There are a total of 32 questions on the survey, with seven of them open-ended. In addition to the open-ended questions, many of the multiple-choice questions list “other,” giving the opportunity of writing in information not listed as an option.

The Drawing and Writing Survey was field tested in advance with a pilot group of fifteen teachers in a masters level literacy course at the local university to ensure its clarity. A review of the field test surveys showed that the instrument was clear and informative and required no additional revisions. Of the 22 surveys mailed out, nine were returned that were usable for this study. The principal investigator coded and examined the surveys looking for patterns and outliers regarding teachers’ use of visuals in their writing instruction.

Classroom observations were conducted to determine how closely teacher instructional practices aligned with survey responses and to look at specific ways the teacher integrated visuals in her writing instruction. The researcher observed in Mrs. Duncan’s classroom for 33 hours (nine separate occasions) over a period of four weeks.

Twenty-eight of these hours were from four full day observations. The remaining five hours were during writing instruction times.

The role of the principal investigator was that of an outside observer.

Observations were completed from the back of the classroom on initial visits. As the students grew accustomed to my presence, I was occasionally approached with questions, or by students wanting to share their work with me. As their comfort with my presence became apparent, I spent more time walking the room as they were working so as to better see what they were writing and drawing.

Field notes taken during these times include classroom environment layout and descriptions, detailed notes concerning teacher instruction and student response, with special attention to teacher use of visuals in instruction. Also included are the researcher's assertions and questions. These notes were taken by hand in the classroom and typed later that day with additional assertions and questions added.

Follow up and clarifying questions (Appendix B) were developed after reviewing the teacher's survey responses and as the researcher observed and typed field notes. At the teacher's request, these questions were e-mailed in the evenings and over spring break.

### *Data Analysis*

Data analysis included coding of surveys looking for patterns and outliers among teacher responses. Excel worksheets and graphs were utilized to organize and display coded survey data. Observation field notes and notes and e-mails from the teacher follow up were coded in regard to teacher and student use of visuals. Themes emerged from the data and were verified by reviewing the data with the principal investigator's committee

chairperson. Triangulation is achieved in this study by examining the survey responses, observing the selected teacher directly, and following up the observations with questions generated from review of the observations and survey data.

## RESULTS – *Painting the Portrait*

Writing allows opportunity for expression as well as providing means to demonstrate learning. With the current time constraints in today's assessment-driven classrooms, it is imperative that educators make the most of every minute. While there are many opinions about how writing should be taught, there is not one set method for effective instruction. Research substantiates validity of certain techniques and programs, but it is also worth studying writing instruction from the perspective of expert writing teachers. It is from these teachers, their effective instructional practices and their perceptions, that we will learn what works best and how to make it available to all students.

The purpose of this study is to determine how elementary teachers, who meet the criteria of being exceptional teachers of writing, utilize visual images in their writing instruction. Specifically, the researcher is interested in how drawing is used as a learning tool in the classroom setting by both teachers and students and especially how drawing is used in the various stages of the writing process. The study is designed to acquire the input and perspectives of excellent writing teachers through a detailed questionnaire and then examine more closely one of those teachers through a case study, involving observations of writing instruction and follow up questions for clarification. Triangulation is achieved in this study by examining the survey responses, observing the selected teacher directly, and following up the observations with questions generated from review of the observations and survey data.

### *Description of Results*

The Drawing and Writing Survey for Elementary Teachers (Appendix A) was developed to gather information concerning teacher demographics as well as ascertain teacher beliefs and practices related to the teaching of writing. The survey questions were designed in keeping with both current research in writing and knowledge of classroom teaching practices. Some questions were adapted from Brindley and Schneider's (2002) survey which studied the ways teachers balance their stated beliefs about how writing should be taught and their classroom practice which may be influenced by outside issues.

Teachers who were selected for participation in this study were determined to be exceptional teachers of writing as defined by the parameters set forth for this study. To meet the criteria for teacher selection, teachers had to have successfully completed the Writing Project, be currently employed as an elementary school teacher and be recognized in their schools as "teacher leaders" who have worked with other teachers in their school or district to promote best practices in the teaching of writing.

The initial survey was mailed to 22 teachers who met these criteria. Eleven responded by the date asked for in the cover letter. An e-mail reminder was sent to each teacher who had not responded by that date. A total of 17 teachers responded by the cut-off date. Seven responded that they no longer met the criteria for the study because they were no longer elementary classroom teachers. Some are now teaching guidance, English Language Learners, gifted and talented students, managing reading grants, or are curriculum coordinators as opposed to regular classroom teachers. One teacher

responded that she was not interested in participating at this time. The remaining nine returned surveys were usable for this study.

### *Survey Results*

Of these nine elementary teachers, one teacher teaches kindergarten, one has a first and second transition classroom, one teaches third grade and the remaining six teachers teach fourth grade. One of the fourth grade teachers only teaches writing. Another of the fourth grade teachers does not teach math or science. Grade levels taught are outlined in Table 1.

Table 1

### *Grade Levels Taught*

	Grade K	1 <sup>st</sup> Grade	2 <sup>nd</sup> Grade	3 <sup>rd</sup> Grade	4 <sup>th</sup> Grade
Teacher 1					X
Teacher 2					X
Teacher 3					X
Teacher 4	X				
Teacher 5					X
Teacher 6		X	X		
Teacher 7					X
Teacher 8				X	
Teacher 9					X

All of the teachers are Caucasian females. Three have 0-5 years teaching experience, two have 6-10 years experience, one has 11-15 years experience, two have



16-20 years experience, and one has 21 or more years of experience. Experience is shown in Table 2.

Table 2

*Teacher Experience*

	Teach Exp	Teach Exp	Teach Exp	Teach Exp	Teach Exp
	0-5 years	6-10 years	11-15 years	16-20 years	21+ years
Teacher 1			X		
Teacher 2					X
Teacher 3	X				
Teacher 4	X				
Teacher 5		X			
Teacher 6				X	
Teacher 7		X			
Teacher 8				X	
Teacher 9	X				

When asked whether they consider themselves to be visual learners, from a five-point scale of definitely to not at all, three teachers replied “definitely”, three “usually,” and three “somewhat.” Teachers were also asked if they viewed themselves as artists on the same scale rating. Responses list two “definite,” two “usually,” two “somewhat,” two “not usually,” and one “not at all.” More teachers considered themselves to be writers, with four “definite,” three “usually,” one “somewhat,” and one

“not usually” response. Table 3 shows the teacher preferences for visual learning, artist and writer.

Table 3

*Teacher Learning Preferences*

	Consider self	Consider self	Consider self
	Visual Learner	Artist	Writer
Teacher 1	Somewhat	Not Usually	Usually
Teacher 2	Definitely	Somewhat	Somewhat
Teacher 3	Usually	Not Usually	Definitely
Teacher 4	Somewhat	Usually	Definitely
Teacher 5	Usually	Definitely	Definitely
Teacher 6	Usually	Usually	Usually
Teacher 7	Definitely	Not at All	Usually
Teacher 8	Definitely	Definitely	Definitely
Teacher 9	Somewhat	Somewhat	Not Usually

Graves (1994) writes about the importance of the teacher as a writer. He encourages teachers to write with their students and to share their writing with students. The same concepts can be extended to art and visuals. No teacher would say, “Now you all know I’m just a terrible mathematician...” as she approaches the markerboard to demonstrate, but many teachers do discount their artistic abilities as a precursor to drawing a visual example for a lesson. With two responses of “not usually” and one “not at all,” teachers think less of their artistic abilities than their writing abilities. What

impact might this have on teachers' instructional practices and their ability to provide effective visuals for instructional purposes? Teachers need to feel qualified to prepare students to work in a very visual society. Author and artist, Roger Essley (2008), claims that everyone can be an artist and encourages teachers to work through their anxieties of drawing in front of children.

When asked, how familiar are you with Multiple Intelligences theory? On a five-point scale from expert to never heard of multiple intelligences (MI), all teachers report that they are "very familiar." Familiarity with MI theory does not ensure that it will be incorporated into teaching practices. This question was included in the survey because it would be more difficult for teachers to be held accountable to these practices if they were not aware of them.

**Teachers' estimates of the number of students who are visual learners in their classroom** vary from 25% to 50% to more than 75%. Teacher responses are noted in Table 4. Here, teacher estimates come close to aligning with data from Olsen (1992). She found at least half of the students in a typical classroom could be classified as having high visual skills. Because teachers self-report to be aware of Multiple Intelligences theory as noted in the previous survey question, it will be important to see whether their instructional practices are differentiated to account for students' individual differences.

Table 4

*Teacher Estimates of Visual Learners*

	Less than 25%	25-50%	50-75%	More than 75%
Number of teachers	0	3	4	2

Teachers were asked how often do you incorporate visual examples, such as charts, graphs, posters, diagrams, or graphic organizers, into your lessons (any subject area)? With choices ranging from occasionally to multiple times per day, teacher responses show a high rate of visual example use. With the exception of one teacher, who chose “weekly,” all other teachers use visuals “daily” or “multiple times per day.” Responses are listed in Table 5. Self-reports of high frequency use of visuals is a possible indication that these teachers believe in the power of incorporating visuals into instruction.

Table 5

*Frequency of Visual Example Use*

	Occasionally	Weekly	Daily	Multiple times per day
Number of teachers	0	1	4	4

The following question indicates that these writing teachers do seem to have strong opinions about using visuals. When asked, how important is it that you utilize visuals to teach your students effectively, one teacher replied “very important” and all other teachers replied “extremely important.”

Teachers were asked in what subject area they use visuals the most. Writing, reading, math, and science each received two responses and social studies received one vote. Two teacher responses were not usable for this item: one marked more than one answer and the other only teaches writing. They were also asked in what subject area they use visuals the least. Visuals are used least by four teachers in teaching subjects such as spelling, language arts, and grammar, which fell into the “other” category.

Reading was noted by three teachers, and social studies received one vote. Again, the teacher who only teaches writing was not counted in this survey item. Here, answers were dispersed, but it is notable that writing was not mentioned by any teacher as a subject in which she uses visuals the least.

Teachers were asked to describe any changes in the way they incorporate visuals or visual products into lessons during their teaching career. All teacher responses show an increased use of visuals. Three teachers attributed their increase to technology capabilities in the classroom, with specific references to Activboards, Smart Boards, computers, and document cameras. Teacher 6 responded, “The use of technology has made it easier to incorporate visuals in my lessons. I have an Activboard with a direct link to my computer that allows me to show images instantly if needed.” Teacher 7 agrees, “The activeboards and document cameras have made it much easier to demonstrate visuals in teaching writing and other content areas.” Two teachers mentioned increased use of graphic organizers and using visuals “to help students organize information.” Teacher 1 noted an increased use of student-created visuals and teacher 5 incorporates picture prompts, in which students respond to thought-provoking pictures.

Hoban et al. (1937) warn against improper use of visuals and state that many visuals used in the classroom for instruction have been ineffective. Here teachers report that improved technology has made it easier to incorporate visuals, but we have no information as to the quality and the appropriateness of the visuals for the particular lessons. A better question might have been, are these the best visuals for the lessons’ objectives?

In this first section, teachers were asked about demographics, including gender, race, and number of years of teaching experience, as well as their and their students' learning style preferences. The nine teachers surveyed are all Caucasian females, with teaching experience ranging from 0-5 years to 21 or more years. Six of the teachers have fourth grade classrooms, one teaches kindergarten, one teaches a first and second transition class, and one teaches third grade. While most of the teachers would describe themselves as visual learners or as writers, few described themselves as artists. Six of the nine teachers estimate more than half of their students to be visual learners. All are very familiar with Multiple Intelligences theory. All but one teacher report to use visuals in instruction daily or multiple times per day. Teacher responses in this section indicate that they are incorporating visuals on a regular basis and that their use of visuals has increased since they began teaching.

Writing instruction and assessment questions formed the second portion of the survey. Teachers were asked how much time do you devote to writing instruction each week. They were asked to respond by filling in the blanks, \_\_\_\_\_ times per week for \_\_\_\_\_ minutes. Because of the range of times in teacher responses, it is possible that this question was not interpreted in like manner by each teacher. While some teachers may have marked only the time allotted for a mini-lesson (15 minutes), others may have marked their entire writing time, including the students' writing time. They were also asked how much time do students spend writing daily. Time for writing instruction each week and time students spend writing daily are shown in Table 6.

Developing writers does take time. Although it appears that this question may not have been understood clearly, it is important to see that a writing teacher sets up “conditions,” including time, as described by Graves (1994), for good writing to occur.

Table 6

*Writing Instruction and Student Daily Writing Time*

	Writing Instruction			Student daily writing time
	Number of times per week	Number of minutes	Total minutes	Total minutes
Teacher 1	5	45	225	30-45
Teacher 2	5		6 hours/day	60
Teacher 3	5	45	225	15
Teacher 4	2	15	30	30
Teacher 5	5	40	200	90
Teacher 6	4-5	30-40	120-200	30-40
Teacher 7	5	30-45	150-225	20-40
Teacher 8	5	45	225	100
Teacher 9	5	45	225	20-30

Teachers were asked, Please describe your writing instruction. What does a typical lesson look like? While many models have been touted as effective, here the researcher was looking for the inclusion of research-based best practices such as

providing models and teaching writing as a process. A wide variety of responses included references to Writers Workshop format, mini-lessons, examining samples, use of literature, modeling, independent writing time for students, use of the writing process model, and sharing. Teacher 7 noted the difficulty in describing a typical lesson, explaining, “It depends if I am introducing a new genre or a new skill.” A writing lesson can easily span a week or more if working through all the stages of the writing process. Teacher 5 noted that after modeling, she leaves a sample projected on the board during student independent writing time. Teacher 6 was the only teacher to mention specific prewriting strategies. She responded,

Lessons typically begin with literature (usually picture books). After reading, students have ‘think’ time usually based on a specific question (i.e., When was a time when you felt sad...). I allow LOTS of time for talking. Oral language is very important to my 1<sup>st</sup> and 2<sup>nd</sup> graders. I usually have students draw before writing (or dictating for some of my 1<sup>st</sup> graders). Drawing allows for idea development & adding of details. Writing the story is next, followed by sharing.

Teacher 8 also mentioned writing across content areas in addition to typical writing instruction time.

Bromley (2003) states that students need opportunities to practice writing skills within the framework of engaging in the writing process. Both lessons on craft and conventions of writing should be provided. Attempts to balance process and product is evidenced in these teachers’ self-reports of their instructional practices. Mention of student drawing by Teacher 6 stands out among the responses.

Teachers were also asked to list any writing-related workshops or trainings attended for professional development. While all of them have participated in the Writing Project (a requirement for the sampling purposes of this study), a few have



participated in many more. One teacher made a note on the survey asking whether I wanted to know the writing professional development from just the past year. Four of the teachers are writing cluster leaders in their respective schools, which requires annual training. Other annual trainings mentioned include KCTE/LA conferences, mentioned by three teachers, and portfolio scoring training, mentioned by two. Workshops were listed by some with the presenter (e.g., Barry Lane, Donna Vincent) and by others according to topic (e.g., transactive writing, writing workshop, 4-square, open response).

In Brindley and Schneider's (2002) research many teachers commented that their writing instruction had improved as a result of the training they had received so that they might prepare students for testing. Many teachers modeled writing more often, stated that their instruction had moved beyond the basics of isolated skill instruction, and had higher expectations for students as a result. In this study, the fact that these teachers have participated in multiple writing training opportunities could be an indication of school, district, or state mandates requiring focus on writing assessment.

Teachers were also asked to describe any changes during their teaching career in the way they teach writing. While one teacher indicated a mild progression, most teachers noted dramatic change. Teacher 7 stated, "Absolutely! I have become much more focused (intentional) in my writing instruction. I enjoy teaching now rather than dread it. I also strive to make writing more enjoyable for my students." A few teachers noted sources that prompted change: Teacher 2 responded, "Definitely! Many changes came about from Kentucky's restructuring of the testing system." Teachers 3, 5, and 8 noted specific changes they made as a result of participating in the Writing Project. Teacher 3 has increased use of modeling and uses personal writing as examples for

students. Writers' notebooks have been incorporated into writing instruction. Teacher 5 has also incorporated writers' notebooks in addition to utilizing the school's four-square writing program. Teacher 8 remarks,

Wow – you can't even imagine. I used to HATE to teach writing – that is until I participated in the Writing Project. I never use to consider myself a writer until then. How I've changed – writers notebooks used – write when my students write – very hands on – teach writers craft – my love of writing rubs off on my students.

It is not a surprise that teachers mention the impact of the Writing Project. The National Writing Project is a network of teachers working with local universities to explore research-based writing instruction practices (National Writing Project & Nagin, 2003). In their training, teachers are not given prescriptive writing programs to implement, but are encouraged to respond to the needs of their students while implementing best-practice activities. Teachers are especially encouraged to develop themselves as writers and to conduct research and present their new knowledge to other teachers. According to Nagin, these "teacher leaders" are making a difference and the result is improved writing in our schools. Here, teachers attest to this valuable training.

In the teaching of writing, teachers face many obstacles. The survey asked, what challenges do you face as you work to teach writing effectively. Teachers were instructed to mark all answers that apply. Time for students to go through all the phases of the writing process and time for conferencing with individuals received the most votes from teachers. Two teachers placed asterisks next to "time for conferencing with students," perhaps indicating that this is their most pressing challenge. Teacher 6 noted an additional challenge she faces. Marking "other," and commenting, "My students were

placed in my class because they are struggling readers – some have difficulty writing words and writing sentences.” Teachers’ answers are indicated in Table 7.

Table 7

*Challenges to Teaching Writing*

	# of teachers	% of teachers
Resources for lessons	1	11.1%
Time to plan	4	44.4%
Time to present lessons	3	33.3%
Time for students to plan, write, revise, edit, and publish their writing	7	77.8%
Time for conferencing with individual students	6	66.7%
Incorporation of technology	3	33.3%
Evaluating student writing	1	11.1%
Individualizing instruction	5	55.6%
Helping students put voice into their writing	3	33.3%
Balancing teaching writing mechanics and writing craft	3	33.3%
Motivating students/creative ways to “get them started”	1	11.1%

Time for students to work through the writing process and time for conferencing received the most responses by far. This confirms the statement from the National Commission on Writing (2003) which calls time writing's "ally." Students need time to develop as writers and teachers need time to respond to them individually.

Teachers need to be made aware that drawing is not another item to be added to their long list of things to include in their brief writing instruction time. Having students draw actually saves writing time. Norris et al. (1997) found that third grade students who drew as a prewriting activity made better use of their writing time. In another study, McFadden (1998) found that pictography quick sketches were even faster than drawing and helped students to write longer narratives with more action sequences. If teachers knew the benefits of these strategies, including their ability to save student writing time, they might be more inclined to incorporate them.

Teachers were asked to mark all the types of writing instruction that you provide for your students on at least a weekly basis. They were instructed to mark all answers that apply. On at least a weekly basis, all teachers provide whole-group instruction. Most teachers also include in their instruction: modeling, free writing, conferencing with individual students, skill/grammar lessons, and the reading of literature as examples of good writing. Only two teachers noted using workbook pages on a weekly basis. This provides additional indication that most of these writing teachers are imbedding writing instruction in the context of authentic student writing in accordance with best practices. The three teachers who indicated use of marker papers are all fourth grade teachers. Teacher responses are summarized in Table 8.

Table 8

*Types of Writing Instruction (weekly)*

	# of teachers	% of teachers
Writing prompts	6	66.7%
Individual instruction	3	33.3%
Small-group instruction	6	66.7%
Whole-group instruction	9	100%
Modeling	8	88.9%
Conferencing with individuals	7	77.8%
Skill/grammar lessons	7	77.8%
Process writing strategies	6	66.7%
Workbook pages	2	22.2%
Reading literature as examples	6	66.7%
Using marker papers as examples	3	33.3%
Free writing/student choice	8	88.9%

The types of writing that students create over the course of the school year are noted in Table 9. The high levels of teacher congruence in many of the types listed may be due to mandates concerning state writing assessment with the inclusion of writing

portfolios and the types of writing that should be included within the portfolio at various grade levels. In comparison with the previous table, the information here shows that one additional teacher uses workbook pages, but not frequently enough to be included in Table 8.

Table 9

*Types of Writing by Students*

	# of teachers	% of teachers
Journals/logs	8	88.9%
Narrative	8	88.9%
Expository	6	66.7%
Creative writing	9	100%
Poetry	8	88.9%
Letter writing	9	100%
Workbook pages	3	33.3%
Content-area writing/ Writing across the curriculum	9	100%
Grammar/skill exercises	7	77.8%
Student choice of writing genres or topics	8	88.9%

Scoring of student writing may also be influenced by state testing mandates. Again teachers were instructed to mark all that apply. The kindergarten and first/second grade teachers relied on personal written responses and individual conference feedback for the majority of their assessment, using fewer formal assessments. All but one of the fourth grade teachers uses a standard scoring rubric on published pieces. This stands out because the portfolio requirements for grade four require standard scoring. Responses are shown in Table 10.

Table 10

*Grading/scoring of Student Writing*

	# of teachers	% of teachers
Personal written responses	6	66.7%
Individual conference feedback	7	77.8%
Teacher-created checklist	4	44.4%
Standard (school or state) checklist	6	66.7%
Teacher-created scoring rubric on first drafts or working drafts	1	11.1%
Teacher-created scoring rubric on published pieces	2	22.2%
Standard scoring rubric on first drafts or working drafts	2	22.2%
Standard scoring rubric on published pieces	5	55.6%
Grade first drafts or working drafts	0	0%
Grade published pieces	1	11.1%
Students select best work for a portfolio	7	77.8%
Teacher selects best work for a portfolio	1	11.1%
There are some pieces I do not look at or grade	6	66.7%



When asked how often they incorporate visual examples, such as charts, graphs, posters, diagrams, or graphic organizers, into writing lessons, just over half of the teachers (55.6%) responded weekly, with two teachers marking occasionally, and one marking daily. One teacher's response was invalid because she marked both weekly and daily, with a note that visuals were used daily for prewriting. These responses are of interest because they contrast with the high levels of student need for visuals as teachers responded earlier in the survey (see Table 4). If these teachers truly understood the importance of using visuals effectively, they would not teach writing without them.

Many researchers recommend frequent use of visuals and testify to the efficacy of student drawing paired with writing. Dyson (1986) and Graves (1994) in their work with young children, have studied the ways students develop as writers using talking, drawing and writing. Graves compares drawing to a "rehearsal" or an "idea bank" for the writing that follows. Dyson's research shows that drawing and talk provide varying amounts of support for children because of their individual differences in the ways they interrelate media. She suggests using a variety of text-producing activities to help children transition into writing. Horn and Giacobbe (2007) advocate teaching oral storytelling and drawing skills in conjunction with writing skills for developing young writers. Olsen (1992) and others value the integration of art and writing for students of all grade levels and argue that more students may need visuals incorporated into writing instruction with increased frequency.

Motivation can be a deciding factor in student writing success. Writing can be difficult for writers of all ages and experience. Teachers were asked have you had students who struggled with motivation or behavior during writing lessons. If so,

please describe any methods you found that worked to turn them on to writing.

Teacher responses varied considerably with many positive reviews of strategies that have proven successful. Five teachers mentioned allowing students more freedom including offering students' choice of topics and use of writers' notebooks. Two teachers mentioned using the computer as a motivator for students. Teacher 8 feels strongly that perception influences motivation, stating, "My strongest strategy is helping them see themselves as writers. I also believe that it is extremely important that they see me enjoying writing. I have found that when they see me enjoying it – so do they." Teacher 1 also works to build student enthusiasm, but accomplishes it through sharing of student work. Teacher 6 provides additional scaffolding for struggling students. "My 1<sup>st</sup> & 2<sup>nd</sup> graders need talk time. They also need to draw before writing. I use dictation for my writers who have difficulty hearing sounds in words."

It is interesting that only one teacher mentions using art as a motivator for writing. Olshansky (2003) claims that motivation is one of the reasons to include art making in the writing process and gives the example of a former reluctant writer who through the Picturing Writing program began writing with more interest and greater proficiency. This difference is perhaps due to these teachers including minimal visual and drawing support for writing as opposed to the programs developed by Olshansky, which immerse students in robust artwork creation.

Writing instruction and assessment questions formed the second portion of the survey. The kindergarten teacher is the only teacher who teaches writing twice a week. All other teachers report writing instruction periods for 4-5 or 5 days a week. Teachers described their writing instruction in terms of what a typical lesson looks like, as well as

indicating how their instruction has changed over the course of their teaching careers. All reported an increase in use of visuals. Teachers were also asked about challenges they face in their writing instruction. The most frequent responses included time for students to go through all the phases of the writing process and time for conferencing with individuals. Art was only listed by one teacher as a tried-and-true motivational tool. Despite their self-reports of using visuals, teachers may not be incorporating them to the degree recommended by research.

The third portion of the survey addresses art and writing products created in the classroom, with a look at how students use drawing at various stages of the writing process and visual products that are created by students. Teachers were asked to what extent they believe drawing to be a part of writing, and were asked to mark all that apply. Responses are shown in Table 11. All of the teachers are in agreement that drawing can help students form concepts and visualize their ideas. Most agree that drawing helps students with expressing their ideas, that it can be a motivator, and that it is necessary for younger children.

It is interesting that all teachers did not embrace the last item listed, understanding that drawing can communicate some information more clearly than text. Think of a street map or a diagram of the water cycle. Teachers need to be able to teach students when a drawing is an effective means to communicate information. A complete literacy program, according to Moline (1995), needs to include both drawing and writing as means to communicate information. Students need to be taught how to explain information through diagrams, graphs, tables, and maps as well as determining which method is most effective for the information to be conveyed. However, only 66.7% of

the teachers surveyed here recognize that some drawings (such as a map, graph, or diagram) are able to communicate certain information more clearly than a written description.

Table 11

*Drawing as a Part of Writing*

	# of teachers	% of teachers
Helps form concepts/visualize ideas	9	100%
Is necessary for younger children	7	77.8%
Is not necessary if children can write on their own	1	11.1%
Helps build creativity and expression	7	77.8%
Supplements writing	3	33.3%
Is a form of writing	6	66.7%
Helps students to express what they visualize	8	88.9%
Can motivate struggling writers	7	77.8%
Can communicate certain information more clearly than verbal text	6	66.7%

Teachers were asked in what stages of the writing process do your students utilize drawing. Most of the teachers have students draw in only the prewriting stage. Only one teacher mentioned student use of drawing at the revision or editing stage, marking “other” and noting “use of acronyms.” One fourth grade teacher remarked, “In

4<sup>th</sup> grade we don't utilize drawing as much as in younger grade levels." Answers are shown in Table 12. There is a contrast to note here with the previous survey question. Although all of the teachers agree that drawing can help students form concepts and visualize their ideas for writing, not all of them are using drawing in their instruction. In the Brindley and Schneider (2002) study, 68% of teachers stated that drawing was a necessary part of writing, but none of the teachers listed drawing in their description of student writing behaviors or as a part of their instruction. Incongruities between teachers' ideals of writing instruction and classroom instructional practices were attributed to assessment pressures. Another possibility might be the disjunction between teachers' theories and actual classroom practices. Implementing new instructional strategies can be daunting for teachers, even if they think the practices might be valuable. Perhaps teachers would be more likely to try incorporating these practices if they first saw them modeled.

Table 12 also highlights a remarkable finding of this study. Of the teachers surveyed, most who utilize student drawing do so at the prewriting stage. Had this question been asked of teachers 20 or 30 years ago, there is no doubt that the answer would have been the opposite. Drawing was done to illustrate the finished product. It is interesting to note the change in writing instruction. This provides evidence that teachers are leading students into writing experiences rather than merely assigning writing. Also, if half of the teachers are using storyboarding at the prewriting stage, it would be a simple step to use those same storyboards for revision.

Table 12

*Student Drawing – Stages of the Writing Process*

	# of teachers	% of teachers
<u><i>Drawing during prewriting</i></u>		
• Draw, paint, or sketch to brainstorm ideas	7	77.8%
• Storyboarding to plan a story	5	55.6%
• Graphic organizers/story webs	7	77.8%
<u><i>Drawing during drafting</i></u>		
• Sketch to stretch strategy	2	22.2%
• Story frames	4	44.4%
<u><i>Drawing with revision/editing</i></u>		
• Storyboarding to look at overall ideas/concepts	0	0%
• Other	1	11.1%
<u><i>Drawing at publishing stage</i></u>		
• Draw to illustrate finished product	4	44.4%

The comment from the fourth grade teacher seems to make sense that it would be more appropriate to include more visuals with younger students before they are able to write proficiently. However, Linda Rief (1999) testifies to using visuals with middle school students to improve their writing and note taking skills. A study with third grade

students (Norris et al., 1997) provides evidence for the positive impact that drawing can have on student writing. The students who drew produced more words, more sentences, and more ideas, with better overall writing performance than that of the control group. Gangwer (2009), and others argue that visuals are not just for young children, but they are necessary for all students in today's visual society as they develop visual and media literacy skills.

The survey asked teachers, in your opinion, what is the value of having students invest time in visual projects (i.e. models, posters, dioramas, charts, and illustrations). Teachers' responses indicate belief that visual projects are worth the time investment. Several of the teachers mention multiple intelligences or students who are visual learners, noting that visual projects help these students to express themselves. Teacher 6 states, "Many of my students are self-expressive or creative thinkers. Visuals allow them to take a strength and use it to develop a weakness (reading/writing)." However, at least one teacher has a hard time putting that into practice. Teacher 7 comments,

I know that art is a motivator to many of my students, but I am not good about incorporating it in my instruction time. I feel that our writing time is so limited, we have to put more emphasis on words. (I'm not saying this is best-practice.)

To see how beliefs translate to instructional practices, teachers were asked to chart types of visual projects they had done with their students. For each type marked, they were asked to list an example of how they used it. Posters, graphs, timelines, and drawings were found to be utilized by the majority of the teachers. Although one might expect duplicate examples, especially from the six fourth grade teachers, there are a great number of differing examples listed. One teacher marked

“other visual computer programs” but did not list an example, so it is not included in the results shown in the table. Results are totaled in Table 13.

Table 13

*Visual projects and examples*

	# of teachers	% of teachers	Examples
Posters	8	88.9%	Transfer of heat, drill, pioneer life, fall, science projects, various – with reading, vocabulary, literary elements
Diagrams	4	44.4%	Water cycle, see connections, diagram of a cell, science concepts
Comics	3	33.3%	Spelling word practice, to show understanding of reading stories
Hypermedia/ multimedia	2	22.2%	Webpages – personal/child, digital storytelling, talk shows
PowerPoint Computer “paint” programs	4 2	44.4% 22.2%	“me”, GAT students created for LA skills Kids works
Flyers/ brochures	5	55.6%	KY tourism, region of KY, students compose brochures, how to brochures on regions, famous Americans, science
Dioramas	2	22.2%	Social studies, reading – setting and other



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			literary elements, science concepts
Maps	5	55.6%	KY natural resources, regions of US and KY, communities, scavenger hunts
Graphs	7	77.8%	Graph art, science, math – reading graphs
Tables	3	33.3%	Chemical/physical changes, math, science, math data, vocabulary, describing shapes
Timelines	7	77.8%	KY history, social studies, social studies, sequencing in reading, personal, famous Americans, self, literary experiences
Models	4	44.4%	Writing – proficient work, salt dough map of the ocean floor, animal, science - recycling
Poetry			Art & writing, Where I’m From, shape poems,
art/shape	4	44.4%	color poems, family, biopoems – favorite
poetry			characters, famous individuals, self
Sketches/			Illustrate science vocabulary, visualizing
paintings/	7	77.8%	vocabulary, reading stories, journal, stories,
drawings			personal narratives, poems
Other visual			recycling bug, student created books, cereal-
products	5	55.6%	box reports, murals, collage for African American project

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When assigning these visual projects, teachers vary in how much time they spend teaching students about visual elements such as typography. The survey asked, when

assigning projects, how much time do you spend explicitly teaching graphic design concepts? (i.e. layout and typography) Two teachers chose “At least one class period, graphic design is assessed as part of the project.” Most of the teachers (66.7%) chose “less than a class period, appearance is assessed as part of the project.” One teacher makes no mention of graphic design concepts; appearance is not assessed as part of the project.

Moline (1995) states that students need to be able to select the most appropriate form for communicating their information to their readers and they need to know some of the basics of graphic design features in order to do that well. He explains that graphic design is part of communication and is relevant to writing of all information texts. Including such features as color, headings, and columns allow students to organize and highlight features of their text.

Assessment criteria were asked about in the next survey question: When assessing visual products, what do you use as your criteria? (mark all that apply) Teacher 6 (first/second grade) was the only teacher who only marked “effort.” Teacher 4 (kindergarten) marked “effort” and “appearance/neatness.” Teachers 1 and 9 left out “effort” but marked the other three criteria. Teachers 2, 3, 5, 7, and 8 marked all four criteria. See Table 14.

Table 14

*Criteria for Visual Products*

	# of teachers	% of teachers
Accuracy of content	7	77.8%
Detail of content	7	77.8%
Effort	7	77.8%
Appearance/neatness	8	88.9%

Teachers were given one last opportunity to explain anything else about their writing instruction. Teacher 1 responded enthusiastically, “There’s always something to learn! ☺” Teacher 7 “would strongly encourage every teacher to participate in The Writing Project at WKU. It changed my attitude toward writing, my writing instruction, and greatly impacted my students’ attitudes and their writing abilities.” Teacher 8 comments, “I typically write when my students write. This lets them see how important it is to me. In most cases, this allows them to buy in!” Teacher 6 provides further insight into her classroom,

I taught 4<sup>th</sup> grade for nine years. Now I have 1<sup>st</sup> & 2<sup>nd</sup> graders in a Transition classroom. Students are usually placed in my room because they are struggling readers. My students can be reluctant writers as well. I spend lots of time working with language. Before students can write, they need to develop oral language and listen to the patterns of language. Literature is used throughout my day. My hope is to give my students the gift of loving literature that will translate to expressing themselves with the written word. Art is my bridge.

The third section of the survey addresses art and writing products created in the classroom. Teachers were asked about their beliefs concerning drawing as a part of

writing. All of the teachers are in agreement that drawing can help students form concepts and visualize their ideas. Most agree that drawing helps students with expressing their ideas and that it is necessary for younger children. It is interesting to note that although these teachers all value drawing, not all of them fully utilize this strategy in their classrooms. Despite research to the contrary, at least one fourth grade teacher seems to feel that drawing is only for younger students. Teachers were asked for specific types of visual projects they have done with their students, and were asked to list an example for each. Teachers' responses indicate belief that visual projects are worth the time investment, mentioning multiple intelligences or students who are visual learners, and noting that visual projects allow these students opportunity to express themselves. All but one of the teachers indicated that they provide some graphic design instruction in conjunction with these visual projects and include design elements as a portion of the assessment criteria.

#### *Summary of survey findings.*

The teachers selected to complete this survey are the best elementary writing teachers in the area. Their teaching practices should set the standard that others strive to achieve. Responses to this survey demonstrate their knowledge of current best-practices and theories in teaching writing. Teachers' reports of continuing professional development could be an indicator that they strive to incorporate these techniques into their instruction. Survey responses also indicate that while teachers value visuals and believe that students benefit from visual projects, time pressures and misconceptions about drawing only being useful for younger students may be preventing teachers from implementing visuals to the degree recommended by research.

These teachers might see benefits from including more visuals, in conjunction with increased opportunities for student drawing, in their instruction. Storyboarding strategies suggested by Rief (1999) and Essley (2008) might prove useful for older students in the revision process. Pictography (McFadden, 1998) could be implemented for narrative writing with students of all ages. A study with third grade students demonstrated the value of incorporating drawing (Norris et al., 1997) with improved student writing, indicating that drawing is not just for kindergarten and first grade students. More time-consuming art-producing activities such as Picturing Writing (Olshansky, 1997) might be used on a less frequent basis.

Another function of this survey was to help select teachers for further study who are incorporating visuals and drawing in their classrooms regularly. One teacher was selected for a case study with the hope of further insight into an exceptional teacher's writing instruction and use of visuals in teaching.

### *Case study*

The researcher was looking for teacher survey responses that indicated frequent use of visuals and/or drawing as a part of writing instruction, as well as teacher beliefs that indicated the importance of using visuals in the classroom. Based on survey responses, Teacher 6 stood out as an information-rich source and was selected as a case study for observations and follow up questions. For the remainder of this study, she will be referred to by pseudonym, as Mrs. Duncan. Mrs. Duncan was initially chosen for meeting the criteria of being an excellent teacher of writing. She participated in the Writing Project summer program and has been an elementary classroom teacher for the past 19 years. Her survey responses stood out because of how strongly she feels about

the impact of using visuals and drawing with her students and how frequently she relies upon these tools in her teaching practices. She teaches first and second graders in a transition classroom. These students were selected for this classroom specifically because they struggle with reading. In addition, many of Mrs. Duncan's students also have language delays and difficulties with writing and math.

The elementary school in which Mrs. Duncan teaches is located in a small suburb in the southeastern United States, in the same town with a mid-sized university. The building is neat and clean with many flowers planted out front. The school is very welcoming to visitors and parent volunteers, with bulletin board displays and information posted about upcoming events. Data from the 2006-2007 school year lists a student population of 592 preschool through sixth grade students (School Digger, 2008). Seventy-eight percent of the population is Caucasian, 5% African American, 5% Hispanic, 8% Asian, and 5% other. Eighteen percent of the population receives free or reduced lunch. The school is ranked 149<sup>th</sup> of 675 public elementary schools in the state, based on state math and reading test scores.

Online reviews highlight the school's Jumpin' Jaguar jump rope program as well as high levels of parent involvement (Great Schools, 2008). Safety precautions are also mentioned by one parent reviewer as a school strength. Visitors to the building must sign in at an office window before the door is unlocked to enter the main hallway. A teacher testified to the friendly school atmosphere in a casual conversation in the hallway, stating that it had greatly improved under the leadership of the current principal over the past couple of years (M. Stewart, personal communication, April 2, 2008).

Mrs. Duncan's classroom has 14 students, a slightly smaller class size than the school's teacher student ratio of 1:16 (Great Schools, 2008). She has 8 male and 6 female students; 9 are white, 2 are black, 1 is Hispanic, and 1 is listed as "other." Some of the biracial children are listed as white and some are listed as "other." Her class also has three students who speak English as a second language and one student identified with autism who receives special education services. One student is in the process of being tested for special education. Two additional students receive speech and language services.

*Case study survey items.*

The survey items that made Teacher 6 stand out from the rest were the open response questions. The researcher was especially interested in teacher responses that indicated frequent use of visuals and/or drawing as a part of writing instruction, in addition to teacher beliefs indicating the importance of using visuals in the classroom. Mrs. Duncan's responses answered to both of these items. In survey question 17, where the teachers were asked Please describe your writing instruction. What does a typical lesson look like? Mrs. Duncan was the only teacher to mention drawing. She responded,

Lessons typically begin with literature (usually picture books). After reading, students have 'think' time usually based on a specific question (i.e. When was a time when you felt sad...). I allow LOTS of time for talking. Oral language is very important to my 1<sup>st</sup> and 2<sup>nd</sup> graders. *I usually have students draw before writing* [italics added] (or dictating for some of my 1<sup>st</sup> graders). Drawing allows for idea development & adding of details. Writing the story is next, followed by sharing.

Her response, indicating that her students draw before writing on a frequent basis, showed that this was a classroom where student use of drawing could be observed.

This teacher also communicated in survey responses her belief that using visuals in instruction is “extremely important.” She indicated use of visuals in instruction “multiple times per day.” Mrs. Duncan goes beyond thinking that drawing and visuals are a nice supplement to instruction. In her response to question 25, which addresses students who struggle and asks for teacher input on strategies used to motivate students, this teacher explains that her students “*need to draw* [italics added] before writing.” She goes on to clarify in her response to question 28, concerning the value of visual projects, “Visual projects allow students to create details. Many of my students are self-expressive or creative thinkers. Visuals allow them to take a strength and use it to develop a weakness (reading/writing).” Clearly, this teacher values the role that visuals play in instruction. Her final survey comment addresses the struggles that her students face as reluctant readers and writers. She states, “My hope is to give my students the gift of loving literature that will translate to expressing themselves with the written word. Art is my bridge.”

*Case study observations and follow up responses.*

The researcher observed in Mrs. Duncan’s classroom for 33 hours (nine separate occasions) over a period of four weeks. Twenty-eight of these hours were from four full day observations. The remaining five hours were during writing instruction times.

The role of the principal investigator was that of an outside observer. Observations were completed from the back corner of the classroom on initial visits. I also accompanied the class to special events in the library and to art class on one occasion. As the students grew accustomed to my presence, I was occasionally approached by students with questions, or by others wanting to share their work with me.



When their comfort with my presence became apparent, I spent more time walking the room as they were working so as to better see what they were writing and drawing.

Field notes taken during these times include classroom environment layout and descriptions, detailed notes concerning teacher instruction and student participation, with special attention to teacher use of visuals in instruction. Also included are the researcher's assertions and questions. These notes were taken by hand in the classroom and typed later that day with additional assertions and questions added. Selected artifacts, including printouts of Activboard visuals created for lessons, examples of class-created writings, and copies of teacher writing handouts and assignments were also collected.

Follow up and clarifying questions (Appendix B) were developed after reviewing the teacher's survey responses and as the researcher observed and typed field notes. At the teacher's request, these questions were e-mailed in the evenings and over spring break to allow time for thoughtful responses. Responses to these questions are imbedded in the findings here as they relate to the behaviors observed.

In the following sections of this chapter, a portrait is "painted" of Mrs. Duncan and her classroom. In this painting, the classroom is illustrated in detail with examples of how the teacher has thoughtfully prepared the learning environment. Teacher practices, including use of scaffolding and teachable moments, and observations on student engagement are given as examples of Mrs. Duncan's expertise and her beliefs about incorporating visuals to optimize learning. Visual teaching practices and use of student drawing are especially highlighted, as they pertain most directly to this study.

*Classroom management.*

Mrs. Duncan's classroom is welcoming but not overly relaxed. It comes across as a comfortable workplace. Students sit at three large tables in the center of the room. Four student computers and a calendar are on one side of the room, with the reading table on the opposite side. Students' lockers, an independent work area, and classroom storage are along the back of the room. At the front of the room, there is a colorful carpeted seating area in front of an Interactive White Board. Bins filled with books and shelving containing games, students' supplies, and materials surround the carpet. The teacher work area adjoins the carpeted area, including the computer, document camera, and printer that are connected with the Activboard. The researcher asked in a follow-up question, was anything done purposefully, in regard to classroom layout, to lend toward using visuals/drawing in lessons. The teacher responded,

The calendar placement was purposeful – I needed space for the parts that I believe are important. I also wanted an area where kids could sit if needed. I also wanted kids to be able to see the ActivBoard without their backs being turned to it. I also have the reading table area where I can easily use the big books and charts with the reading lessons. Sometimes I have to use the computer to show a graphic of a word – but then I just take them to my computer.

The classroom layout allows for effective instruction; it provides a calm and structured backdrop, even when there are multiple instructional activities occurring simultaneously.

Classroom posters include a calendar bulletin board and a daily schedule chart in addition to charts and posters related to instruction, such as The Story of Money, and a word wall. Store-bought, class-created, and teacher-made visuals are displayed. Field notes from observations and follow-up questions indicate divergence in how these visuals are utilized. Some were not referred to at all during the times observed, while others

were used frequently by students or by the teacher during instruction. Concerning the purpose of these posted visuals, Mrs. Duncan comments,

Some is 'decoration' but not much. I do believe that if there is too much on the walls, then the kids tune it out – it becomes wallpaper to them. I refer to the posters often – try to ask them “Where would you find that in our room?” type of questions.

Students were observed using classroom posters for information about the weather, formatting a friendly letter, to spell words, to chant a doubles rap during math, and to assist in math computation. The teacher explains the importance of teaching students to use the visuals in the room as a resource, “EVENTUALLY they start using the things around the room (such as the word wall) if I do regular activities with it.”

As students transition from one area of the room to another or from one activity to another, little time is lost. Transitions to the computer workstations are surprisingly seamless. Students appear to know what programs they should be working on as well as the procedures for logging on and getting started and do not seem to waste any time doing so. Before students enter the room from another class, the teacher gives reminders of behavior expectations as well as explicit instructions that allow the next lesson to begin without delay. Transitions are also eased by the teacher giving adequate warning before ending a work time. Mrs. Duncan was observed using several strategies that allow students to finish what they are working on and transition to the next activity seamlessly. Effective use of time and space are managed through careful planning and by having procedures in place. It should be noted that these observations took place in the spring, when students were most familiar with classroom routines. Some observations were conducted following spring break as well, and there seemed to be few lapses in remembering the routines and procedures practiced throughout the school year.

Student behavior does not appear to be an issue in this classroom possibly due to effective management and the observed rapport between teacher and students. Mrs. Duncan is positive and gracious in addition to being firm and consistent with her classroom discipline policies. The researcher did not observe her getting into power struggles, but instead, correcting students with calm reminders in a manner that allowed them to get back on track without feeling a need to “save face.” The researcher noted a marked difference when observing the same class with a different teacher during Art class. The same students who performed well for Mrs. Duncan had difficulties with another teacher possibly due to her lack of classroom procedures and inconsistencies in classroom management.

*Instructional density and use of scaffolding.*

Mrs. Duncan appears to be an effective teacher. She makes the most of teachable moments within the framework of well planned instruction, meeting multiple instructional goals while maintaining the overall lesson flow. This density in her instruction contributes to her effectiveness. In observed lessons, she often made reference to topics covered recently in other subject areas to assist students in forming cross-curricular connections, practice new vocabulary, and deepen their understanding of a topic. Before reading a new text, the teacher provided comprehension scaffolding to students by making a connection with a book that was familiar to them. In another example, a review of homophones was incorporated into a read-aloud to explain the difference between “flour” and “flower.” At the start of a math lesson, Mrs. Duncan was reviewing the term “add” and the symbol, “+.” She had students compare the idea of putting two numbers together to baking, which they had done in class the previous

afternoon. She reminded students of the process of adding ingredients into the mixing bowl and related that process to adding numerals. In another math lesson, students color-coded doubles facts. One student remarked that the sums looked “like steps” going down his paper. Mrs. Duncan introduced and explained the term “diagonal.”

Phonics and vocabulary skills are integrated throughout all lessons. When a student is writing on the calendar or the Activboard, the teacher supports him or her with hints and cues such as visual phonics. Many times when the teacher is writing, she will have one or more students spell aloud to assist her. For example, during calendar, the “ch” in March was emphasized. In a reading lesson, students were spelling words aloud as the teacher added them to a chart. Blends, such as “sw” and “pl” and rules for making a vowel sound long by adding a silent e were reviewed.

Science concepts were observed to be integrated into reading lessons numerous times. In one reading lesson utilizing a book about tadpoles, the vocabulary terms “appearance” and “resemble” were discussed and explained. The teacher asked, “Do all animal babies look like – resemble – their parents?” A chart was created listing animal babies and adults which included even more vocabulary terms that were new to several students, such as colt and kid (goat). The teacher also showed the students a photograph of her new puppy playing with her older, full grown dog. She asked, “Does [the puppy] resemble a dog?” After reviewing their chart, students concluded that some animal babies resemble their parents. In another reading lesson with a story about a garden, the teacher facilitated a discussion of living versus non-living things while having students define the word “nature.” Mrs. Duncan’s ability to capitalize on teachable moments that arose during lessons demonstrates her effectiveness. Even time used for transitions was

maximized, with the teacher counting down, counting up, spelling words, or saying things such as, “You may come to the carpet for math as I count by fives. The Magic Number is 45.” When she got to 45, the students were ready for the lesson to begin.

The teacher especially takes advantage of moments during independent student work time to differentiate for the needs of individual students. This scaffolding, or supporting, of students is made possible by her careful monitoring. Just the right amount of support is provided as needed to allow students to continue learning without frustration. Mrs. Duncan utilizes questioning to have students clarify their thought processes aloud. She was observed to remind one child while conferencing during writing, that “-ed can sound like /t/” which he had been working on with the speech teacher. Visual phonics and sign language are used to help students requesting assistance with sounding out words as they read and write. Mrs. Duncan anticipates problems even before they arise and provides the support that students need to achieve success.

#### *Student engagement.*

Mrs. Duncan’s students are remarkably engaged for so young a class. Students are rarely off task, and when they are the teacher redirects them in such a way that little instructional time is lost. The teacher was observed utilizing multiple methods to promote student engagement. Use of the classroom Activboard by students, having them come up to the board and write or draw answers, encourages active participation. In follow-up, the teacher states, “now my kids are more involved with the technology – that’s my goal. Otherwise, it can be a fancy chalkboard!” She discusses the impact that the Activboard has on students when they actively participate in the lessons, commenting that students “love USING [the Activboard]. That’s the key that I try to keep in mind.”

When asked if the time spent learning to use the new technology has been worthwhile in its impact on students, Mrs. Duncan replied, “YES! This year I have been trying to use the ActivVotes for formative assessments. I’m amazed at how well [the students] handle them and how much more they are engaged with their learning.” Following a math lesson in which students dragged and filled in the blanks in addition facts on the Activboard, one student exclaimed, “That was so fun... it was like a game!”

These comments from Mrs. Duncan and her student substantiate the findings of research. The Challenge Project (Baker et al., 2005) studied five schools using Activboards<sup>TM</sup> in Washington State. They found that the presence and use of the equipment has enhanced teacher instructional practices as well as positively impacting the rate and quality of student learning.

Movement to keep students engaged is encouraged through acting out vocabulary words or phrases as the teacher reads-aloud. As the teacher read “noses sniff” and “paws dig,” and in another story, “shrug” and “raised a hand,” she acted them out and had students do the same. “Beating eggs” was demonstrated during another read-aloud and students all joined in for imaginary stirring. Visual hand movements and some sign language were observed to be modeled by the teacher and used by students. These motions are utilized to help students identify compound words and to assist them in blending sounds for writing. Even the structuring of lessons is purposeful so that students are on the carpet for a portion of the time and then have the opportunity to stretch their legs as they move to their seats for independent work. Mrs. Duncan indicates her belief about student activity in an answer to a follow up question about classroom layout, stating,

I thought about moving the reading table to the front [of the room] (in front of the Activboard) but then decided that it would be better to have that as a group area and allow the kids to MOVE (they need that!) to the area as needed.

Another engagement strategy Mrs. Duncan uses is having students participate by talking aloud. During a read-aloud which included the word “groaned,” the teacher stopped mid-sentence and had everyone demonstrate their best groan. In whole-group lessons, students are often cued to think in their thinking position and then to turn and talk with a partner about what they know. Partner talk is structured and focused, with students facing one another, taking turns, and the teacher giving signals about how much longer they have to discuss the issue.

Teacher expertise in preparing lessons that are developmentally appropriate for students also encourages active participation. No students were observed to be at their frustration point during any lessons; the lessons were observed to be an appropriate challenge for students with scaffolding built in to support student learning. Procedures are in place for students when they need assistance with an independent assignment. Grouping for differentiated instruction was observed to be used for some math and writing instruction and more regularly for computer use and reading groups. Time is also set aside in the afternoons for reading intervention small groups; only one child from Mrs. Duncan’s class is in her intervention group. This is a new program that has been recently added at the school.

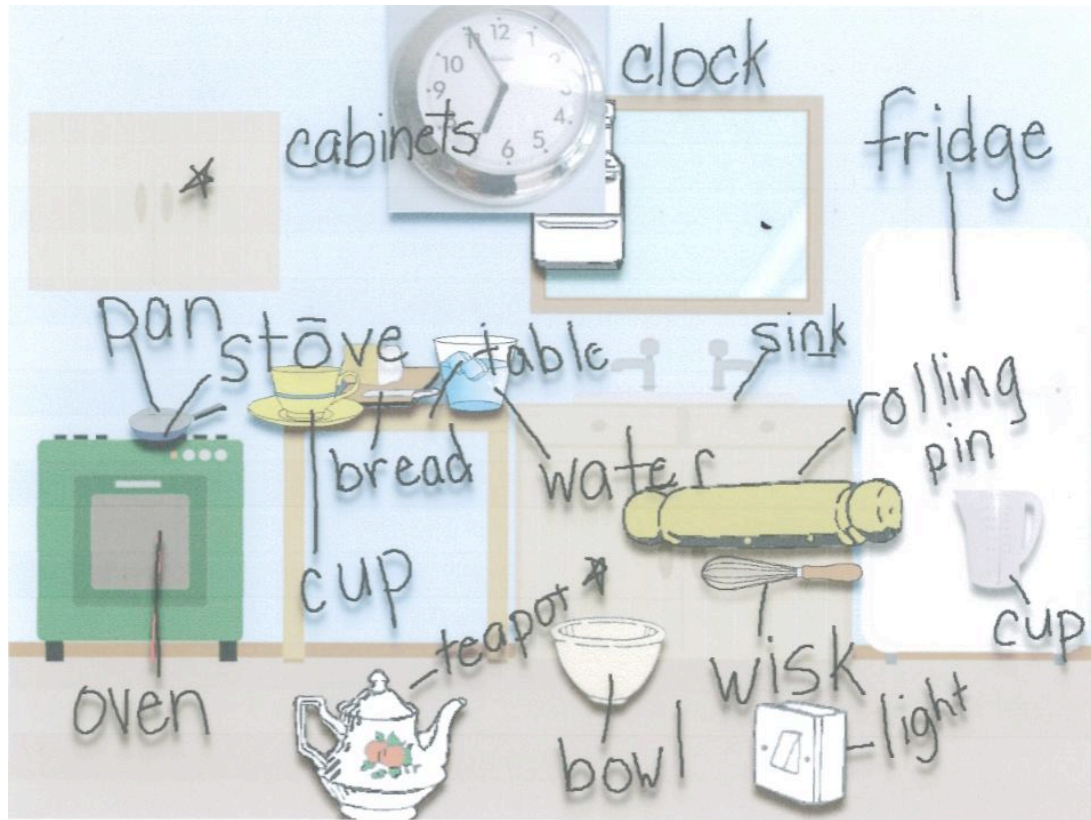
All observed writing lessons were preceded by read-alouds or an experience with literature. This incorporation of quality literature makes available excellent writing examples that can inspire independent student writing, as well as provide opportunities for vocabulary instruction. The books selected seemed to make an impact on students.



Students were observed looking back through the books during independent writing time for specific wording, for spelling assistance, and to help with visualizing details of a particular character for their own drawings.

Although Mrs. Duncan stated that she has never been able to get a writer's workshop format to work with her first and second graders, the student work time seemed a great deal like a workshop format. On some days, students were not all working on the same stage of the writing process or even the same writing prompt during a lesson. A few were finishing puppets and writing stories about them, others were dictating friendly letters to the teacher at the reading table, while at another table half the students were drawing and the other half were writing.

Creative lessons further promote student engagement and keep students excited about learning. Mrs. Duncan is purposeful in her lesson planning to create experiences for her students that will jump start their creative processes. Creative writing lesson experiences observed include: designing a house for the class mascot after viewing a website with photographs of examples, sewing felt bunny puppets to serve as the main character in a story they would be writing, cooking strawberry shortcake from a recipe in a book the class had read and looking up recipes on their own, participating in a Readers Theater to introduce a story before writing a modified version, using a graphic organizer and a short video to compare different versions of a story, sharing photographs of an event before writing about it, and using the Activboard to label a kitchen before writing a story in which the setting takes place in a kitchen (see Figure 1).



*Figure 1.* An Activboard flipchart visual created by the class during a writing lesson to review vocabulary pertaining to the kitchen.

*Oral and visual teaching strategies.*

Not only does Mrs. Duncan give students a strong start by using quality literature and presenting creative lessons, she also addresses the needs of a variety of learners by providing visuals, think time, talk time, and time for drawing before writing. Survey responses indicate that this teacher believes that these strategies are essential for her students.

In describing a typical writing lesson, Mrs. Duncan makes clear her students' needs for talking and drawing before writing. She explains, "I allow LOTS of time for talking. Oral language is very important to my 1<sup>st</sup> and 2<sup>nd</sup> graders.... Drawing allows for idea development & adding of details." In another survey item she notes, "Before

students can write, they need to develop oral language and listen to the patterns of language.” A combination of think time, time to talk with a partner, and/or the opportunity to draw before writing were observed as prewriting strategies for almost every writing lesson in Mrs. Duncan’s classroom.

These practices are recommended by researchers. Dyson (1986) has studied the interrelations of student talking, drawing and writing and found that children rely on talking and drawing in varying amounts for writing support. Graves (1994) also recommends integrating drawing to support student writing. Horn and Giacobbe (2007) go further to recommend teaching drawing skills to students to enhance their writing. A study with third graders (Norris et al., 1997) found that students given the opportunity to draw during their writing time produced more words, more sentences, and more ideas, with better overall writing performance than that of the control group. Students in the drawing group were also more enthusiastic about writing and made better use of their time.

Mrs. Duncan’s students are permitted to talk while they write, making this classroom seem noisy at times. The researcher did note, however, that the talk during writing is purposeful and for the most part is focused on the subject that students are writing about. During one writing lesson in which the students were especially excited about their topic, the researcher observed even more purposeful talking than usual. At one table a lively discussion included debate about whether or not bears have names. One student had drawn a bear that was a superhero and was describing his powers as he drew in more details. The other students offered superhero name suggestions. He was especially excited by one girl’s suggestion, “Flash,” and he added it prominently at the

top of his paper. Student talking generated ideas which led to more writing. The researcher observed that many teachers might not be comfortable with this amount of talking or the noise level during students' independent work time. However, the students' work seems to be enhanced rather than restricted by their ability to talk as they draw and write. The researcher did note one exception to this, where students were talking about a related topic and not the writing prompt, which resulted in the two of them not getting much accomplished.

Oral language practice was observed throughout the school day, including oral descriptions of forming letters and numbers. While forming the numeral four on a marker board at the calendar, the teacher said aloud, "short stick, slide, tall stick." Students join in repeated portions of books being read aloud. Students are also given reminders of how to restate requests as complete sentences and how to refuse and reply politely before they are given the opportunity to share their writing in front of the class. Mrs. Duncan explains further,

Anytime you can engage more than one sense, it will be better for the student. My kids tend to need multiple experiences with a topic/area to make it their own. I think many kids are like that! Using visuals and referring to them during the day (or week...) can make a difference. Allowing for movement, talk time, and expression (drawing/labeling) can provide for multiple 'touches' with a concept.

Engaging the senses and using more regions of the brain helps students with learning and retaining new information (Campbell, 1997). Having observed Mrs. Duncan using these strategies frequently is further confirmation that she does indeed value these practices.

In a writing lesson in which the students were to design a house for their class mascot, Striped Zebra, students were reminded of a book they had read-aloud earlier

titled *Shoetown*, were shown photographs of “Shoehouse” examples from the author’s website using the Activboard, and were asked to think about what Striped Zebra’s house might look like. They were given time in thinking position to visualize the house followed by time to discuss their ideas with a partner. The teacher then asked for student input as she began to draw on the Activboard. Students described ideas with increasing detail as the teacher prompted, using vocabulary to indicate colors, locations, and structures to add to the illustration. Labels were added to the sides of the drawing. When the teacher transitioned students to work independently, they were excited to get to work.

Mrs. Duncan asked for “lots and lots of details,” specifically wondering aloud about what materials they would need to use and what the house should look like. The model created by the class was left projected on the Activboard throughout the student independent writing time but no students were observed copying directly from the model. Mrs. Duncan reminded students to draw before writing and told them, “Drawing will help you write.”

The teacher wandered and observed aloud as students got started, making comments such as, “D \_\_\_\_ is using color to let me know.... J \_\_\_\_’s house has a roof – what materials would I use to make that? ...You think it needs steps... what would I make them from?” She also asked students who showed their drawings to her, “What are these? What should I make them out of? Write that down so I’ll remember.”

One student was drawing but not labeling. When the teacher reminded him to use labels with his drawing, he explained, “I’m still getting my ideas.” A few minutes later he added the label, “the flag of popsikls [popsicles],” at the top of his paper. Other examples of students’ labels included with their detailed drawings are listed: zebra,

window, black, ruf [roof], treplin/ trapling [trampoline], stars and stripes on the roof and a slide, swing made out of clay, colrs [colors], and top of the shoe.

After a warning that only five more minutes of work time remained, students were given the opportunity to share their work from the front of the room. The teacher reminded everyone how to refuse politely, but most students chose to share. Some students described their drawings and others read the sentence descriptions or story they had written on the lined portion of the paper. No feedback for revision was given at this time by the other students or the teacher. The ideas generated by their writing were used the next day to create a three-dimensional model of a Shoehouse that was displayed in the school's library. Several other lessons were also observed that included the use of a visual example, think time, talk time, and drawing before writing. This lesson is described in detail as evidence of the teacher's use of these prewriting strategies.

To critique this lesson, first the researcher was not certain of the lesson's objectives. Some students were creating drawings with labels and others wrote narratives beneath their Shoehouse drawings. The model created by the teacher with the help of the class was a labeled drawing. This would have been an ideal opportunity to tie in a mini-lesson on setting, with a look at how the Shoehouse is described in the book as a model. In such a lesson, this labeled drawing could be used for brainstorming that would then lead to descriptive writing. The visual introduction to the lesson, with the book and the photos from the website, as well as the teacher drawing definitely seemed to spark student interest. All of the students were very engaged during the observed work time. Teacher statements, such as the request for "lots and lots of details" and "drawing will help you write" seem general but may have been effective for these students as those

terms might have been defined previously. Students did have time for visualizing/thinking, talking, and drawing before writing, but were not observed to move through the stages of the writing process. The sharing time at the end of the lesson did not provide any feedback on their ideas or their drawing/writing, although it is possible that some of these concerns were addressed in a follow-up lesson or when the Shoehouse model was constructed.

The researcher's concern with the unclear lesson objective was repeated in one other observed writing lesson in which the students were using bunny puppets and rewriting a bunny version of the Little Red Hen folktale. The puppets provided a perfect opportunity for instruction about including dialogue within a narrative. This second missed opportunity prompted questioning of whether the creative lesson ideas and visuals were driving writing lessons as opposed to structured lesson objectives being enhanced by visuals.

In a follow-up question, the researcher asked, do you believe that your students need visuals/drawing incorporated into lessons more than the average class? Mrs. Duncan replied, "Yes, I think they do – these are kids who can have success with a support – in this case a visual. However, ALL kids – especially early primary kids could use these to aid in their writing/language development." Mrs. Duncan went into greater detail, explaining the impact from using visuals/drawing with students, "I believe that [my students] are more successful with a visual or using their drawings...through informal observation, I have noticed that they take more time with their work and are more engaged."

These statements from the teacher corroborate what Graves (1994) states about drawing being a rehearsal for writing. He observed students spending the majority of their writing time on their drawings and said that their drawings served as an “idea bank” when it came time to write.

When asked how visuals help with oral language and vocabulary development, the teacher states,

I believe it makes a difference. Even my non-ESL kids need to have words attached to the items they see. My kids also tend to have difficulty “visualizing” items. Having them see and talk about pictures, experiences, etc. can help with this.

Gangwer’s (2009) work with English language learners (ELL) is of note here. He recommends using photography to build individualized visual journals as an aid to student vocabulary development. In this classroom, Mrs. Duncan also recognizes the need for developing vocabulary with visual support.

The purpose of Mrs. Duncan’s visuals is most often to develop language related to the writing topic. Although vocabulary development is not listed as a purpose for visuals by Weaver and Bollinger (1949), it works well in this classroom setting. Weaver and Bollinger do mention that visuals can be of assistance when students have difficulty with a concept. For Mrs. Duncan’s students, the difficulty is writing and visuals are used as a support to build a bridge to increased vocabulary and improved writing.

Additional visual instruction strategies, including modeling with teacher visuals, such as videos, photographs, labeled illustrations, picture walks through literature examples, and graphic organizers, were observed to be used as well. A top hat organizer was used to compare and contrast the books *Cook-A-Doodle-Do!* and *The Little Red Hen*. Mrs. Duncan explained to the researcher that when using graphic organizers with a



primary class, she prefers to complete them as a whole class with the Activboard to allow for more talk time. With the top hat organizer mentioned, students were given time to think and talk with a partner before the whole-group activity of filling in the organizer with similarities and differences between the stories. Details discussed included the specific characters in each story, lines from the stories that repeated, setting differences, and what the characters were cooking, as well as the stories' outcomes.

Here again, the lesson objective was not clear. While I assume that the organizer was completed to help students prepare for writing their bunny stories, the objective was not stated clearly to students and the organizers were not reviewed prior to writing their bunny stories. During writing time, most students merely copied the portion of the organizer that was filled in with the whole class.

Mrs. Duncan was observed differentiating and supporting student learning throughout their independent work time. During student writing time, this is achieved mainly through questioning in individual conferences with students. Some whole group reminders are given as the teacher sees multiple children struggling with similar issues. Conferencing is done with students who are actively writing in addition to assisting students who need ideas or redirecting to remain on task, or who declare themselves finished and want to share their completed piece. Mrs. Duncan uses phrases such as “tell me more,” “tell me with words,” “what is [the character] doing?” and “what might [the character] say?” to have students verbalize what they are attempting to write.

*Student use of drawing.*

Mrs. Duncan tells her students, “Drawing will help you write.” Because of her belief in this statement, she has students draw before writing almost anytime they have a

writing task. Even in reading group, students were given half-lined half-unlined paper so that they could draw as they were writing in response to a reading passage. In independent writing time, students are often prompted to add details to their drawings. Mrs. Duncan also has them close their eyes and visualize their ideas so they can draw them in greater detail.

During the Shoehouse writing lesson mentioned earlier, Mrs. Duncan prompted students to include “lots and lots of details” in their illustrations. She reminded the whole class to put labels on their drawings and then talked individually with a child who had not yet done so. His response to her was, “I’m still getting my ideas.” After completing his drawing, he did add a label to his illustration. This student’s reply to the teacher demonstrates a clear understanding that drawing helps one with writing.

In another lesson, one student with writer’s block had no difficulty drawing. His detailed illustration included a bear in a suit, surrounded by tall skyscrapers, indicating the setting of a city. As he conferenced with Mrs. Duncan, she asked whether living in the city caused any problems for the bear. He immediately started writing about the bear’s problems and she stepped aside to conference with another student. This student’s drawing was the instrument that prompted writing.

Mrs. Duncan tells students that they are better at drawing than she is, and they agree. Most seem to be quite confident in their artistic abilities. This correlates to the survey question in which teachers reflected about themselves as writers, visual learners, and artists. Fewer teachers classified themselves as artists (see Table 3). Horn and Giacobbe disagree with this common teacher practice of disregarding artistic ability and encourage teaching drawing skills to children to enhance their writing. Chapters three

and four of their book, *Talking, Drawing, Writing: Lessons for Our Youngest Writers*, are devoted to drawing and teaching the craft of drawing. They offer lesson examples such as teaching students to draw people in action and drawing people with specific physical features.

The researcher noted a few specific examples of times when students added to their writing after adding to their drawings. M\_\_\_\_\_ listed his superhero bear's powers as he drew, going back and forth from drawing to writing. D\_\_\_\_\_ added details to his story about the setting and examples of what he and the bear do together. After her initial drawing and getting started on her story, J\_\_\_\_\_ went back and added hula skirts to her bear drawing and looked up "Hawaii" in the dictionary so she could add that her hula dancer bears were from Hawaii.

Mrs. Duncan states her belief in using visual instructional strategies to assist her students in achieving success at several points in the survey. The researcher followed up on the teacher's comments for a more in depth perspective, asking, when you have students draw (before they write), how does that transfer to improved writing?

This is so interesting to observe! Some of my kids do the minimal with drawing and writing... some spend all their time with the drawing... some want to go straight to the writing. This is where conferencing comes into it – at my level (and with my group) this is where I can HOPEFULLY work with oral language and with details. By asking questions, I can bring out more of their ideas.

Graves (1994) calls drawing a "rehearsal" for the writing that follows and states that many developing writers spend the majority of their writing time drawing. He also recommends the conferencing that Mrs. Duncan describes here.

How do you know this strategy works? How do you know when a student needs this strategy?

I haven't done formal research... just my experiences. Obviously no strategy works with all kids. For this group, I have noticed that they prefer creative activities. While I haven't found a solid learning style inventory for this age group, when I have done task rotations (Thoughtful Ed) and they have them to identify the task they like best- most choose the creative. To know when a child needs this strategy... the "kid watching" activity would be best. At the beginning of the year, I have a questionnaire that I use... that gives me some ideas of their interests.

Olsen (1992) found in her observations of teaching and working with children that students could be categorized as having high visual and high verbal skills, high visual and low verbal skills, low visual and high verbal skills, and low visual and low verbal skills. She recommends integrating drawing and writing through a visual-narrative method to meet the needs of all of these learners.

**What if the drawing doesn't match what is written or the writing doesn't match the drawing (depending on which was done first)?**

Oh, that can happen! Again, questioning is vital at this point – even with my youngers! (M\_\_\_\_\_ can find a superhero in anything I give him!) That's the oral language first philosophy I believe. What's interesting is that it doesn't bother some kids, others will be concerned enough to erase everything and start over. With my youngers, I'm more concerned with fluency... I want them to write! With my fourth graders, I would often have them use a highlighter to identify different parts – if they couldn't highlight (parts that didn't need highlighting) were parts that were cut out. Highlighting became a visual for them! They had to be aware of audience/purpose for the portfolio pieces.



*Figure 2.* Illustrator, Janet Stevens, culminates a presentation by drawing a character for students to write about when they return to their classrooms.

One writing lesson especially allowed the researcher to see the value of a visual from the students' perspective. The students wrote reflective letters to an author and author/illustrator who had visited their school the day before. The authors had made a presentation in the school library which ended with the illustrator drawing a five-foot tall character and giving the students a story starter to take back to their classrooms. Mrs. Duncan's students worked on their stories for over an hour with no lack of inspiration, and had an opportunity to share them with the authors later that day. In the whole class discussion before students started their individual letters, the teacher reviewed parts of a friendly letter and showed photographs of the authors' presentation on the Activboard. One student exclaimed aloud, "By showing us the bear, it gave us ideas!" In their letters, the teacher prompted students to thank the visitors for coming in the first paragraph as

well as comment on how seeing the authors and doing the activities had helped their writing in the second paragraph. J\_\_\_\_\_ mentioned how reading the authors' books helped to give him ideas when he wrote and wrote that sharing his work with the authors "made me feel like an author." D\_\_\_\_\_ wrote, "Seeing your work made me feel great." When he read his letter to the teacher, he added "... gave me story ideas." One bilingual student dictating to the teacher commented, "When I look at the bear, I remember and it helped me draw a picture like the aliens and the Superbear. I liked to see the authors." A\_\_\_\_\_ wrote in the second paragraph of her letter, "By seeing you, it made me think about my story. It helped me by thinking of ideas. I liked it when you gave me compliments. It made me feel happy." Another student explained, "Seeing you draw the picture helped me remember my story. My story was better because you drew the picture."

These student insights provide extension for Graves' (1994) idea that drawing can be a rehearsal for writing. Here students report that a drawing, even though it was done by someone else, helped them remember, made them think, and gave them ideas.

Similar student remarks are reported by Olsen (1992). After participating in a visual-narrative writing experience, several third grade students are quoted stating that drawing helped them remember details, say what they were thinking, and made it easier to write.

### *Summary of case study findings.*

The researcher's observations clearly document Mrs. Duncan's effective classroom management skills. One quality that especially stands out as an example of teacher expertise is the density of her instruction. Student engagement is encouraged

through dynamic use of the Activboard, providing opportunities for movement, and promotion of focused talking aloud. In addition, the teacher plans creative lessons that are developmentally appropriate for students and provide differentiation. Observed visual strategies included in the teacher's writing instruction involve modeling with teacher visuals, such as videos, photographs, labeled illustrations, picture walks through literature examples, and graphic organizers. Observed visual strategies used by students consist of drawings primarily before, but also during and after writing to inspire, support, and enhance their pieces. Mrs. Duncan's writing lessons include a prompt (literature or a visual); think time and partner talk time; and student work time which includes talking, drawing, and writing.

The teachers selected for the survey portion of this research study are the best elementary writing teachers in this area. They have participated in the Kentucky Writing Project and are recognized in their schools as "teacher leaders" who have worked with other teachers in their school or district to promote best practices in the teaching of writing. The teacher chosen for this case study was selected from these survey respondents because of her self-reports of including visuals in her instruction regularly. Locally, she is the best example found of an exceptional elementary writing teacher who is using visuals regularly within her instruction.

While Mrs. Duncan is an exceptional writing teacher, does she meet Gangwer's (2009) definition of a visual teacher? Gangwer states that "the visual teacher is an educator who embraces and models full-spectrum visual literacy and understands the effects of visual stimulation on brain development and, where appropriate, utilizes imagery to enhance learning (p. 5)." Mrs. Duncan makes use of imagery to enhance her

writing instruction and keeps her students actively engaged in learning. She creates assignments and activities that ask students to combine images with text to share their ideas effectively. Mrs. Duncan states her fervent belief that visuals can make a difference for students although she does not demonstrate awareness of research on brain development in this area. Her lesson plans and activities reflect some of the six methods of visual learning, including investigating (visual pre-writing activities) and expressing (using images to reveal thoughts and feelings). Mrs. Duncan could extend her use of visuals to include chronicling, communicating, inspiring, and envisioning. She might increase her effectiveness as a visual teacher by responding to student-created images and evaluating their effectiveness based on the six methods of visual learning.

One concern voiced in this case study is the teacher's ambiguous writing lesson objectives. It is unclear to the researcher whether the creative experiences are driving the instruction or whether lesson objectives are being enhanced through the selected visuals. Hoban et al. (1937) comment on the effective use of visuals, claiming that visuals do not achieve their full potential value in the learning process because educators fail to use them wisely. They acknowledge four principles that teachers should consider when integrating visual aids in instruction. Their third principle is: "The value of visual aids is a function of the objectives of instruction in the particular classroom situation" (p. 24). In Mrs. Duncan's instruction, the objectives are not stated clearly for students, which could impact the effectiveness of her teaching.

Observations show that there is much to commend in Mrs. Duncan's writing instruction. Her beliefs about having children talk, draw and write correspond with research from Dyson (1986), Olsen (1992), and Graves (1994). To further enhance this



teacher's effectiveness, it is recommended that lesson objectives be stated clearly to students. A valuable lesson planning resource to this teacher might be Fletcher and Portalupi's (1998) book, *Craft Lessons: Teaching Writing K-8*.

It is also recommended that pictography should be introduced to students as a prewriting tool. Mrs. Duncan's students are accustomed to drawing before writing and pictography would be a simple addition that would provide even more support for writing narratives with action sequences. With pictography, students use quick drawings of stick figures to draft narrative stories. It differs from drawing a story, or summarizing a whole narrative into one detailed image, in that it is a series of simplified stick-figure drawings that are organized in a left-to-right, chronological order. Arrows are used to separate thoughts or scenes. It is valuable for working with students on narrative structure as well as sequencing, vocabulary, sentence structure, and listening comprehension. A research study involving 61 elementary students in three classrooms showed that pictography was faster than writing or drawing and resulted in longer oral narratives with more organization and more action sequences (McFadden, 1998). Longer narratives and action could also be achieved through Horn and Giacobbe's (2007) techniques of teaching students how to draw figures in action and using minibooks to prompt students to write extended narratives.

## DISCUSSION – *Displaying a Masterpiece*

Like other subject areas, writing requires that teachers utilize effective classroom management, provide a supportive environment for risk-taking, access students' prior knowledge of a subject, motivate, and present appropriate instruction and assessment which take into consideration developmental differences and individual student needs. An expert teacher will not only plan engaging lessons, but will do it purposefully, taking each and every one of these factors into account.

Challenges specific to the teaching of writing include balancing process and product across numerous genres and pairing the teaching of writers' craft with teaching writing skills. Writing is also like other artistic endeavors, in which teachers must inspire students to tap into a venue of self-expression. Research has not led to one "right way" to teach writing. Value has been found in many instructional strategies, causing teachers to question which approach they should utilize. Additionally, because of the personal nature of writing, there is an issue with the time involved to develop strong writers. Each writer has strengths and weaknesses and each requires individual feedback on his or her writing. There are even further challenges for some students who struggle to communicate their ideas into words or their words onto paper. To further complicate things, recent recommendations in education promote teaching writing across the curriculum in all subject areas. Students write to learn and learn to write. This is designed to provide students more time with writing and increase the types of writing that students are exposed to. However, for many teachers in areas other than language arts, these mandates are difficult to follow through on, as these teachers have not been trained in the teaching of writing and know little about supporting students through the process.

Although challenging, writing is worth teaching because it is an essential skill for success both in school and workplace. Writing is a means of social communication, personal reflection, and a method to show not only what has been learned, but also the thoughts behind those results.

Research substantiates a strong connection between visual and verbal communication. Visuals are used for motivation, inspiration, and as a concrete support for the writing process. Many studies have highlighted a particular method or strategy for incorporating visuals. This study, in comparison, examines the teaching of writing from the perspective of expert teachers to see how these teachers utilize visuals.

The purpose of this study is to determine how elementary teachers, who meet the criteria of being exceptional teachers of writing, utilize visual images in their writing instruction. Specifically, the researcher is interested in how drawing is used as a learning tool in the classroom setting by both teachers and students and especially how drawing is used in the various stages of the writing process. In this study, the perspective of exceptional writing teachers was sought to illuminate the beliefs and practices that set these teachers apart. What is it that allows these teachers to rise above the rest? When given the same learners or the same materials, some teachers are able to make a greater impact on student learning. How do they do it? One tool in these exemplary teachers' instructional repositories is art.

### *Review of the Results*

#### *Survey Discussion*

The survey created for this study was divided into three sections. The first section included questions about demographics and teacher and student learning preferences.

The nine teachers surveyed are all Caucasian females, with teaching experience ranging from 0-5 years to 21 or more years. Six of the teachers teach fourth grade, one teaches kindergarten, one teaches a first and second transition class, and one teaches third grade. While most of the teachers would describe themselves as visual learners or as writers, few described themselves as artists. This could be due in part to the influence of the Writing Project, in which all of these teachers have participated. The Writing Project encourages teachers to think of themselves as writers and to develop as writers. Teacher beliefs about their own learning style may have influence on their instruction. Six of the nine teachers estimate more than half of their students to be visual learners. These responses correspond with research (Olsen, 1992; Landon, 2005). At least half of the students in each classroom have visual learning preferences of some type. All are very familiar with Multiple Intelligences theory. All but one teacher report to use visuals in instruction daily or multiple times per day. Teacher responses in this section of the survey indicate that these exemplary writing teachers are incorporating visuals on a regular basis and that their use of visuals has increased since they began teaching.

Writing instruction and assessment questions formed the second portion of the survey. The kindergarten teacher is the only teacher who teaches writing twice a week. All other teachers report writing instruction periods for 4-5 or 5 days a week. Teachers described their writing instruction in terms of what a typical lesson looks like, as well as indicating how their instruction has changed over the course of their teaching careers. All reported an increase in use of visuals. Teachers were also asked about challenges they face in their writing instruction. The most frequent responses included time for students to go through all the phases of the writing process and time for conferencing

with individuals. Only one teacher listed art as a motivational tool for writing. The majority of the writing instruction described in this section of the survey corresponds with research-based best practices in writing instruction. Graves (1994) describes conditions rather than a prescribed method for teachers to consider when planning writing instruction. One factor, time, is especially considered important (National Writing Commission, 2003). Here, teacher responses demonstrate that time is a struggle for allowing students to move through the phases of the writing process as well as finding time for individual conferencing. Research shows that having students draw before they write helps them to make better use of their work time (Norris et al., 1997). Teachers need to be made aware of this finding and also research from McFadden (1998) that demonstrates further benefits from having students use pictography. Teachers can save valuable instruction time by having students utilize drawing or pictography to make better use of their writing time.

The third section of the survey addressed art and writing products. Teachers were asked about their beliefs concerning drawing as a part of writing. All of the teachers agree that drawing can help students form concepts and visualize their ideas. Most agree that drawing helps students with expressing their ideas and that it is necessary for younger children. It is interesting to note that although these teachers all value drawing, not all of them fully utilize this strategy in their writing instruction. At least one fourth grade teacher seems to feel that drawing is more appropriate at earlier grade levels. Teachers were asked for specific types of visual projects they have done with their students, and were asked to list an example for each. Teachers' survey responses indicate belief that visual projects are worth the time investment, mentioning multiple

intelligences or students who are visual learners, and noting that visual projects allow these students opportunity to express themselves. All but one of the teachers indicated that they provide some graphic design instruction in conjunction with these visual projects and include design elements as a portion of the assessment criteria. In this final section of the survey, teacher responses are especially interesting because they uncover a disparity between beliefs and practices. While teachers agree that visuals and drawing are beneficial, they are not using these tools frequently in writing instruction. Few teachers utilize drawing in the writing process except at the prewriting stage. The fourth grade teacher who commented about drawing for younger students may be illuminating an unspoken belief for others. Research (Gangwer, 2009; Rief, 1999; Sinatra et al., 1990; Zoss et al., 2007) demonstrates benefits for using visuals and drawing with writers of all ages.

Responses to this survey demonstrate teacher knowledge of current best-practices and theories in teaching writing. Teachers' reports of continuing professional development could be an indicator that they strive to incorporate these techniques into their instruction. Survey responses also indicate that while teachers value visuals and believe that students benefit from visual projects, time pressures and misconceptions about drawing only being useful for younger students may be preventing teachers from implementing visuals more regularly. These teachers might benefit from including more visuals, in conjunction with increased opportunities for student drawing, in their instruction.

### *Case Study Discussion*

A central theme became evident as surveys, observations, and follow up questions were coded and analyzed. As was found in the literacy expertise studies (Pressley et al., 1996; Wharton-McDonald et al., 1998), many of the effective teaching practices observed are true of all good teachers. This research seeks to illuminate those pieces of the puzzle that specifically pertain to the use of visuals in writing instruction.

Each of the teachers surveyed highly values visuals and recognizes their effectiveness as instructional tools. The teacher selected for the case study, Mrs. Duncan, especially holds ardent beliefs about the value of providing visual examples and opportunities for students to talk and draw before and during writing instruction. This teacher communicates a steadfast belief that student success is possible through the support of visuals. She states, “I believe that [my students] are more successful with a visual or using their drawings... they take more time with their work and are more engaged.” Mrs. Duncan also communicates her belief to students, stating, “Drawing will help you write.” These statements concur with research from Dyson (1986), Graves (1994), and Horn and Giacobbe (2007).

In addition to providing regular opportunities for students to draw as a part of independent writing time, Mrs. Duncan also provides a wide variety of visuals as a part of her whole-group writing instruction. In doing so, she addresses the needs of her diverse learners and promotes student engagement. Observed writing lessons included visuals such as modeling, a short video, photographs, picture walks through literature, and graphic organizers.

Mrs. Duncan explains additional reasoning for her frequent use of visuals, and addresses how using visuals helps meet students' individual learning styles.

Anytime you can engage more than one sense, it will be better for the student. My kids tend to need multiple experiences with a topic/area to make it their own. I think many kids are like that! Using visuals and referring to them during the day (or week...) can make a difference. Allowing for movement, talk time, and expression (drawing/labeling) can provide for multiple 'touches' with a concept.

This statement demonstrates Mrs. Duncan's knowledge of her students' individual differences and also applies to brain-compatible learning, which encourages involving multiple regions of the brain (Campbell, 1997).

Teacher beliefs are demonstrated by actions in how they transfer into effective classroom instruction. Beliefs affect instructional decisions for curriculum choices and how a teacher responds to individual students' needs in teachable moments. It is these invaluable instructional practices that make Mrs. Duncan stand out and help her students achieve success.

Mrs. Duncan is an effective teacher of writing as a result of her careful orchestrating of the most excellent strategies available for her students. She sets the stage for her students to write. She prepares the classroom environment and student materials in such a manner that there are no barriers to prevent success as students begin writing. She provides scaffolding support to students through literature and opportunities with oral language and drawing. This teacher's purposeful use of visuals helps to break down barriers to achievement. She does not make excuses for her students, but demonstrates high expectations for each of them. In response to another query, do you believe that your students need visuals/drawing incorporated into lessons more than the average



class? she explains further, “Yes, I think they do – these are kids who can have success with a support – in this case a visual. However, ALL kids – especially early primary kids could use these to aid in their writing/language development.”

She considers herself responsible for bridging the gap to help her students achieve success and plans her instruction accordingly. Her final survey comment demonstrates her belief in the power of utilizing visuals as well as her intentional use of these strategies within her writing instruction.

Students are usually placed in my room because they are struggling readers. My students can be reluctant writers as well.... My hope is to give my students the gift of loving literature that will translate to expressing themselves with the written word. Art is my bridge.

### *Limitations*

Limitations for this study include the small sample size of teachers who completed the survey. There was not a control group, nor were teachers randomly selected to participate in the study. Most of the teachers surveyed teach fourth grade and the case study teacher teaches first and second graders in a transition class. The findings from this study might not transfer to other grade levels or classroom settings. Only one teacher was selected for observation and in-depth study. This provided limitations specific to that teacher’s perspective and her use of the strategies under observation. Another limitation, the short observation period, could have hindered the researcher in capturing a complete picture of the case study teacher’s instruction.

### *Recommendations*

Recommendations for future research include envisioning studies with a larger sample size of teachers. Further qualitative research focused on examining visuals and drawing in writing instruction could be conducted across multiple grade levels, at other

grade levels such as middle school, or focused on many teachers all at one grade level. Multiple case studies could be conducted to compare effective versus ineffective instruction with visuals and drawing. Quantitative studies should also be conducted to measure the impact of visuals on student writing achievement. Future studies might benefit from observing teachers at regular intervals throughout the school year to gain a more complete view of the teacher's instructional practices.

Recommendations for teacher training in writing instruction include changes for preservice teachers. Instruction at the undergraduate level is one way to ensure that all teachers are exposed to the potentially powerful impact of incorporating visuals into instruction. Language arts and writing courses should go beyond teaching the basics of the writing process to include strategies that motivate and encourage communication through both text and images.

Continued training and professional development for current teachers is recommended to examine information about recent research in the area of visuals and writing instruction. This professional development can be differentiated to meet the various needs of elementary, middle, high school, and university instructors as well as those teachers who incorporate writing across various disciplines but do not teach language arts. Teachers at all levels should be encouraged to incorporate visual teaching methods in writing lessons. Specific strategies such as pictography and storyboarding can be presented to teachers through video demonstration of these powerful techniques. Teachers also need to be informed of current brain research studies and their educational implications. Visual literacy and media literacy topics should be explored and incorporated into instruction at all grade levels to help students become more reflective

consumers and producers of visual messages. It is imperative that teachers capitalize on the availability of technology in classrooms and use it to provide effective visuals which enhance the teaching of lesson objectives.

Workshops for principals and administrators are recommended as well, as these leaders need to be made aware of these valuable visual teaching practices in order to support and encourage teachers in their use of these techniques. Parent workshops, where student writing and visuals are showcased, provide opportunities for introducing learning styles and the needs of various learners, informing parents about the development of student writers, and the powerful influence of media.

In a pilot study where visual literacy was examined as a topic of study with preservice teachers, Box and Cochenour (1995) stated, “We cannot take for granted that people either understand or practice these things we recognize to be important. Education of teachers in visual literacy must begin in programs of education. Education of our colleagues in teacher education programs must begin with us” (p. 9).

### *Conclusions*

The purpose of the study was to determine how exceptional writing teachers utilize visual images in their teaching of writing. Specifically, the researcher was interested to discover how drawing might be used as a learning tool in the various stages of the writing process. Nine elementary teachers - recognized as exemplary teachers of writing, completed a detailed questionnaire in reference to their writing instruction. All of the teachers surveyed value visuals highly and recognize the potential impact that drawing can have on writing. However, not all of these teachers are utilizing drawing or visual strategies in their writing instruction on a regular basis. Descriptions of writing

instruction and types of visuals used, along with examples, are provided. Additional information was gathered by conducting a case study and observing the instruction of one of the teachers, a particularly information-rich sample, who does integrate drawing and writing. This teacher's beliefs and resulting purposeful instruction are described as evidence for how others might incorporate these valuable strategies. The data reported here highlights the use of visuals and drawing as instructional tools in writing instruction and supports the conclusion that these strategies can and should be incorporated into the teaching of writing for more effective instruction.

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## Appendix A

Drawing and Writing Survey for Elementary Teachers**Teacher/Class Information**

1. What grade do you teach? (circle one)  
K      1<sup>st</sup>      2<sup>nd</sup>      3<sup>rd</sup>      4<sup>th</sup>      5<sup>th</sup>      6<sup>th</sup>      other: \_\_\_\_\_
2. How many years of teaching experience do you have? (choose one)
  - ☐ 0-5 years
  - ☐ 6-10 years
  - ☐ 11-15 years
  - ☐ 16-20 years
  - ☐ 21 years or more
3. What is your ethnicity? \_\_\_\_\_
4. What is your gender? (circle one)      Male                  Female
5. Visual learners prefer using images to communicate and to organize information; they have good spatial sense and are able to visualize things easily. Do you consider yourself to be a visual learner? (choose one)
  - ☐ I am definitely a visual learner
  - ☐ Usually a visual learner
  - ☐ Somewhat a visual learner
  - ☐ Not usually a visual learner
  - ☐ I am not at all a visual learner
6. Artists are those who create works of art or participate in the arts. They may enjoy landscape design, painting, crafts, dancing, playing an instrument, or a multitude of artistic outlets. Do you consider yourself to be an artist? (choose one)
  - ☐ I am definitely an artist
  - ☐ Usually an artist
  - ☐ Somewhat an artist
  - ☐ Not usually an artist
  - ☐ I am not at all an artist
7. Writers do well when expressing their thoughts with written words. Examples of their writing could include journaling, e-mails, how-to instructions, short stories, blogging, or grant writing. Do you consider yourself to be a writer? (choose one)
  - ☐ I am definitely a writer
  - ☐ Usually a writer
  - ☐ Somewhat a writer
  - ☐ Not usually a writer
  - ☐ I am not at all a writer

8. How familiar are you with Multiple Intelligences theory? (choose one)
- ☐ Expert
  - ☐ Very familiar
  - ☐ Somewhat familiar
  - ☐ Not very familiar
  - ☐ Have never heard of Multiple Intelligences
9. What percentage of your students do you estimate to be visual learners? (choose one)
- ☐ Less than 25%
  - ☐ 25-50%
  - ☐ 50-75%
  - ☐ More than 75%
10. How often do you incorporate visual examples, such as charts, graphs, posters, diagrams, or graphic organizers, into your lessons (any subject area)? (choose one)
- ☐ Occasionally
  - ☐ Weekly
  - ☐ Daily
  - ☐ Multiple times per day
11. How important is it that you utilize visuals to teach your students effectively? (choose one)
- ☐ Extremely important
  - ☐ Very important
  - ☐ Somewhat important
  - ☐ Not at all important
12. In what subject area do you use visuals the MOST? (choose one)
- ☐ Reading
  - ☐ Writing
  - ☐ Math
  - ☐ Science
  - ☐ Social Studies
  - ☐ Other (please specify): \_\_\_\_\_
13. In what subject area do you use visuals the LEAST? (choose one)
- ☐ Reading
  - ☐ Writing
  - ☐ Math
  - ☐ Science
  - ☐ Social Studies
  - ☐ Other (please specify): \_\_\_\_\_

14. During your teaching career, have there been any changes in the way you incorporate visuals/visual products into your lessons? Please describe.

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### **Writing Instruction and Assessment**

15. How much time do you devote to writing instruction each week?

\_\_\_\_\_ times per week for \_\_\_\_\_ minutes

16. How much time do students spend writing daily?

\_\_\_\_\_ minutes

17. Please describe your writing instruction. What does a typical lesson look like?

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18. Please list any writing-related workshops or trainings that you have attended for professional development:

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19. During your teaching career, have there been any changes in the way you teach writing? Please describe.

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20. What challenges do you face as you work to teach writing effectively? (mark all that apply)

- ☐ Resources for lessons
- ☐ Time to plan
- ☐ Time to present lessons
- ☐ Time for students to plan, write, revise, edit, and publish their writing
- ☐ Time for conferencing with students (helping them revise and edit individual pieces)
- ☐ Incorporation of technology
- ☐ Evaluating student writing
- ☐ Individualizing instruction
- ☐ Helping students to put voice into their writing
- ☐ Balancing teaching writing mechanics and writing craft
- ☐ Motivating students/creative ways to “get them started”
- ☐ Other (please specify): \_\_\_\_\_
- ☐ Other (please specify): \_\_\_\_\_

21. Please mark all the types of writing instruction that you provide for your students on at least a weekly basis. (mark all that apply)

- ☐ Writing prompts
- ☐ Individual instruction
- ☐ Small-group instruction
- ☐ Whole-group instruction
- ☐ Modeling
- ☐ Conferencing with individuals
- ☐ Skill/grammar lessons
- ☐ Process writing strategies
- ☐ Workbook pages
- ☐ Reading literature as examples of good writing
- ☐ Using marker papers as examples of good writing
- ☐ Free writing/student choice
- ☐ Other: \_\_\_\_\_

22. Please mark all of the types of writing that your students create during the school year. (mark all that apply)

- ☐ Journals/logs
- ☐ Narrative
- ☐ Expository
- ☐ Creative writing
- ☐ Poetry
- ☐ Letter writing
- ☐ Workbook pages
- ☐ Content-area writing/Writing across the curriculum
- ☐ Grammar/skill exercises
- ☐ Student choice of writing genres or topics
- ☐ Other: \_\_\_\_\_

23. How do you grade/score student writing pieces? (mark all that apply)
- ☐ Personal written responses
  - ☐ Individual conference feedback
  - ☐ Teacher-created checklist
  - ☐ Standard (school or state) checklist
  - ☐ Teacher-created scoring rubric on first drafts or working drafts
  - ☐ Teacher-created scoring rubric on published pieces
  - ☐ Standard scoring rubric on first drafts or working drafts
  - ☐ Standard scoring rubric on published pieces
  - ☐ Grade first drafts or working drafts
  - ☐ Grade published pieces
  - ☐ Students select best work for a portfolio
  - ☐ Teacher selects best work for a portfolio
  - ☐ There are some pieces I do not look at or grade
24. How often do you incorporate visual examples, such as charts, graphs, posters, diagrams, or graphic organizers, into your writing lessons? (choose one)
- ☐ Rarely
  - ☐ Occasionally
  - ☐ Weekly
  - ☐ Daily
25. Have you had students who struggled with motivation or behavior during writing lessons? If so, please describe any methods you found that worked to turn them on to writing. (i.e. helping them find a subject they were interested in to write about, providing more structure, allowing use of the computer for drafting, etc.)
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## Art and Writing Products

26. To what extent do you believe drawing to be a part of writing? (mark all that apply)

- ☐ Helps form concepts/visualize ideas
- ☐ Is necessary for younger children
- ☐ Is not necessary if children can write on their own
- ☐ Helps build creativity and expression
- ☐ Supplements writing
- ☐ Is a form of writing
- ☐ Helps students to express what they visualize
- ☐ Can motivate struggling writers
- ☐ Can communicate certain information more clearly than verbal text

27. In what stages of the writing process do your students utilize drawing? (mark all that apply)

Drawing at prewriting stage

- ☐ Draw, paint, or sketch to brainstorm ideas
- ☐ Storyboarding to plan a story
- ☐ Graphic organizers/ story webs
- ☐ Other (please specify): \_\_\_\_\_

Drawing at drafting stage

- ☐ Sketch to stretch strategy
- ☐ Story frames
- ☐ Other (please specify): \_\_\_\_\_

Drawing at revision/editing stage

- ☐ Storyboarding to look at overall ideas/concepts
- ☐ Other (please specify): \_\_\_\_\_

Drawing at publishing stage

- ☐ Draw to illustrate finished product
- ☐ Other (please specify): \_\_\_\_\_

28. In your opinion, what is the value of having students invest time in visual projects? (i.e. models, posters, dioramas, charts, illustrations)

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29. What types of visual projects do you have students produce during the school year? (mark all that apply) For each type marked, please give an example of how you have used it. (i.e. PowerPoint: present animal research after zoo trip)

- Posters: \_\_\_\_\_
- Diagrams: \_\_\_\_\_
- Comics: \_\_\_\_\_
- Hypermedia/ multimedia: \_\_\_\_\_
- PowerPoint: \_\_\_\_\_
- Computer “paint” programs: \_\_\_\_\_
- Other visual/creative computer programs: \_\_\_\_\_:  
\_\_\_\_\_
- Flyers/brochures: \_\_\_\_\_
- Dioramas: \_\_\_\_\_
- Maps: \_\_\_\_\_
- Graphs: \_\_\_\_\_
- Tables: \_\_\_\_\_
- Timelines: \_\_\_\_\_
- Models: \_\_\_\_\_
- Poetry art/shape poetry: \_\_\_\_\_
- Sketches/paintings/drawings/illustrations: \_\_\_\_\_
- Other visual products (please specify): \_\_\_\_\_:  
\_\_\_\_\_
- Other visual products (please specify): \_\_\_\_\_:  
\_\_\_\_\_
- Other visual products (please specify): \_\_\_\_\_:  
\_\_\_\_\_

30. When assigning projects, how much time do you spend explicitly teaching graphic design concepts? (i.e. layout and typography) (choose one)

- ☐ At least one class period, graphic design is assessed as part of the project
- ☐ Less than a class period, appearance is assessed as part of the project
- ☐ No mention of it, appearance is not assessed as part of the project

31. When assessing visual products, what do you use as your criteria? (mark all that apply)

- ☐ Accuracy of content
- ☐ Detail of content
- ☐ Effort
- ☐ Appearance/neatness
- ☐ Other: \_\_\_\_\_

32. Please let me know if there is anything else you think I would be interested in knowing about your writing instruction.

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## Appendix B

### *Questions - Follow Up 1*

1. Your classroom layout seems very purposeful and contributes to the flow of lessons/activities. The overall classroom environment is very warm and calm – even when there is a lot going on.
  - Was anything done purposefully to lend toward using visuals/drawing in lessons?
  - What is your purpose in using visuals such as classroom posters, word wall, calendar board, etc? How do you use them?
  - Is it possible to create charts/posters from what is done on the Activboard? Have you done that as a part of any lessons?
  - I noticed “The Story of Money” class-created chart in the independent work area... Why is it there? How do students use it?
  
2. When I go back to teaching in the classroom, I definitely want an Activboard! I have been amazed to see how you use it to engage students in lessons.
  - How and when were you first trained to use the Activboard?
    - How did you use it then versus now?
    - What has helped you to gain proficiency?
    - Has your time learning to use this technology been worth it?
  - How do you find graphic organizers, video clips, photos, and other visuals to use with your lessons?
    - Is finding these time-consuming?
    - Is the impact on students worth the time you spend?
  - Are there any subject areas in which you do not use the Activboard as a teaching tool? Why or why not?
  - How would you describe the Activboard’s impact on students?
  - How often do you save, record, or print what is done with students on the Activboard? How valuable have you found these features to be?

*Questions - Follow Up 2*

1. You have described your students as struggling readers. After observing in your classroom, I noticed that you also have special education and ESL students. I am wondering whether you use visuals and drawing more because of your student population or because it is just a good teaching practice.
  - What is the population breakdown in your classroom? (gender, ethnicity, special ed, speech/language, gifted, etc.)
  - Do you believe that your students need visuals/drawing incorporated into lessons more than the average class? Why or why not?
  - What impact have you seen from using visuals/drawing with your students? What evidence do you base this on?
  - How do visuals help students' oral language/vocabulary development?
  - Do you have any recommendations for other elementary teachers with struggling students regarding this type of instruction?
  
2. In your survey responses, you mentioned that you use drawing with your students during writing instruction to promote idea development and the adding of details to their writing.
  - Did you receive training or professional development that led you to incorporate visuals/drawing with your students? If not, how did you get to this point?
  - When you have students draw (before they write), how does that transfer to improved writing?
  - How do you know this strategy works? How do you know when a student needs this strategy?
  - What if drawing before writing doesn't seem to help with idea development and adding details in a specific lesson or with a particular student? What other strategies do you try?
  - What if the drawing doesn't match what is written or the writing doesn't match the drawing (depending on which was done first)?

- I've observed several writing lessons involving labeling. How have you seen drawing help with students' narrative descriptions? Use of verbs?

## Appendix C

APPLICATION FOR APPROVAL OF INVESTIGATIONS  
INVOLVING THE USE OF HUMAN SUBJECTS

1. Principal Investigator's Name: Sally H. Tooley  
 Email Address: [sally.tooley953@wku.edu](mailto:sally.tooley953@wku.edu), or [stooley@hillvue.com](mailto:stooley@hillvue.com)  
 (Permanent) Mailing Address: 143 Valleybrook Ave., Bowling Green, KY 42101  
 Department: Literacy Phone: 270-846-2725 (home)  
  
 Co-Investigator: N/A
2. Faculty Sponsor: Dr. Pam Petty Department: Literacy Phone: 270-745-2933  
 Faculty Mailing Address: Tate Page Hall 363  
  
 Is this your thesis or dissertation research? Yes – thesis
3. Title of project: The Art in Teaching Writing
4. Project Period: Start upon HSRB approval End April 30, 2008
5. Has this project previously been considered by the HSRB? No
6. Do you or any other person responsible for the design, conduct, or reporting of this research have an economic interest in, or act as an officer or a director of, any outside entity whose financial interests would reasonably appear to be affected by the research? No
7. Is a proposal for external support being submitted? No
8. You must include copies of all pertinent information such as, a copy of the questionnaire you will be using or other survey instruments, informed consent documents, letters of approval from cooperating institutions (e.g., schools, hospitals or other medical facilities and/or clinics, human services agencies, individuals such as physicians or other specialists in different fields, etc.), copy of external support proposals, etc. (see attached)
9. Does this project SOLELY involve analysis of an existing database? No

## I. PROPOSED RESEARCH PROJECT

### A. Summary of proposed research

The proposed research investigation, *The Art in Teaching Writing*, is a qualitative study. The purpose of this study is to determine how elementary teachers, who meet the criteria of being exceptional teachers of writing, utilize visual images in their teaching of writing. Specifically, the researcher is interested in how drawing is used as a learning tool in the classroom setting by both teachers and students and especially how drawing is used in the various stages of the writing process.

As a qualitative study, the research will involve gathering data from information-rich sources by means of survey, direct observation, and in-depth, open-ended interviews. This study will be implemented with teachers from school districts in Bowling Green, Kentucky. Ten to fifteen elementary classroom teachers, who meet the criteria of being exceptional teachers of writing, will be surveyed. Based on survey responses, select teachers will be observed and interviewed.

### B. Subjects and selection criteria

Teachers selected to receive surveys participated in the WKU Kentucky Writing Project and are considered exceptional writing teachers based upon a set of criteria developed jointly with the WKU Kentucky Writing Project Director, Dr. John Hagaman. These are elementary classroom teachers who currently teach in either Bowling Green Independent or Warren County School Districts. Initial contact will be made to selected teachers through surveys sent to their respective school addresses.

### C. Informed consent

Permission to conduct this study will be obtained from the school boards of the participating teachers. Teachers will be mailed surveys along with a consent letter to sign and return (see attached). Teachers who are selected for observations and interviews and who choose to participate will sign another consent document (see attached).

### D. Procedures

**Selection of Participant Sample:** Teachers will be identified who meet the criteria for “exceptional teachers of writing” as jointly developed with WKU Kentucky Writing Project Director, Dr. John Hagaman, and who are currently teaching elementary classrooms (K-5<sup>th</sup> grades) in either Bowling Green Independent or Warren County School systems.

Survey: After obtaining school board permission for the study, an initial survey will be mailed to teachers and will be used to collect information about how they teach writing. The survey will also be used to select teachers for classroom observations and interview. Based on the field test of this instrument, the survey will take approximately twenty minutes for teachers to complete.

Observations: With the 2 or 3 teachers selected, classroom observations will be conducted during each of the classes' writing periods once a week for a minimum of three and as many as six weeks.

Interviews: Each of the 2 or 3 teachers selected will be interviewed individually for thirty to sixty minutes about their teaching practices and beliefs about teaching writing. Interview questions will be formulated based upon survey responses and observation of teaching methods. The location (within the school) and whether the interview consists of one or two sessions will be arranged at the preference and availability of the teachers.

#### E. Confidentiality

Teachers' names will be kept confidential. All materials and data, including consent forms, completed surveys, data output from SPSS, observation checklists and notes, and interview transcripts and notes, will be kept in a locked file cabinet in the Literacy Department in Tate Page Hall for three years upon the completion of this study at which time they will be destroyed. None of the observations or interviews will be taped or video recorded. At no time will the names of the schools or districts be identified in writing and only the investigator and committee chairperson will be privy to that information. The participating schools will be referred to only as "elementary schools in the southeastern United States."

#### F. Risks

There are no expected risks for the participating schools, administrators, or any of the teachers surveyed and/or observed/interviewed. Access to consent forms, completed surveys, data output from SPSS, and other written materials will be restricted only to the researcher and the committee chairperson. All materials including consent forms, surveys, data output from SPSS, and other written materials will be kept in a locked file in the Literacy Department for three years upon the completion of this study at which time they will be destroyed.

#### G. Benefits

As a result of participating in this study, contributing teachers should feel encouraged in their efforts to teach writing with excellence. Although there are plenty of examples of how not to teach writing, we can learn best through closer examination of exceptional models. With this study, by examining and reporting



what these teachers are doing with excellence, it is anticipated that other current teachers and future teachers will be empowered to become more effective in their teaching methods.

Utilizing art in the teaching of writing can have a profound impact on students – especially visual learners. High-quality teachers use a variety of techniques to add visual interest to their instruction including graphic organizers, fine art, quick sketches, and digital visual images. This research will examine the practical use of these methods in ordinary classrooms by extraordinary teachers.

H. List of references (if applicable):

Additions to or changes in procedures involving human subjects, as well as any problems connected with the use of human subjects once the project has begun, must be brought to the attention of the HSRB as they occur.

## II. SIGNATURES

- A. I certify that to the best of my knowledge the information presented herein is an accurate reflection of the proposed research project.

\_\_\_\_\_  
Principal Investigator

\_\_\_\_\_  
Date

- B. Approval by faculty sponsor (required for all students):

I affirm the accuracy of this application, and I accept the responsibility for the conduct of this research, the supervision of human subjects, and maintenance of informed consent documentation as required by the HSRB.

\_\_\_\_\_  
Faculty Sponsor

\_\_\_\_\_  
Date

- C. Approval by Department Head is not required (Some departments require approval by the Department Head. Please verify with your department head if their signature is required). If PI is a director or department head, then the PI's immediate superior should sign.

I confirm the accuracy of the information stated in this application. I am familiar with, and approve of the procedures that involve human subjects.

\_\_\_\_\_  
Department Head (or immediate superior)

\_\_\_\_\_  
Date

- D. Advising Physician\*:

I certify that I am a duly licensed physician in the State of Kentucky and that, acting as advising physician, I accept the procedures prescribed herein.

\_\_\_\_\_  
Physician's Name and Signature

\_\_\_\_\_  
Date

\*Physician signature is needed only if the project involves medical procedures and the investigator is not a licensed physician.

Project Title: The Art in Teaching Writing

Investigator: Sally Tooley, Literacy Department, home phone 270-846-2725

-----  
(This portion is for HSRB use only.)

HSRB Determination:

Exempt from Full Review ( )      Expedited Review ( )      Full HSRB Review ( )

( ) Disapproval

( ) Approval      ( ) Above minimal risk      ( ) Minimal risk

- a. approval, subject to minor changes
- b. approval in general but requiring major alterations, clarifications or assurances
- c. restricted approval

Date of review: \_\_\_\_\_

Comments:

\_\_\_\_\_  
 Human Subjects Review Board Chair

\_\_\_\_\_  
 Date

\_\_\_\_\_  
 Compliance Manager

\_\_\_\_\_  
 Date

If you have questions regarding review procedures or completion of this HSRB application, contact the Office of Sponsored Programs:

Director -- Dr. Phillip E. Myers, Human Protections Administrator, (270) 745-4652

E-mail: [phillip.myers@wku.edu](mailto:phillip.myers@wku.edu)

Compliance Manager -- Mr. Sean Rubino, Human Protections Administrator, (270) 745-2129

E-mail: [sean.rubino@wku.edu](mailto:sean.rubino@wku.edu)

## Appendix D

Warren County School Board  
303 Lovers Lane  
Bowling Green, KY 42103

January 7, 2008

Dear Sirs and Madams:

I am writing to obtain your permission to conduct a qualitative research study within your school district this semester. The Human Subjects Review Board at Western Kentucky University has approved this proposed study. They can be contacted through the Office of Sponsored Programs at Western Kentucky University, 301 Potter Hall, (270) 745-4652. The purpose of the study is to determine how elementary teachers, who meet the criteria of being exceptional teachers of writing, utilize visual images in their teaching of writing. Specifically, I am interested in how drawing is used as a learning tool in the classroom setting by both teachers and students and especially how drawing is used in the various stages of the writing process.

Ten to fifteen elementary classroom teachers, who meet the criteria of being exceptional teachers of writing, will be surveyed. Surveys will be mailed to teachers at their school addresses and teachers will choose whether they want to participate in the study. Anyone who agrees to participate in this study is free to withdraw from the study at any time with no penalty. The completed surveys will also be used to select 2-3 teachers for classroom observations and interview. With the 2 or 3 teachers selected, classroom observations will be conducted during each of the classes' writing periods once a week for a minimum of three and as many as six weeks. Each of the 2 or 3 teachers selected will also be interviewed for thirty to sixty minutes about their teaching practices and beliefs about teaching writing. The location (within the school) and whether the interview consists of one or two sessions will be arranged at the preference and availability of the teachers.

There are no expected risks for the participating schools, administrators, or any of the teachers surveyed and observed or interviewed. Teachers' names will be kept confidential. None of the observations or interviews will be taped or video recorded. Access to data and written materials will be restricted only to me and my committee chairperson. As a result of participating in this study, contributing teachers should feel encouraged in their efforts to teach writing with excellence. With this study, by examining and reporting what these teachers are doing with excellence, it is anticipated that other teachers will be empowered to become more effective in their teaching methods.

Please contact me if you have any questions or concerns about this proposed research project. If this research proposal meets your approval, please let me know by letter to the following address: 143 Valleybrook Avenue, Bowling Green, KY 42101. Thank you for your consideration.

Respectfully,

Sally H. Tooley  
Student Researcher  
Western Kentucky University  
143 Valleybrook Avenue  
Bowling Green, KY 42101  
270-846-2725 (home)  
[stooley@hillvue.com](mailto:stooley@hillvue.com)

Bowling Green Independent School Board  
1211 Center Street  
Bowling Green, KY 42101

January 7, 2008

Dear Sirs and Madams:

I am writing to obtain your permission to conduct a qualitative research study within your school district this semester. The Human Subjects Review Board at Western Kentucky University has approved this proposed study. They can be contacted through the Office of Sponsored Programs at Western Kentucky University, 301 Potter Hall, (270) 745-4652. The purpose of the study is to determine how elementary teachers, who meet the criteria of being exceptional teachers of writing, utilize visual images in their teaching of writing. Specifically, I am interested in how drawing is used as a learning tool in the classroom setting by both teachers and students and especially how drawing is used in the various stages of the writing process.

Ten to fifteen elementary classroom teachers, who meet the criteria of being exceptional teachers of writing, will be surveyed. Surveys will be mailed to teachers at their school addresses and teachers will choose whether they want to participate in the study. Anyone who agrees to participate in this study is free to withdraw from the study at any time with no penalty. The completed surveys will also be used to select 2-3 teachers for classroom observations and interview. With the 2 or 3 teachers selected, classroom observations will be conducted during each of the classes' writing periods once a week for a minimum of three and as many as six weeks. Each of the 2 or 3 teachers selected will also be interviewed for thirty to sixty minutes about their teaching practices and beliefs about teaching writing. The location (within the school) and whether the interview consists of one or two sessions will be arranged at the preference and availability of the teachers.

There are no expected risks for the participating schools, administrators, or any of the teachers surveyed and observed or interviewed. Teachers' names will be kept confidential. None of the observations or interviews will be taped or video recorded. Access to data and written materials will be restricted only to me and my committee chairperson. As a result of participating in this study, contributing teachers should feel encouraged in their efforts to teach writing with excellence. With this study, by examining and reporting what these teachers are doing with excellence, it is anticipated that other teachers will be empowered to become more effective in their teaching methods.

Please contact me if you have any questions or concerns about this proposed research project. If this research proposal meets your approval, please let me know by letter to the following address: 143 Valleybrook Avenue, Bowling Green, KY 42101. Thank you for your consideration.

Respectfully,

Sally H. Tooley  
Student Researcher  
Western Kentucky University  
143 Valleybrook Avenue  
Bowling Green, KY 42101  
270-846-2725 (home)  
[stooley@hillvue.com](mailto:stooley@hillvue.com)

Appendix E  
INFORMED CONSENT DOCUMENT – Survey

Project Title: The Art in Teaching Writing

Investigator: Sally H. Tooley, Literacy Department, home phone 270-846-2725

You are being asked to participate in a project conducted through Western Kentucky University. The University requires that you give your signed agreement to participate in this project.

The investigator will explain to you in detail the purpose of the project, the procedures to be used, and the potential benefits and possible risks of participation. You may ask him/her any questions you have to help you understand the project. A basic explanation of the project is written below. Please read this explanation and discuss with the researcher any questions you may have.

If you then decide to participate in the project, please sign on the last page of this form in the presence of the person who explained the project to you. You should be given a copy of this form to keep.

**6. Nature and Purpose of the Project:**

The purpose of this study is to determine how elementary teachers, who meet the criteria of being exceptional teachers of writing, utilize visual images in their teaching of writing. Specifically, the researcher is interested in how drawing is used as a learning tool in the classroom setting by both teachers and students and especially how drawing is used in the various stages of the writing process.

**7. Explanation of Procedures:**

This study will be implemented in a school district in Bowling Green, Kentucky. Ten elementary classroom teachers, who meet the criteria of being exceptional teachers of writing, will be surveyed.

The initial survey will be mailed to teachers and will be used to collect information about their teaching of writing. The survey will also be used to select teachers for classroom observations and interview.

**8. Discomfort and Risks:**

There are no expected risks for the participating schools, administrators, or any of the teachers surveyed.

**9. Benefits:**

As a result of participating in this study, contributing teachers should feel encouraged in their efforts to teach writing with excellence. With this study, by examining and reporting what these teachers are doing with excellence, it is anticipated that other teachers will be empowered to become more effective in their teaching methods.

(consent form continued)

10. Confidentiality:

Teachers' names will be kept confidential. None of the observations or interviews will be taped or video recorded. Access to data and written materials will be restricted only to the researcher and the committee chairperson. All materials will be kept in a locked file in the Literacy Department for three years upon the completion of this study at which time they will be destroyed.

11. Refusal/Withdrawal:

Refusal to participate in this study will have no effect on any future services you may be entitled to from the University. Anyone who agrees to participate in this study is free to withdraw from the study at any time with no penalty.

*You understand also that it is not possible to identify all potential risks in an experimental procedure, and you believe that reasonable safeguards have been taken to minimize both the known and potential but unknown risks.*

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Date

THE DATED APPROVAL ON THIS CONSENT FORM INDICATES THAT  
THIS PROJECT HAS BEEN REVIEWED AND APPROVED BY  
THE WESTERN KENTUCKY UNIVERSITY HUMAN SUBJECTS REVIEW BOARD

Sean Rubino, Compliance Manager

TELEPHONE: (270) 745-4652

Appendix F  
INFORMED CONSENT DOCUMENT – Interview and Observation

Project Title: The Art in Teaching Writing

Investigator: Sally H. Tooley, Literacy Department, home phone 270-846-2725

You are being asked to participate in a project conducted through Western Kentucky University. The University requires that you give your signed agreement to participate in this project.

The investigator will explain to you in detail the purpose of the project, the procedures to be used, and the potential benefits and possible risks of participation. You may ask him/her any questions you have to help you understand the project. A basic explanation of the project is written below. Please read this explanation and discuss with the researcher any questions you may have.

If you then decide to participate in the project, please sign on the last page of this form in the presence of the person who explained the project to you. You should be given a copy of this form to keep.

1. Nature and Purpose of the Project:

The purpose of this study is to determine how elementary teachers, who meet the criteria of being exceptional teachers of writing, utilize visual images in their teaching of writing. Specifically, the researcher is interested in how drawing is used as a learning tool in the classroom setting by both teachers and students and especially how drawing is used in the various stages of the writing process.

2. Explanation of Procedures:

This study will be implemented in a school district in Bowling Green, Kentucky. Ten elementary classroom teachers, who meet the criteria of being exceptional teachers of writing, will be surveyed. The survey will also be used to select 2-3 teachers for classroom observations and interview.

With the 2 or 3 teachers selected, classroom observations will be conducted during each of the classes' writing periods once a week for a minimum of three and as many as six weeks. Each of the 2 or 3 teachers selected will also be interviewed for thirty to sixty minutes about their teaching practices and beliefs about teaching writing. The location (within the school) and whether the interview consists of one or two sessions will be arranged at the preference and availability of the teachers.

3. Discomfort and Risks:

There are no expected risks for the participating schools, administrators, or any of the teachers surveyed and observed or interviewed.



(consent form continued)

4. **Benefits:**

As a result of participating in this study, contributing teachers should feel encouraged in their efforts to teach writing with excellence. With this study, by examining and reporting what these teachers are doing with excellence, it is anticipated that other teachers will be empowered to become more effective in their teaching methods.

5. **Confidentiality:**

Teachers' names will be kept confidential. None of the observations or interviews will be taped or video recorded. Access to data and written materials will be restricted only to the researcher and the committee chairperson. All materials will be kept in a locked file in the Literacy Department for three years upon the completion of this study at which time they will be destroyed.

6. **Refusal/Withdrawal:**

Refusal to participate in this study will have no effect on any future services you may be entitled to from the University. Anyone who agrees to participate in this study is free to withdraw from the study at any time with no penalty.

*You understand also that it is not possible to identify all potential risks in an experimental procedure, and you believe that reasonable safeguards have been taken to minimize both the known and potential but unknown risks.*

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Date

THE DATED APPROVAL ON THIS CONSENT FORM INDICATES THAT  
THIS PROJECT HAS BEEN REVIEWED AND APPROVED BY  
THE WESTERN KENTUCKY UNIVERSITY HUMAN SUBJECTS REVIEW BOARD  
Sean Rubino, Compliance Manger  
TELEPHONE: (270) 745-4652

