WEAVING WORDS AND IMAGES:
USING VISUAL STRATEGIES TO IMPROVE IDEA GENERATION
AND WRITING STRATEGIES OF PRIMARY WRITERS

By

ESTHER LENORE DENNIS

B.Ed (Elem.) The University of British Columbia, 1986

A GRADUATING PAPER SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF EDUCATION

in

THE FACULTY OF GRADUATE STUDIES

Department of Language and Literacy Education

We accept this major paper as conforming
to the required standard

Dr. Theresa Rogers

(Graduate Advisor)

Maureen Kendrick

THE UNIVERSITY OF BRITISH COLUMBIA

November 2010

© E. L. Dennis, 2010
ACKNOWLEDGEMENT

I would like to first thank all the young, artistic, articulate children of this study who over the course of the time together welcomed me into their stories. I thank them for sharing their responses with me so that I could understand their ways with art and language. To Jan McIntyre, a friend and colleague, I thank you for your support and sense of humour in and out of the classroom during the course of the study.

During the course of my master's journey, the voices of many people have insured my success. Each voice provided a unique role and I am most grateful for their support. The experienced voices of my advisor, Dr. Theresa Rogers, provided me with feedback to foster my growth as a researcher. To my cohort members, I thank you for your considerable support and reassurance. Traveling on this journey together has been an adventure, and I will always treasure the friendships that have formed. Thank you Juanita, and Kelly, for the cups of tea and lengthy talks. I will keep you on my speed dial!

My deepest thanks I extend to my family. To my mentor and greatest cheerleader, my mom. Your patience, understanding, and empathetic ear have enabled me to have the courage to fulfill my dream. To my sister, Tracy Saddul, who has always been my best friend, I appreciate the many hours of commiserating about life over few glasses of wine.

To my children, I owe the most appreciation. They have traveled the bumpiest part of the journey with me, and have done so with unwavering love and understanding. Tiana, you have been one of my biggest cheerleaders. You are a literary and artistic talent in your own right. My own journey may have ended, but I hope to follow you on many of your own. Bradon and Zachary, you are my true inspirations. Your own curiousities about drawing and writing inspired
me to explore the natural way in which you shared your imaginations with me. It was your work that lead me to do mine.

My greatest appreciation goes to the supportive, reassuring voice of my husband, Lloyd. You knew a Masters was a goal before I even had the courage to speak the words. Thank you for the endless flow of coffee, home cooked meals and knowing when to take the kids out of the house. Your constant love, encouragement, and patience (and lots of it) nourished me during my journey. My accomplishment here is most appropriately shared with you.
ABSTRACT
This eight week study supports the view that literacy learning is multimodal and it contributes to existing research (Dyson, 1986; Hubbard, 1989; Olshansky, 2006; Skupa, 1985) on the “communicability of drawing and writing as vehicles through which children make and share meaning” (Leigh & Heid, 2008, p.1). Focused on using visual art, specifically drawing, in the planning stages before and during the writing process, this study was conducted to explore if there is a value in privileging the role of drawing to improve children's writing stamina and idea generation. The subjects were 17 grade two and three students in an elementary classroom. Data collected consisted of teacher observational notes, conferences with children, a survey, and portfolios of the children's writing and drawing. Patterns and themes were identified, relating to their (a) use of drawing as a pre-writing or planning strategy, (b) use of drawing to overcome writer's block and reducing cognitive demands, (c) drawings as idea banks, (d) affective responses to drawing and writing, (e) recursive use of writing and drawing, and (f) embedding of writing in drawings. On the basis of these patterns, inferences were made about written language development and the power in children's use of art, specifically drawing, when it is valued as a conduit for understanding how children construct meaning. It was concluded that drawing, before and during the writing process, at least in terms of the generation of ideas and children's stamina for writing tasks, is an effective form of planning for writing. Given the very diversity in personal learning styles, and ways of knowing, there is a real benefit for children to approach the writing process using alternative modes of representation.

Keywords: literacy learning, multimodal, planning, drawing, writing.
# TABLE OF CONTENTS

Title Page ................................................................. i  
Acknowledgment .............................................................. ii  
Abstract ........................................................................ iv  
Table of Contents .............................................................. v  
List of Tables .................................................................. vi  
List of Figures .................................................................. vi  

## CHAPTER 1. PURPOSE OF THE STUDY .......................... 1

## CHAPTER 2. LITERATURE REVIEW ............................... 2
  - Building a Context for Multimodal Possibilities of Representation in Writing ..................................................... 3  
  - Between Words and Images: A Dialogical View ............................................... 4  
  - Drawing Into Meaning: A Pre-Writing Strategy ................................................................. 7  
  - Valuing the Process of Weaving Stories and Images:  
    - The Art of Writing ............................................................................ 8  
    - Bridging Symbol Systems: A Pedagogical Shift .............................................. 11  
  - Looking Forward: Educational Implications ................................................................. 12

## CHAPTER 3. METHOD ...................................................... 14
  - Research Design ......................................................................................... 14  
  - Research Site ......................................................................................... 14  
  - Participants ............................................................................................... 15  
  - Procedures / Data Sources and Collection .................................................. 16    - Pre-Instructional Observations and Mini-lessons ........................................... 17  
    - Writing Process and Conferencing .......................................................... 18  
    - Post-Instructional Assessment ................................................................ 19  
  - Data Sources .............................................................................................. 19    - Anecdotal / Observational Notes ................................................................. 20  
    - Portfolios of Writing and Drawing Samples ............................................. 20  
    - Conferences / Interviews ........................................................................ 21  
    - Student Surveys ...................................................................................... 21  
  - Analysis ...................................................................................................... 21    - Organizing and Coding the Survey Data ..................................................... 21  
    - Organizing and Coding Qualitative Data - Conferences, Field Notes, Portfolios ......................................................... 21
CHAPTER 4. FINDINGS ...................................................................................................... 22
Identifying Themes and Patterns in Quantitative Survey Data ........................................... 22
  Drawing as a Pre-Writing or Planning Strategy .......................................................... 23
  Utilizing Drawing to Overcome Writer's Block and Reducing Cognitive Demands ...... 24
  Drawing as an Idea Bank ..................................................................................... 24
  Children's Affective Response to Drawing and Writing ............................................. 25
Identifying Themes and Patterns in Qualitative Data ...................................................... 25
  Drawing as a Pre-Writing or Planning Strategy .......................................................... 26
  Utilizing Drawing to Overcome Writer's Block and Reducing Cognitive Demands ...... 28
  Drawing as an Idea Bank ..................................................................................... 29
  Mode-Switching: Use of Writing and Drawing Recursively ........................................ 31
  Writing Embedded In Drawing ............................................................................. 32

CHAPTER 5. DISCUSSION ................................................................................................. 34

REFERENCES ........................................................................................................................................ 37

APPENDICES .................................................................................................................. 40
  1. Storyboard Planning Sheet ................................................................................. 41
  2. Conference Guide ............................................................................................. 42
  3. Student Survey ................................................................................................. 43
  4. Conference Guide Transcriptions of Semi-structured and Spontaneous Conferences ........................................................................................................... 44
  5. Coded Conference Transcripts ........................................................................ 52

LIST OF TABLES
Table 1: Student Survey: Visual Strategies to Improve Idea Generation and Writing Stamina of Primary Writers
Table 2: Written Text Features Embedded in Drawings

LIST OF FIGURES
Figure 1: Student Survey: Preference for Initiating Writing Process
Figure 2: Student Survey: Changing and Adding to Writing and / or Drawing
Figure 3: Student Survey: Students' Affective Response to Writing and Drawing
Figure 4: Ethan's drawing helps to explain the story
Figure 5: Drawing helps Julio continue writing
Figure 6: Drawing serves as an idea bank for Christopher
Figure 7: Becky illustrates when there is room
Figure 8: Writing and drawing intermingle in Ethan's picture
PURPOSE OF STUDY

As a primary teacher, with close to 20 years of experience, I have often struggled with tapping children's funds of knowledge during writing tasks. I have provided opportunities to plan writing using a variety of story maps and organizers, and still my students struggle with clarifying and elaborating on ideas and adding details. Yet, too often, the common refrains have been centred on not knowing what to write about and/or not having details to add to their writing. Drawing was something I discouraged until writing tasks were complete; instead, it was often done in the final, or publishing, stage of the writing process. For many of my students, this final step was the most enjoyable part of the process and when conferencing with students I became drawn to the realization that they spoke to their drawings and illustrations almost more than the written texts.

It was when my twin sons began writing their first stories at the kitchen table that I had an awakening. For my boys, drawing and colouring pictures, which they would later sequence and staple into booklets, was the first step in what had become a favourite pastime. Following their image-making, they put words to their pictures, both orally and in writing. Drawing as one means by which they registered their conceptions of the world, allowed them to produce tangible, concrete connections to what they knew. The composing, more abstract in its form, came after their visual representations of their ideas.

Drawing for some children could be a means to explore, to plan, for writing tasks. I began to wonder what would happen if children were encouraged to first use symbol systems other than writing to tap into their own ideas before and during the composing process. Could using visual strategies such as drawing result in more ideas emerging in their writing and would their writing stamina improve? Given opportunities to use image-making, or drawing to be
specific, I wondered if as a planning process my students would more readily be able to generate and organize ideas, and set goals for writing.

I am curious if there is value in allowing students to use visual strategies, specifically drawing, in the planning stages and throughout the writing process. For instance, I wonder if drawing provides writers with the means of clarifying and elaborating on their ideas in such a way as to make the recall of their ideas more accessible. The purpose of this study is to explore the role that drawing has in the writing process of learners in my grade 2/3 classroom. In particular, I want to know whether young writers use drawing as a planning tool before writing, and/or as a recursive tool during and following writing.

**LITERATURE REVIEW**

Recent research has investigated writing as one of several available systems of communication and explored the expansive benefits and values inherent in allowing children to make meaning in many ways before, and during, mastering writing (Dyson, 1986; Hubbard, 1989; Kress, 1997). According to Vygotsky (1962), the origins of children's writing development lie in the relatively concrete symbol systems of play and drawing and as such a growing number of educators influenced by this line of thinking support a multimodal view of beginning writing (Frankel, 1993; Kendrick & McKay, 2004; Leigh & Heid, 2008). Many scholars too have demonstrated ways in which young students spontaneously use alternative symbolic forms such as drawing to add depth and meaning to their writing (Dyson, 1986; Karnowski, 1986, Rowe, 1994). The relationship between drawing and writing have also been discussed in relation to children's planning strategies for writing and suggest that drawing benefits the emergent writer in that it acts as a form of rehearsal enabling children to gain more control of the process of generating and organizing their ideas (Norris, Mokhtari, & Reichard, 1998; Olshansky, 1994,
Writing is a complicated and challenging task, especially for young children. It is a conscious and self-directed pursuit, involving the knowledgeable use of a variety of mental operations and skills to satisfy the writer's goals and meet the needs of the reader. As a result, a writer must deal with many demands at once. As Flowers and Hayes (1981) noted, a good writer is a person who can juggle all of the demands on their attention simultaneously. The acts of planning, drawing ideas from memory, developing concepts and creating an image for the reader require a high degree of self-regulation, cognitive effort, and attentional control. Because so little of the writing process is automatic for children, they must “devote conscious attention to a variety of individual thinking tasks which adults perform quickly and automatically” (Flowers and Hayes, p. 374).

Writing, then, can be a complex and demanding task that many children find difficult to master. Children's difficulties with learning to write have led to many researchers to explore ways in which children use drawing alongside other visual modes of representation to create and express complex meanings about their worlds, as a means to investigate children's knowledge and understanding of particular topics, and as a way of facilitating idea generation for writing. This review is intended to explore literature that could help to define my queries about children's ability to express ideas through visual modes to support their writing. The review will also examine the notion that using young children's drawings about reading and writing as an innovative way of investigating their perceptions and understandings of literacy across broad contexts of their lives is often neglected in schools. The neglect of the multimodal possibilities of representation engaged in by children has been a limitation rather than a stimulus to human
creativity and innovation (Millard & Marsh, 2001) and schools must challenge the politics of classroom practices that privilege language dependent modes of representation over other modes.

**Between Words and Images: A Dialogical View**

Children whose language, culture, and experiences are different from that of mainstream children or whose modes of communication and expression do not fit the expected classroom discourse can often find verbocentric activities to be impediments to their ability to convey meaning. There can be an imbalance between the flow of their ideas and their ability to get the words down on paper when they try to represent their images in writing. Through drawing, children can generate new ideas and refine their writing by adding detail. Drawing may also help children organize their writing. Thus, children often need another form such as visual arts to support or express their ideas and they should be encouraged to use drawing and writing to generate meaning. Integrating drawing and writing is a way of motivating students to write and enjoy doing it. However, while it may be bold to state that drawing always should take place before writing occurs, Norris, Mokhtari, and Reichard (1998) argue that perhaps it would be more reasonable to suggest that drawing before writing could become a valuable extension of the overall writing curriculum in the classroom. In trying to integrate the arts with writing, if done only superficially through illustrating after writing, educators still emphasize the conventional definition of literacy as privileging language over other representational modes.

Researchers focusing on reluctant readers and writers, in particular, identified as “at-risk”, discuss why some students need visual, kinesthetic, and tactile sensory experiences to become more involved in the reading and writing process. Writing as a multimodal experience, as evidenced in how young children convey meaning to others using many different communication systems, is a prevalent and common direction in much of the literature I explored. In her study of
the writing behaviours of young children, Karnowski (1986) asserts children use what is known about one system to support the understanding of another system. For example, they use everything they know about communicating in oral language, art, music, and drama in order to make sense of the writing process and to communicate to an audience. Karnowski (1986) investigated and described the writing behaviours of children aged three to five. Data obtained through videotapes were analyzed paying particular attention to the expressions of language, the types of communication systems used by young writers, and the forms of writing they attempted when writing occurred in a natural, unrestrictive setting. The data supported the conclusions that a supportive atmosphere allows children the freedom to use alternative forms of communication and to experiment with a range of products and that children use alternative forms of communication while writing.

Scholars such as James Gee (1990) and Gunther Kress (1997) advocate against the dichotomy of visual literacy versus linguistic literacy. Instead, they stress the necessity of accepting the co-presence of linguistic literacies and visual literacies as interacting and interlacing modalities which complement one another in the meaning making process. Many researchers, however, working from semiotic perspectives have noted that school literacy events typically privilege authoring practices that isolate print from other sign systems.

Millard and Marsh (2001) examined how the current emphasis on technical accuracy and neatness in handwriting has worked to limit the drawing in children's construction of text. They suggest that this tendency has adverse consequences for the development of pupil confidence as authors of their own meanings, particularly marked in young boys. Millard and Marsh (2001) report findings from their interviews of pupils who were asked to make value judgments about the writing they have completed in school and to identify their preferred modes of expression.
Their findings show that teachers' attitudes toward the use of drawing in the writing process affect the way in which children approach the use of diverse sign systems. In classrooms where they were generally free to pursue writing tasks as they wished, children, stated they preferred drawing before writing because this helped them to think about the content of their compositions when writing simple recounts of their lives or when asked to write stories. The children appeared to use drawing in an integral way in their written work and there was a “strong dialogic relationship between the word and image” (Millard and Marsh, p. 59).

In another classroom setting, students were restricted to writing first and only on one page. Not surprisingly, responses of the children when asked if they preferred to draw or write first were effected. In this setting, students preferred writing first to ensure they had enough room, or space (Millard and Marsh, 2001). This parallels Skupa’s dissertation (1985) in which the writings of three groups of elementary students were analyzed: those permitted to draw and look at their drawings before writing, those permitted to draw but not look at their drawings before writing (blind drawers), and those who were not permitted to draw at all before writing. The data show that those permitted to draw and look at their drawings wrote best.

Whereas Millard and Marsh (2001) focus on the role of drawing in children's construction of texts to enhance and stimulate the writing process, another approach to integrating the use of visual imagery throughout the various stages of writing is illustrated in the ongoing investigations of Olshansky (2006) into the "art" of writing. In her efforts to provide a captivating pathway into writing for children with diverse learning styles, she introduces real artists’ materials into writer’s workshops. In several studies of children in the arts-based literacy program, the Image-Making Process, research findings supported teachers' observations that adding a rich visual and sensory component to the writing process not only dramatically enriched
children's story making, but also enhanced their finished pieces (Frankel, 1993; Olshansky, 2006). Stories demonstrate a far greater use of descriptive language, had more highly developed plots, had a stronger beginning, middle and end, and demonstrated a more cohesive literary quality (Frankel, 1993).

**Drawing Into Meaning: A Pre-Writing Strategy**

Norris, Mokhtari, & Reichard (1998) examined the unique kinship of drawing and writing during the planning phases of third-grade children's writing and their use of drawing and other art activities as pre-writing strategies. Their findings indicate that drawing became an effective planning strategy for the students who appeared to rely on their drawings as a reference point to prompt them toward what they should come up with next in their writing. Comparing the writing products of third-graders who either drew before writing on a self-selected topic to those who wrote before drawing, the researchers discovered significant differences in the writing products. The students in the group that drew before writing tended to produce more words, more sentences and more idea units, and their overall writing performance was higher than the students who wrote without drawing. The findings were consistent for boys, and as well as for girls. Such results indicate that the act of drawing before writing appeared to be beneficial to writing performance among the children in the experimental group.

Caldwell and Moore (1991) illustrate a second approach to using drawing as a practical and effective form of rehearsal for narrative writing. The researchers compared the effects of planning activities involving drama and drawing with the traditional planning activity, discussion, on the quality of narrative writing of second and third graders. The results of the analysis of the writing quality of both the drawing-group and the control-group indicates that there was a statistically significant difference and that the average gain of students in the drawing
group was above the average gain of students in the control group (Caldwell and Moore, 1991).

The researchers’ data clearly support their hypothesis that participation in drawing leads to a difference in writing quality, in comparison with participation in discussion. The researchers concluded that “drawing is a viable and effective form of rehearsal for narrative writing at the second- and third-grade levels and can be more successful than the traditional planning activity, discussion” (Caldwell and Moore, 1991, p. 216).

In her informal research project, Carroll (1991) observed middle- and high-school students in the act of writing and wondered if drawing, scribbling, and doodling could be a powerful writing tool in middle and high schools. Using drawing as a prewriting technique and as a springboard for further writing, Carroll's (1991) data suggest that students tend to “use drawing as a basic response then move in hierarchical, heuristical ways from the known, or graphical representations, to discoveries, to transformations, and on to higher levels of knowing” (p. 38). She hypothesized that meaning embodied in a graphic symbol leads to symbolic expression. More clearly explained perhaps is her notion that perceptual skills used when drawing enhance thinking skills. She proposes that along with brainstorming, mapping, and other prewriting strategies, students should be encouraged to draw into meaning, whether as prewriting for their impromptu or extensive pieces, or as initial responses to literature.

**Valuing the Process of Weaving Stories and Images: The Art of Writing**

Teacher attitudes play an important role in giving visual expression value. It is evident that in most primary grades, visual expression has a more esteemed place because the writing skills of children are not as refined or well developed as their visual skills. As writing skills improve, the value placed on visual skills in older grades decreases. With devaluation, the visual and verbal partnership can easily break down, and consequently I would argue that the two forms
would no longer benefit from their initial, and in my view, quite natural, complementarities.

Indeed there seems to be an overriding concern in much of the literature reviewed, specifically that somehow as they travel up the ladder of academe, students are educated out of using drawing as a way of meaning; that somehow drawing belongs to little kids (Millard and Marsh, 2001; Carroll, 1991). Although “drawing can also act as a bridge from one symbol system to another, from image to word” (Kendrick and McKay, 2004, p. 124), the use of drawing in schools as a way of representing meanings and as a tool for learning is depressingly restricted.

The concerns that on entering formal school, the messages children receive from the culture of classrooms is that the modes of representation that are valued are formal symbolic modes of literacy and numeracy whereas teachers perceive drawing as useful for occupational or recreational purposes. Ironically as children are cultured into academic achievements, they lose out on opportunities to engage in alternative modes of representation/symbolic systems, which may offer opportunities for cognitive challenge at higher levels. Thus, while pushing children to perform academically in the early stages of schooling, we underestimate them intellectually and their capabilities in using alternative modes of representation as tools for learning wither away.

Teachers and educators need to be more understanding of differences in the modes in which pupils choose to make sense of their social and cultural contexts (Millard and Marsh, 2001). There are several studies (e.g., Frankel, 1993; Olshansky, 2006) that have shown dramatic increases in writing skills after implementation of Image-Making Within the Writing Process. In her study, Olshansky's (2006) primary instructional focus was on integrating art into her daily classroom curriculum, and to validate children as authors and illustrators. She soon developed a greater vision of an image making or “picture writing” process as a stimulus for writing. She contends that because visual imagery, kinesthetic experience, and oral and written language are
equally valued and supported, the program gives children the freedom to follow their unique
creative processes as they discover and weave stories in picture and images. Her approach serves
to "awaken the imaginations and creativity of young authors and illustrators" (Olshansky, 1994,
p. 351) and as numerous studies have shown, is most beneficial with groups of students
categorized as at-risk.

In her two-year research study, Dr. Susan Frankel (1993) also examined the effect of
Image-Making Within the Writing Process on student writing. Several aspects of story
development such as beginning, middle, end, plot development, cohesiveness, and the use of
descriptive language as well as the overall quality of the story were looked at. When comparing
the writing samples from the treatment group to those of the comparison group, research findings
revealed students in the treatment group significantly outperformed students in the comparison
group. While writing topics were more varied and imaginative, story plots were more fully
developed, had a stronger sense of beginning, middle, and ending, were better crafted, and often
had a more literary quality. Rich descriptive language was also more prevalent, even in the
stories of emerging first grade writers (Frankel, 1993). If one considers the crafting of stories and
poems as an art form, then one must view children's use of written language and visual arts as an
expression of ideas generated through their image making. By being encouraged to use their
imaginations to draw images, children are free to explore new ideas. Significant improvement in
the use and quality of visual elements for the purpose of conveying their ideas, was markedly
evident in the writing of students who had participated in the picturing writing and image-
making processes as compared to students who had not (Frankel, 1993).
**Bridging Symbol Systems: A Pedagogical Shift**

Viewing writing as a multimodal experience looks at alternative expressions of language, such as speaking, listening, and reading, and the alternative communication systems, such as oral language, art, music, and drama, as they are included in the writing event. Young children convey meaning to others using many different communication systems and they use what is known about one system to support understanding of another system (Karnowski, 1986). Writing is but one system of communication. It is one way to transform meaning. Just as children seem to be actively constructing their knowledge about written language, they also seem to be going through the same active construction with the various alternative communications. In other words, they use the more familiar communication systems to add depth and meaning to their newly acquired skill of writing (Karnowski, 1986).

By looking at the visual arts as a pathway for engaging children in the writing process, educators might explore *looking-to-write* as a different way to start writing and to explore how visual arts expresses meaning in different ways than other modes of representation common to the school experience. Several researchers suggest that educators can weave opportunities to engage with the visual arts and to write from the arts into writing workshop and into other curricula (Norris, Mokhtari & Reichard, 1998; Olshanky, 2006; Skupa, 1985). If educators can think of schooling as a place where they open up spaces of imagination, they can weave familiarity with forms of representation other than the written ones into literacy. In doing this, educators are rising to the challenge of recognizing that education ought to enable the young to learn how to access the meanings that have been created through many forms of representation.
Looking Forward: Educational Implications

Researchers, whose work is reviewed above, support and encourage methods of writing that address the visual learner. The reviewed literature included some studies initiated by teachers to help students and their classroom teachers to organize thoughts and write more effectively using visual modes of representation. Each study in this review of drawing and writing differed slightly, and in some cases broadly, from others with each considering visual modes and writing from different perspectives. They all, however, emphasized the need for a major pedagogical shift towards helping children transmediate (Short, Harste, & Burke, 1996), or manipulate sign systems or codes that are meaningful to them, into modes of representation that allow for a full range of expression and human experience and make some fairly global recommendations as to how the shift may be achieved.

First, educators need to enable students to recenter texts in visual, non-threatening ways. Drawing and other visual modes of representation reduce the cognitive demands on young learners and serve to enable children to master more complex cognitive relationships than they can through verbal language alone. Even young children can decode the meaning of pictures and encode meaning into pictures with ease, without instruction. Because drawing is a largely invented and personal symbol system, it does not require learned interpretation, as does writing. Children using their own personal symbol systems do so with more confidence, ease, and enjoyment, which in turn allow for a prolific flow of ideas.

Secondly, teachers need to consider “drawing an initial graphic probe, a strategy for tapping deeper or other awarenesses” (Carroll, 1991, p. 35). Children need to imagine. Their imaginative abilities must be cultivated and sensory systems refined to explore visions of possibility beyond their experiences. The most complex or subtle forms of thinking take place
when students have an opportunity either to work meaningfully on the creation of images, or to scrutinize them appreciatively. As Hubbard explained, “15% of the population thinks exclusively in the visual modes, another 15% thinks only in verbal terms, and the remaining 70% uses a mixture of approaches” (Hubbard as quoted by Carroll, 1991, p. 35). Final written or artistic products are only representations, or perhaps interpretations of what goes on in our minds. The noted statistics strongly suggest why so many children naturally turn to drawing while writing, which emphasizes why we must try to facilitate an environment where children discover and value the power of visual modes.

Thirdly, educators need to encourage the use of drawing as a prewriting technique. Drawing is one of the primary ways young children can communicate. Young writers use drawing to explain and embellish their writing, usually as a prewriting strategy.

Lastly, educators need to allow for appropriate drawing as a springboard for further writing. Beginning writers spontaneously use alternative symbolic forms such as drawing to add depth and meaning to their writing (Caldwell and Moore, 1991; Karnowski, 1986). Drawing as a previously developed form of expression facilitates the exploration of ideas and children use drawing to support their first attempts at writing. They are able to move fluidly between the two modes and “drawing brings ideas to be verbalized bubbling to the surface” (Caldwell and Moore, 1991, p. 208).

My study draws on the reviewed literature as I examine the value of allowing grade two and three students to use visual strategies, specifically drawing, in the planning stages and throughout the writing process. I seek to consider the role that drawing has in the writing process of learners in my classroom and hope to understand how drawing is used in both an iterative and recursive means during students’ writing tasks.
METHODS

Research Design

In this study, a qualitative descriptive research design was used to allow close observation of children in the form of anecdotal records, informal conference interviews, informal student surveys, and portfolios consisting of samples of students' own writing and drawing. To ensure the data could be properly examined, I employed qualitative and descriptive quantitative measures and analyses. Many people are drawn to this research approach, closely associated with action research, because it is firmly located in the realm of the practitioner. Elliot Eisner (1993), I believe, expresses and embodies my own beliefs about the role of researcher-practitioner in the following quote:

*We do research to understand. We try to understand to make our schools a better place for the children and the adults who spend their lives there. In the end, our work lives its ultimate life in the lives that it enables others to lead.* (Eisner, p. 10)

Research Site

Phoenix School is part of a vibrant and changing West Coast village community within a larger urban city. The school site is located in an area that has evolved from being an active commercial fishing centre to a trendy tourist destination and high-density waterfront residential area reflecting the changing school population. This public school serves students from a range of socio-economic backgrounds. A 600 plus school population of students from working families fifteen years ago, school boundary changes ten years ago, and the recent declining enrollment in the school district, have resulted in a gradual reduction of the student population.

The population for the 2009-2010 school year was 330 students, and included 14 divisions spread out between Kindergarten and Grade 7, close to 18 full-time equivalent teaching
staff and several educational assistants and staff. A blended-model of delivering for learning assistance, learning resource and English language instruction provides students with needed curriculum supports. Phoenix School houses a before and after school daycare that served students from Phoenix and the surrounding neighbourhood.

The Phoenix student population is mixed, with the exception of a moderately high number of students with special needs. In 2009-2010, there were approximately 24 students with special needs as defined by the Ministry of Education (7% of the school population). Phoenix had 67 English Language Learners enrolled with the majority being level 3, 4, and 5 (20% of the school population). There were four students of Aboriginal descent in the school. Twenty-five percent of students came from homes where English was not their home language and the top three languages in 2008-2009 were Chinese (4%), Cantonese (4%), and Spanish (2%). The student population had remained quite stable over the years. In 2008-2009, 10 students moved to other districts, other parts of Canada or out of the country. At the same time, 32 students moved into the area and enrolled at Phoenix.

Participants

The study involved twenty of my own second- and third-grade students from one classroom; they were between 7 and 8 years of age at the time of the study. The heterogeneously mixed academic class consisted of 10 boys and 10 girls. Within this population, three children were identified as being special needs and were on adapted and/or modified programmes. A full time Educational Assistant supported these learners in the class, as required. In addition, four students were identified as English Language Learners, with varying levels of English language proficiency. Students requiring additional language and learning support were pulled out from the classroom for small group instruction by the Resource/Language Assistance/ESL teacher for three 45 minute blocks a week.
Informed consent was obtained for 17 out of the 20 students in my class. The children, without parental consent participated fully in the classroom writing activities, but their writings and talk were excluded from the data. In addition, two children who had informed consent were excluded from the conference portion of the data collection process as they were frequently pulled from the classroom for additional support in English as a Second Language during the writing sessions; however, all 17 students are included in survey data. The children were assigned pseudonyms to maintain confidentiality.

**Procedures / Data Sources and Collection**

Data were gathered for this study daily for a ten-week period during the winter term from January 30, 2010 to April 9, 2010. Data were triangulated using multiple sources relying on the intersections of student surveys, observations, conferences, and artifacts. The data were collected primarily in the morning during the children's scheduled Writers' Workshop periods. To create a comprehensive approach to teaching primary students' writing skills, I generally use a combination of whole group, small group, and individual instruction, along with teacher and peer conferencing to develop all areas of writing. During the study, topics for writers’ workshop were assigned by me or chosen by the student. Students worked at their own pace, following the steps of the writing process, to create authentic pieces of writing. This process allowed them to develop and internalize effective writing strategies. Word walls, primary dictionaries, thesauruses, revising and editing rubrics, and publishing supplies were readily available to assist students in their writing. I actively circulated around the room answering questions, providing mini-lessons, and conferencing with students. The students were seated at tables or desks writing, conferencing with a peer, and using laptop computers to type their final copies.
Pre-instructional observations and mini-lessons.

Data collection proceeded through three overlapping phases. During the first phase (weeks 1-4), I observed and interacted daily with the children as they worked independently on their writing. I kept notes on students' behavioural approaches to initiating and sustaining their daily writing. This unstructured observational and instructional period also allowed the students and me to continue exploring a variety of visual strategies introduced earlier in the school year. The emphasis was on using sketching to capture ideas rather than producing a polished drawing. Activities were designed to encourage confidence in drawing and to develop awareness of aspects of story writing such as plot, characterization, and setting. Some of the strategies modeled and utilized in whole class instructional mini-lessons included sketching in the margins, drawing illustrations on a blank page, and using picture storyboards (Appendix A). The latter were used to explore and organize ideas rather than to produce a finished product. The children were encouraged to add details to their drawing that they might use later in their writing. They then shared their stories with a partner, using the storyboard as a guide, and later as visual prompts for writing.

As I walked around the room in the initial weeks of the study, I made notes as to how children were using drawing and sketching throughout the process of writing, as planning tools for initiating writing events, and as a means of illustrating during and after writing events. Occasionally, students would invite me to “look at” their stories. I took the opportunity to ask them to “share with me what they wrote and, or drew” in their writers' notebooks. Specifically, I was interested in seeing how children engaged in drawing before, or during, the writing process and whether or not there was a preference for one mode over the other.
Based on the literature, and my field notes and reflections from this first phase, I developed both a conference guide (Appendix B) and a survey (Appendix C). The conference guide, consisting of a series of questions intended to explore children's iterative use of visual strategies throughout the writing process, was used in subsequent phases of the study (week 3-10), while the survey was administered in the final phase of the study (week 9-10).

**Writing process and conferencing.**

The second phase (weeks 3-10) was the major data collection period. During this stage of the data collection, I conferenced directly with children one or more times on an individual basis. These conferences, beginning early in the third week of the study, were an integral component of the Writers' Workshop model, as previously described, and were meant to be semi-structured and spontaneous. The questioning allowed students to lead the conferences and to let the conversations take their own course. Questions were kept open-ended and general, designed to probe into the children's creative process. Using the conference guide created in the initial phase of the study, I began each conference by asking the children to tell me about their piece of writing, and about their drawings and images, if any. I relied on student portfolios referring directly to students' drawings, sketches, graphic organizers, and texts. Responses to questions and information shared were scribed by hand in a conference notebook.

Finally, I asked each conference participant to walk me through the steps of the writing/image creating process by asking which was done first, the writing or the drawing. I questioned the student further by asking if the writing influenced the drawing, or if the drawing influenced the writing. Each participant was asked to talk about whether any changes were made to the writing or the drawings/images as the participant went through the process, and if so what influenced any changes. Students were also asked to identify what was easier to begin the
process with, writing or drawing, and to elaborate on why they felt this way. They were then encouraged to read the story and to tell about any drawings and images they wished to share.

Post-instructional assessment.

In the third and final overlapping phase of the study, beginning in the eighth week of the data collection period, I had each of the students in the class complete a class-wide write on the topic, “My Olympic Experience.” In addition to participating in a whole class discussion and brainstorming about shared and individual experiences, students were encouraged to use a storyboard to plan for the writing experience. All students were given fifteen minutes to sketch/draw before writing. The total time permitted for the planning and writing of this recount writing sample was 60 minutes, at which time all related materials were collected.

In the week following the class-write, I conferenced with individual children about their recount of the Olympic experiences and enquired how the storyboard was used, if at all, as a planning tool for their writing. Specifically, I sought information on when it was used and how it might have supported the child in his or her ability to write for the allotted time, using the semi-structured and spontaneous conference questions used throughout the second phase of the study.

Finally, students were asked to complete the survey I had developed at the end of the first phase. The survey statements developed to delve into the children’s use of drawing and writing during the writing process became themes, slightly elaborated, that I used to code the conference data.

Data Sources

I employed an overall qualitative research approach by collecting data in the form of observations, conferences, portfolios. In addition, the survey data produced descriptive
quantitative data. Triangulation was used to enhance the credibility of the findings using multiple sources relying on the intersections of student surveys, observations, conferences, and artifacts.

**Anecdotal/observational notes.**

My observational notes, taken during Writers’ Workshop, focused on children’s writing strategies, the strengths each child exhibited, and the problems each child encountered while writing throughout the process from idea generation through to publishing. Because many of these experiences were informal and I wanted them to be as unobtrusive as possible, I often did not record these conversations until the end of the school day.

**Portfolios of writing and drawing samples.**

Each student’s completed drawing and writing samples were collected and photocopied, most in black and white and a few in colour, and stored in a portable filing system throughout the study period. At the end of the eight-week observational period, one or more dated writing samples were collected from each of fifteen students following conferencing, as well as fifteen recounts. Embedded in and separate from the written texts, 73 drawings and sketches were also documented and collected.

Portfolio data collection provided me with outcome data that I used as starting points for conversations with students and to capture student work samples over time. I began each conference with samples of students’ art (drawing and sketches) and writing. Over the course of this study, each student shared with me with one or more pieces of writing. As I was not concerned with the overall quality or length of the written pieces, I chose not to assign an overall score, holistic or otherwise. Instead, I collected these strictly for delving into how children use, or do not use, drawing and sketching throughout the writing process.
Conferences/interviews.

I conducted 32 conferences with the fifteen students throughout the final eight weeks of the study. On average, each student participated in one to three conferences. Transcripts of the conferences were scribed by hand, with dated copies kept in a conference journal, and subsequently transcribed verbatim.

Student surveys.

During the final two weeks of the study, surveys were administered to descriptively measure student attitudes, confidence levels, and writing behaviours using a five-point Likert scale. Each student, following a conference about a piece of writing, was read the survey statements and asked to circle one of five scaled responses that best described their view of themselves as writers and image makers. Students were asked to not identify themselves on the survey to ensure confidentiality.

Analysis

Organizing and coding the survey data.

Upon collecting completed surveys from 17 of 20 participants, I counted the number of Likert scale category responses. Descriptive statistics were used to analyze the survey data. Data were analyzed and represented by means of tables and bar graphs.

Each item was analyzed separately and in some cases responses were summed to create a score for a group of items (see Table 1). The mode, or the most frequent response categories, was used as a measure of the Likert scale, or survey, data.

Organizing and coding qualitative data - conferences, field notes, portfolios.

With the bulk analysis being left until the data had been collected, a form of qualitative, analysis such as content analysis seemed to be the method most conducive to examining the data
in detail in order to understand it better and to draw conclusions from it. Content analysis is “a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding” (Stemler, 2001).

A significant amount of the data was derived from the open-ended questions that were embedded in the conferences. I scrutinized each transcribed conference (Appendix D) and used the survey statements as themes for the initial coding of the data. Themes that emerged included the students' preference for planning the writing process with text or images, types of changes or additions made, if any, to students' drawings and writing, and idea generation. The data were organized, common statements by theme were highlighted, and emerging codes noted. Students' comments and talk about their writing and drawing were isolated and coded, then organized in a table (Appendix E). In reporting the conference data, I embedded data from my field notes and the portfolios.

FINDINGS

Identifying Themes and Patterns in Quantitative Survey Data

Findings from the survey are discussed around several major themes: Drawing as pre-writing; drawing to overcome writer's block and reduce cognitive demands; drawing as an idea bank; affective responses to writing and drawing. I begin by presenting a table of survey data before discussing each theme.
Table 1: Student Survey: Visual Strategies to Improve Idea Generation and Writing Stamina of Primary Writers

<table>
<thead>
<tr>
<th>Survey Responses</th>
<th>Not At All / Seldom</th>
<th>Sometimes</th>
<th>Usually / All the Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoy writing</td>
<td>0</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>I enjoy drawing</td>
<td>0</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Finding ideas to write about is easy</td>
<td>4</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Drawing helps me to begin writing</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>I begin writing first and then draw</td>
<td>7</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>I begin drawing first and then write</td>
<td>10</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>I add to or change my writing when I draw</td>
<td>7</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>I add to or change my drawings as I write</td>
<td>7</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>I am a good writer</td>
<td>0</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>I am a good drawer/image maker</td>
<td>2</td>
<td>1</td>
<td>14</td>
</tr>
</tbody>
</table>

Drawing as a pre-writing or planning strategy.

The analysis of student responses to the survey suggests that most respondents, 9 of 17, usually or always wrote first before drawing (see Table 1). It would appear that 6 of 17 students usually or always used drawing and sketching to begin writing tasks. One of the 17 students indicated that only sometimes did they either draw first, or write first, to begin writing (see Figure 1).

Figure 1: Student Survey: Preference for Initiating Process
Utilizing drawing to overcome writer's block and reducing cognitive demands.

The analysis of student responses to the survey suggests that some respondents make additions and changes to either, or both, their writing or their drawings during the writing process (see Figure 2). In 10 of the 17 survey responses, students sometimes, usually or always made changes to their drawings and/or text, supporting the notion that many students operate in a recursive manner when approaching the drawing/writing process.

Figure 2: Student Survey: Changing and Adding to Writing and/or Drawing

Drawing as an idea bank.

Interestingly, many of the students admitted that finding ideas to write about was easy and some also felt drawing helped them to begin writing. I can only surmise that drawing was an important means by which the children accessed ideas for their writing tasks. Of the 17 respondents, 8 usually or always felt drawing helped them begin writing, while another five students sometimes felt drawing helped them in the writing process. It may be that for many children, drawing provided an idea bank and a means of clarifying and elaborating on their ideas in such a way as to make the recall of their ideas more accessible (Skupa, 1985).
Children's affective response to drawing and writing.

For most students in my study, writing and drawing were enjoyable activities. Many of the children saw themselves as good writers, as well as good image-makers or drawers (see Figure 3). While the survey’s data are not robust enough to conclude that allowing children to draw before or during writing tasks improves their enjoyment and/or confidence in these pursuits. They do suggest the students’ overall affinity towards drawing and writing in my classroom where drawing and writing are equally privileged, giving credence to my rationale that children would benefit from opportunities to enter into academic pursuits from places they are most comfortable, from and through alternate modes of understanding.

Identifying Themes and Patterns in Qualitative Data

Similar to the findings of the quantitative survey data, findings from the qualitative data, namely the conferences, portfolios and observations, are also discussed around several major themes: drawing as a pre-writing or planning strategy; utilizing drawing to overcome writer’s block and reducing cognitive demands; drawing as an idea bank; and mode-switching: use of
writing and drawing recursively. Additionally, upon closer examination of the portfolio data, an unexpected finding was revealed in that the graphic nature of writing was often embedded in the children's drawings.

**Drawing as a pre-writing or planning strategy.**

As a means of brainstorming, some children used drawing to flesh out ideas for their writing and as symbol weavers (Dyson, 1986) they found it easier to draw first. During conferences, when asked if beginning the process with writing or drawing was easier, 6 children clearly preferred drawing first, and 7 expressed a preference for writing first. Susie, as an example of preferring writing first, had pictures in her “mind that were hard to make words for.” Another student, Julio, made similar statements to the effect that the pictures helped him because when he looked at them, they gave him ideas for writing and it was then easier to draw then write a bit and draw again.

Two other children expressed no preference for either writing or drawing first in the writing process, but indicated that on some level “drawing was perhaps more helpful or easier for them.” One of the children stated that drawing “gave him more details for writing.” A second child felt looking at the picture helped him to write because if he wrote first, he would not want the story to go out of his head and he would have to write fast. It would seem then that for roughly half of the participants, or 8 of 15 children, drawing was preferred over writing as a means of using drawing to help plan or access ideas for writing.

Of the 7 children who preferred beginning the writing process with written text rather than a sketch or drawing, 4 children's writing samples were void of any marks that could be classified as a drawing or sketch. When asked about their choice of not including or using drawing, they made statements to the effect that they just did not feel like they needed to draw to
write because they made pictures in their heads and they already had ideas for their writing. For one of the students, drawing was something done only if it was expected of him and he reserved this action for "good copies, not drafts" and for publishing. Three of the seven students who preferred writing first to drawing said they simply liked to write more, and that for at least one student, it is just what he had been doing all along as a writer.

Even though the children learned other ways to organize their ideas, many of them continued to draw pictures, because they felt that drawing presented more details for writing. While creating his initial image for his story during the pre-instructional observation phase of the study, Ethan stated, "I like to draw instead of write. Drawing helps me to see stories and stuff better. Right now, that is all I have on my page, but I might think of more details to put into my picture, and then my story will be longer when I write." Indeed, Ethan valued drawing as a means of seeing people and events in his story more clearly offering up the notion that drawing is "like a journal," a means of keeping ideas and as a means of seeing the story better.

Using both pictures and memories helped another student, Adriano, to plan his Olympic write, "Because when you get the picture done, it helps you to think about what to put on your plan. That helps me write my story so it makes sense." For David too, drawing helped to retrieve a "little bit of the story in his head and helped him a bit to add to his writing." Pointing to a picture spread out over two pages in his writer’s notebook of his mother’s car and the school, he wondered aloud if he should write a story. For David, the opportunity to draw and tell about what he experienced provided rich fodder for his story about his experiences. Used as a conduit for constructing meaning, drawing for these children benefited them in ways that allowed them to show their thinking more easily than if asked to simply write about their ideas.
The qualitative descriptive data garnered from the conferences, field notes and portfolios does not clearly align with the survey data, yet still acknowledges there exists for some young writers the need for choice as to how, or by what means, they might begin a writing task. For children who initially drew, drawing seemed to provide them time to think about the details they wanted to include and may help children come to know the power of writing.

**Utilizing drawing to overcome writer's block and reducing cognitive demands.**

Observations made of the writing behaviours indicate that drawing may also be helpful in dealing with writer's block. Many of the children utilized their drawings to restart the writing process when their train of thought had come to an end. The drawing served as a retrieval cue to prompt them as to what to write next. For example, Ethan carefully scrutinized his drawings, of which there are many, picked up a felt pen to add more men, then put down his felt pen, picked up his pencil, and preceded his addition with, “Drawing helps me write because it helps me explain the story because I can see the pictures” (Figure 4). The very act of looking at and making additions to and changing his drawings often incited Ethan to keep on writing.

For Julio, like many other children, sketching and drawing helped him to be “focused and on task” when writing. While drawing, he asked himself how he could make his story more interesting and decided to add people, a spaceship and a robot (Figure 5). It was only then that he began to write. Drawing some pictures to help him when he “got stuck on writing” was a strategy used by Christopher to add to his story. This was a common tactic for many of the children, like Caitlin, for whom drawing was helpful in that it allowed her to write more because she thought more about what she had drawn and “kept on going after the picture.”
Drawing as an idea bank.

Some children used drawings as idea banks, as concrete external cues to prompt them to produce more ideas in their writing. Drawing provided some children with inducements to revisit written texts and in some cases extending or adding to ideas or in rare cases changing what had been previously recorded, as evidenced in Susie's addition of a sentence to her story upon realizing her character had a sparkly dress on in her picture. Approaching his revisions in a similar manner, Michael noted that he made changes to his writing when he realized he had drawn more people so added "his family" to the written text. He also shared an additional change to his writing when he stated he had drawn and wanted to include lava spraying out and some action so he wrote, "the lava squirted onto Jamie, Neville, and Isaiah." For other children, like Christopher, the pictures served to provide springboards for new ideas and additions, and did not result in changes to pre-existing text (Figure 6). Drawing for Simon made it easier to think of a
title and helped him to do more writing and to add more details. Julio, too, shared that pictures helped him get ideas, and helped him to add details to his writing, and expressed that he would often add to, but would not change his writing.

Often children were more likely to make changes or additions to their drawings as a result of something they may have written or thought of. The addition of setting elements (e.g., trees, candy, shields, grass), characters, and graphic elements (e.g., speech bubbles) were easily added to existing drawings and illustrations. Becky saw drawing as something she would do as a means to illustrate a text, and then sometimes only when there is enough room where words do not need to be (Figure 7). For these children, drawing was done more as a means of matching pictures with text and was something "done mostly when finished writing."

For this theme, the descriptive data gleaned from the conferences and portfolios would seem to parallel the analysis of the survey data. Interestingly, the children were very aware of their propensity to use their illustrations as idea banks for their writing, as the conferences support, with 9 children of 15 using their drawings to add details to their writing. Whether the
children were able to recognize the pull that drawing had on their revision and editing practices is unclear, but the data suggest that indeed the children's use of drawings and sketches was integral to their adding details to, and in some cases changes to, their writing. After a review of the conference data, I determined that most children recognized the ease with which they made additions and changes to their drawings during and following the writing process, suggesting again that the writing / drawing process is a recursive one.

**Mode-switching: Use of writing and drawing recursively.**

The children repeatedly referred to ideas forming and changing during the writing process and as they adopted a multimodal form of expression, they shifted from one action to another, namely drawing and writing, often avoiding possible difficulties in writing a cohesive story.

Of the fifteen students I conducted conferences with, ten children approached drawing and writing in a recursive, or iterative, way to varying degrees. For many of the children, the act of writing a story was a dual one, in which they adopted strategies that enabled them to execute the task of making meaning using the two symbol systems. For no one was this more true than for Ethan, who repeatedly returned to his drawings before making an explicit reference to his text concerning additional comments indicating a strength in the writing process that should not be ignored. For Ethan, the use of drawing and writing became inseparable, one feeding and supporting the other. For him, "drawing helps to see the story better and allows my readers to understand it better too." His ease with which to use both modes is reflected in his view of their importance, "Stories could have both pictures and words. You don't have to have both, but they make the story better when together."
Caitlin echoed many of her classmates with her thoughts of the writing process by sharing that she writes first, then draws a picture, and then keeps on writing. Romina went back and forth between her writing and her drawings as well. First, she did some writing and then did a little picture and went back to writing stating that writing helped her with the picture and the picture helped her with the writing. David, too, expressed that he started with a drawing and some writing, and then some more writing.

The remaining five voiced a clear preference for the written mode or form of expression over the visual mode of expression. For these students, the act of drawing was unwarranted and unnecessary in their view and unless instructed to they were reluctant to include drawing in their writing attempts. For one of the five students, drawings were included and meant to fill the spaces left at the bottom of the page and served no additional purpose other than to illustrate the story. At no time, as indicated by the student, were the drawings used to provide her with ideas for writing, or to add details. The drawings happened linearly with a page of writing completed and then an accompanying picture drawn to illustrate the text.

**Writing embedded in drawing.**

An unexpected, but perhaps not surprising, finding was the students' combined use of both writing and drawing on a page. For some children it would appear that switching from one sign system to another, from language to visual art, prolonged their engagement; that is, when they used both drawing and writing, they engaged in writing tasks with more stamina. In many cases, the actual drawings, some just sketches with things crossed out, added, or changed, served a purpose of holding ideas still for a moment so that they could mine them for details for writing. Because some children have a proclivity for drawing, there seems to exist a value in moving between words and images as they think about and engage in writing tasks.
For many of the children, drawing contained elements that needed to be elaborated upon and clarified (Skupa, 1985) and for them, it was the writing and not the drawing that conveyed the meaning in their message. Of the seventy-three visible drawings produced for the writing tasks, forty-three of the drawings contained writing.

I can attribute the students' embedded use of various text features to two possible influences. In the fall of the school year, the class spent a significant amount of time exploring the use of text features in non-fiction texts, and secondly there was an increased awareness of and interest in graphic novels in the classroom. In fact, some of the favourite reading material for many children included such titles as Jeffrey Kinney's *Diary of a Wimpy Kid* (2007) and Jeff Smith's *Bones* (2004). Because of the prevalence of writing embedded in the drawings and illustrations, I felt it worthy of some analysis. The following is a list of the various text features used by students in their drawings and their respective uses and functions:

Table 2:
Written Text Features Embedded in Drawings

<table>
<thead>
<tr>
<th>Text Features</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labels</td>
<td>Characters, objects, buildings</td>
</tr>
<tr>
<td>Speech Bubbles</td>
<td>&quot;Oh, I am it!&quot;</td>
</tr>
<tr>
<td>Environmental Print</td>
<td>Postcards, party banners, signs, maps</td>
</tr>
<tr>
<td>Onomatopoeia Devices</td>
<td>BOOM, Aw, WOW, screech</td>
</tr>
<tr>
<td>Setting Descriptors</td>
<td>Cloudy</td>
</tr>
<tr>
<td>Plot Descriptors / Captions</td>
<td>&quot;Having trouble with pipe&quot;</td>
</tr>
</tbody>
</table>

Within the scope of the study, these text features carry significant meaning in the students' presentation of their stories, and without them vital information and detail would be lost. In Ethan’s richly illustrated and contextualized drawings, the text features are integral to the overall reading of the story while in others’ stories the additions of text in the illustrations themselves are simply labels for concrete things such as people, places, sounds, and objects. The
use of speech bubbles serve to give voice to the character's in the story, a literary device often used by young writers' not yet familiar with the use of dialogue in story writing. More interesting was Ethan's use of captions noting or foreshadowing events to come, helping to move the story along from one page to the next (Figure 8).

![Figure 8: Writing and drawing intermingle in Ethan's picture](image)

I did not at the time of the conferences see or realize the significance of these embedded text features; instead I am only inferring their intention and function. For many children it would appear that the act of integrating drawing and writing is an exercise in which picture-writing offers children a means of weaving meaning into the two symbol systems (Dyson, 1986).

**DISCUSSION**

Reflecting back on my study, the data supports the notion that there is an inherent value in allowing children to use drawing as a visual strategy to plan and compose written texts. For many of the children, a dual approach to writing tasks was most evident. Many scholars such as James Gee (1990), and Gunther Kress (1997) advocate for the acceptance of an interactive, interlaced approach to literacy instruction, one in which both visual and linguistic literacies are privileged. That is, a form of mode-switching, from drawing to writing and back again, was
beneficial to many children in my study. This recursive process seemed to allow some children to tap into their "funds of knowledge" (Moll, Amanti, Neff, & Gonzalez, 1992), to glean ideas and details and to tap into their memories and experiences in ways that perhaps they would not have been able to if they were to only write. Given the very diversity in personal learning styles, and ways of knowing, some students clearly embraced drawing as a method of planning for writing narratives while others reserved their enthusiasm for drawing for the final stages of the process. The data suggests, though perhaps not in a robust way, that there is a real benefit for children to approach the writing process using drawing, before and during the writing process, at least in terms of the generation of ideas and their stamina for writing tasks.

Further evidence that children need more than words to learn can be found in the research literature on young children's literacy learning. Young children turn writing into a multimodal event involving drawing, talking, singing, writing, and so on (Dyson, 1986) unlike older students who are schooled to adhere to the conventional boundaries between sign systems. The ease with which most children in my study valued and used both the visual and the linguistic modes is reflected in Ethan's view of their importance, "Stories could have both pictures and words. You don't have to have both, but they make the story better when together." By weaving together symbols of both kinds to represent and convey their meanings, most children made it possible to successfully orchestrate literacy events perhaps with more stamina and development of ideas than if language alone had served them (Dyson, 1986; Harste, Woodward, & Burke, 1984; Hubbard, 1989).

Similar to my findings, Rowe (1994) observed children using art and written language to create texts, and concluded that young children integrate different systems of signs and that the primary purpose of their doing so is to express different aspects of meaning. She developed a
multimodal view of literacy, using semiotic theory to support her view. Her interpretation of
semiotic theory is influenced by cognitive psychology and theories of the social construction of
literacy. From these various theories, Rowe (1994) argued, “meanings formed in one
communicative mode are cognitively available to guide communication in other modes” (p. 21).
Communication involves multiple sign systems, and the same process of semiosis underlies the
interpretation of signs, regardless of sign systems.

My data supports the point of view that writing that includes thinking, listening, reading,
planning, talking, and drawing opens our eyes to all sorts of possibilities (Dyson, 1986; Eisner,
1993; Kress, 1997). If children are to be able to transform what they know about print into a
mode of representation that allows for a full range of their experiences then we as educators need
to make a pedagogical shift (Kendrick & McKay, 2004). Teachers, urged to embrace children's
“multifaceted ways of knowing” (Kendrick et al, p. 109), need to recognize the unrealized
potential for understanding how children use alternative symbol systems to make sense. As Kress
(1997) points out,

If limitations to one mode of representation is a limitation, then we should do everything
we can to overcome that limitation. If it is a limitation on the totality of human potential,
if it favours one aspect only, to the detriment of others, then we have, I believe, no
justifiable reason for sustaining it. (Kress, p. 29).

When these findings are considered in light of the need for educational environments that
support students as makers of knowledge and meaning, it seems clear that we must reexamine
our bias toward language in teaching-learning and consider curricular possibilities that do not
marginalize other ways of knowing.
REFERENCES


## APPENDICES

| Appendix 1 | Storyboard Planning Sheet | 40 |
| Appendix 2 | Conference Guide | 41 |
| Appendix 3 | Student Survey | 42 |
| Appendix 4 | Conference Guide Transcriptions of Semi-structured and Spontaneous Conferences | 43 |
| Appendix 5 | Coded Conference Transcripts | 51 |
Appendix A: Artist's Storyboard Planning Sheet

### Artist's Storyboard

<table>
<thead>
<tr>
<th>Here's how I picture the main character...</th>
<th>Here's how I see the setting...</th>
<th>Here's the problem...</th>
<th>Here's the solution...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Here's an important event...</th>
<th>And another important event...</th>
<th>And another important event...</th>
<th>Here's what happens at the end...</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix B: Conference Guide
#### Semi-structured and Spontaneous Conferences

<table>
<thead>
<tr>
<th>Date of Conference</th>
<th>Student ID</th>
<th>Name of Written Piece</th>
<th>Dates Written</th>
</tr>
</thead>
</table>

1. Can you tell me about this piece of writing?
   a) What did you write about?
   b) How/why did you choose the topic?
   c) Did you do anything before you began writing?
   d) What did you think/feel about this piece?

2. Can you tell me about your drawing/images?
   a) What does this drawing/image mean to you?
   b) How/why did you choose to create this?
   c) Did you do anything that helped you to create the drawing/image? Why?
   d) What did you think/feel about the image?

3. Walk me through the steps of your writing/image creating process.
   a) For this piece, which did you do first, the writing or the drawings/images?
   b) Did you make changes or add to your writing as you went through this process? If yes, did your drawings influence your writing?
   c) Did you make changes or add to your drawings/images as you went through this process? If yes, did your writing influences the changes?
   d) Is it easier for you to begin the process with writing or drawing? Why?

4. Is there anything else you want to tell me about your writing or drawing/images?
Weaving Words and Images  
Appendix C: Student Survey

**Student Survey:**  
**Using Visual Strategies To Improve Idea Generation and Writing Stamina of Primary Writers**

Please do not put your name on this paper. This is an anonymous survey. No one will know who has completed it other than you. Your teacher will read out each question and you will circle the response that best describes you.

<table>
<thead>
<tr>
<th>I enjoy writing.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoy drawing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finding ideas to write about is easy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Drawing helps me to begin writing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I begin writing first and then draw.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I begin drawing first and then write.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I add to or change my writing when I draw.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I add to or change my drawings as I write.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I am a good writer.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I am a good drawer / image maker?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Student ID</td>
<td>Susie</td>
<td>David</td>
<td>Kayden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>-------</td>
<td>-------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1. a) She was leaving the ball</strong>&lt;br&gt;b) I like Cinderella&lt;br&gt;c) I drew the picture&lt;br&gt;d) I feel good because I wrote my own story and used good action words</td>
<td>a) My mom ran over my foot with her car because she thought she was in park but actually was in reverse&lt;br&gt;b) I used my imagination to add to my story&lt;br&gt;c) I drew a picture and I talked about it&lt;br&gt;d) I don't know</td>
<td>a) I enjoyed writing story so I wanted to write another&lt;br&gt;c) I just thought back about what happens and looked at books and sometimes titles. I change the words like my poem &quot;Monday's Dog&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. a) She's just about to go into the carriage and the man is sitting in the carriage&lt;br&gt;b) my imagination and thinking, I put my imagination cap on and thinking hard&lt;br&gt;c) I imagined it in my mind and drew it to look like a pumpkin&lt;br&gt;d) I don't know</strong></td>
<td>a) I memorized the time when it happened. I didn't colour my mom's car red because I was bleeding, but because it is red and sometimes when I look at books I get ideas from the pictures</td>
<td>c) I don't really feel like I need to draw when I write because I make &quot;pictures in my head&quot; and sometimes when I look at books I get ideas from the pictures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3. a / b) I drew the picture first. My picture reminded me that she had a sparkle dress so I added a sentence afterwards&lt;br&gt;c) No&lt;br&gt;d) It is easier to draw first because I have pictures in my mind that is hard to make words for&lt;br&gt;e) No&lt;br&gt;f) Writing is easier</strong></td>
<td>a) I believe I did start with the drawing and some writing and then some more writing&lt;br&gt;b) No not really&lt;br&gt;c) No the pictures did not help&lt;br&gt;d) No&lt;br&gt;f) Begin with drawing, because if I would have my story in my head and it helps me a little bit to add to my writing</td>
<td>a) I started to write first&lt;br&gt;b) no&lt;br&gt;c) no&lt;br&gt;f) Writing is easier</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.</strong></td>
<td></td>
<td></td>
<td>Not really</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student ID</td>
<td>Writing was first</td>
<td>Writing was not</td>
<td>Writing was third</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>------------------</td>
<td>-----------------</td>
<td>------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simon</td>
<td>Maybe the picture, I could make speech bubbles.</td>
<td>I didn't do a lot of drawing, at first it was a novel and then you saw other children drawing.</td>
<td>Good, because I really like drawing and dogs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethan</td>
<td>When it was easier to draw the picture first and kind of add more details when the title and then you can do more.</td>
<td>(a) Writing was first. I did the drawing first. I can be kinda hard, I wanted to do more pictures but I was so tired I wanted to do more pictures.</td>
<td>Writing and then I did a little picture and went back to write because I wanted to know where the fairies come from so I added them to my story at the bottom.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romina</td>
<td>When I stop otherwise it will be a big blob.</td>
<td>When I started to draw the picture first and kind of add more details.</td>
<td>(a) Writing was first. I did the drawing first. I can be kinda hard, I wanted to do more pictures but I was so tired I wanted to do more pictures.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Ethan**

Good, because I really like drawing and dogs. I needed a title now. I used the silly sentence starters to get my idea. I thought about the character, a puppy, and I drew a picture and thought about it to get my idea. I thought I couldn't write about puppies. I thought I couldn't write about fairies. So I drew a picture and thought about it to get my idea. I thought I couldn't write about dogs. So I drew a picture and thought about it to get my idea.

**Simon**

I feel I should do more. More detail like snow falling and the monkey dashing to see what is the matter. I wondered if the picture will bleed through. Maybe I could have some other paper, but not from the box near the sink. The castle was supposed to be the Wall of China like in the sloth story. You can't really see the background only the wall of lava flooding the castle and the people have lava buckets. I thought I couldn't write about the castle and the people. I thought I couldn't write about the fairies. So I drew a picture and thought about it to get my idea.
I can't think of anything to share.

Sometimes, yes, but writing is preferred. Pictures and the response was that pictures (asked if student ever drew pictures) I just wanted to write the story, no pictures when doing a good copy, not a draft.

I have been doing it for all my writing. It was easier to do the writing first. It's just what I shield to my picture.

I thought since I wrote about a shield, I added a shield to my picture. I wrote "the lava squirted onto Jake, Nicole because I wanted to add lava spraying out and some action. I wrote "the lava squirted onto Jake, Nicole"

I should. so I added more people in my writing like Isaac and my family.

I made changes. I did the people. I did more than the volcano erupts.

Clubhouse, a hotel, two homes, a safe place in case people are about to do. I in every picture there is a man on the volcano. Later in the story, he comes out and starts fighting the people.

I thought of the story I wanted to write and the pictures were just what I wanted to do.

Response was that he/she just wanted to have a talking book, so I thought about what I should do and how I used brain power and already knew what I was hunting to think about! Before I planned it out, I felt like it was a really good idea. My brain was focused, I didn't like it. I like it. I thought about what I should do and how I wanted to stop the volcano, from erupting. Except some boys, everyone stayed inside. They wrote a book called Story Starters. I saw a book called Story Starters.

I thought I had it come from somewhere I wanted to make it serious. I wanted to make it believable like Michael and my family.

Because I wanted to add lava spraying out and some action. I wrote "the lava squirted onto Jake, Nicole"

I thought since I wrote about a shield, I added a shield to my picture. I wrote "the lava squirted onto Jake, Nicole because I wanted to add lava spraying out and some action. I wrote "the lava squirted onto Jake, Nicole"

I should. so I added more people in my writing like Isaac and my family.

I made changes. I did the people. I did more than the volcano erupts.

Clubhouse, a hotel, two homes, a safe place in case people are about to do. I in every picture there is a man on the volcano. Later in the story, he comes out and starts fighting the people.

I thought of the story I wanted to write and the pictures were just what I wanted to do.

Response was that he/she just wanted to have a talking book, so I thought about what I should do and how I used brain power and already knew what I was hunting to think about! Before I planned it out, I felt like it was a really good idea. My brain was focused, I didn't like it. I like it. I thought about what I should do and how I wanted to stop the volcano, from erupting. Except some boys, everyone stayed inside. They wrote a book called Story Starters. I saw a book called Story Starters.

I thought I had it come from somewhere I wanted to make it serious. I wanted to make it believable like.
<table>
<thead>
<tr>
<th>Student ID</th>
<th>Becky</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td></td>
</tr>
</tbody>
</table>

**Go out of my head, so I write.**

- Writing first: I would draw first so I could look at my pictures.
- Writing first: Mostly I did the writing first on each page.
- Writing first: It gave me a good idea, somewhat chasing something.
- Writing first: He was so full of energy something isn't faster than him.
- Writing first: Added a little more to my drawing like grass.
- Writing first: No.
- Writing first: No not really.
- Writing first: Writing, just because.

---

**Becky**

- They both pretty good for me. I could do either.
- I added a little more to my drawing like grass.
- I created it by using the flip book for an idea. Later I added a palm tree on the island because I feel like adding it.
- I feel happy about it because I like drawing and it's my favorite thing to do.
- There's a boy who wanted to sail. He promised his mom he'd stay near the shore, but it isn't really in the story. He came to an island that was invisible.
- It's like Cloudy and a Chance of Meatballs, but...
- It's a postcard from Pluto and one from Neptune and Saturn. That's me. We're making sailboats out of food and candy.

---

**Lexi**

- They're chasing the ball. They're running for it...
- They're running for it.
- That's a house. He was running and he sort of wanted to see his owner. He sort of wanted to see his owner.
- It meant the same thing as my words and it's the same thing on every page mostly.
- I took a long time on the details and I liked my work.
- I took a long time on the details and I liked my work.
- Some parts I wanted to write about, but I erased them.
- I was thinking about stories and movies and smoothed the story and card on the picture. We're making sailboats out of food and candy.
- I was thinking about stories and movies and smoothed the story and card on the picture. We're making sailboats out of food and candy.

---

**Caitlin**

- Writing first: I would draw first so I could look at my pictures to help me. If I was writing first, I don't want the story to go out of my head, so I write first.
- Writing first: I'm pretty good at it.
- Writing first: It helped me with looking at the pictures and I pictured what was happening in my head on this page only.
- Writing first: I made my illustrations to help me draw better. The drawing first: I could see the pictures better.
- Writing first: I added a little more to my drawing like grass.
- Writing first: I created it by using the flip book for an idea. I used my imagination to draw it.
- Writing first: It shows me a nice invisible island. It's a make believe one.

---

**Becky**

- They're both pretty good for me. I could do either.
- They're both pretty good for me. I could do either.
- Some parts I was thinking about stories and movies and smoothed the story and card on the picture. We're making sailboats out of food and candy.
- Some parts I was thinking about stories and movies and smoothed the story and card on the picture. We're making sailboats out of food and candy.

---

**Becky**

- They're both pretty good for me. I could do either.
- They're both pretty good for me. I could do either.
- Some parts I was thinking about stories and movies and smoothed the story and card on the picture. We're making sailboats out of food and candy.
- Some parts I was thinking about stories and movies and smoothed the story and card on the picture. We're making sailboats out of food and candy.
<table>
<thead>
<tr>
<th>Student ID</th>
<th>Allie</th>
<th>Julio</th>
<th>Christopher</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. a)</td>
<td>b) I and I had been talking about it</td>
<td>a) It's about a stinky library. One person can not smell it other people had to break their houses and moved.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) A lot of thinking and talking</td>
<td>b) Originally, I used the Silly Starters and I continued on.</td>
<td>a) I like cars and I know lots of different kinds of cars. I thought about what to write before writing.</td>
</tr>
<tr>
<td></td>
<td>d) I think I like it because I like Scaredy Squirrel stories</td>
<td>c) I drew pictures.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>d) Pretty good, because it’s the longest story I’ve ever wrote and it's a good story</td>
<td></td>
</tr>
<tr>
<td>2. a)</td>
<td></td>
<td>a) It's a picture of a really stinky library, Jake's house, me pointing at Jake 'cause he can not smell. It's so stinky, the stink cracked the windows and they had to board it up.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) I did not draw any pictures 'cause I kind of already knew what I was going to write it.</td>
<td>b) I added more because I started to draw and then I erased a line and drew Jake and his house because I decided you needed someone to go into the library. I also made him unable to smell.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) Just thinking</td>
<td>c) I feel pretty good. I could improve a little, like the front bumper because it doesn't really connect with the body.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. a)</td>
<td></td>
<td>a) I drew the picture first</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) The picture helped because when I looked at it, it gave me ideas for writing</td>
<td>b) The writing helped me to draw. The writing gave me ideas for drawing.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c) It changed my story and helped me to add to it</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>d) I wrote about ½ page and then drew the broken house. It gave me an idea for something. About everybody breaking their house and moving</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>e)</td>
<td>f) It's easier to draw than write a bit and draw. I add to my writing but I don't go back to change my writing.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>f)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td>In chapter 2, I wrote a little and drew a little. I got stuck on my writing so I drew some pictures to help me. It gave me a lot of ideas to write. The driver upgraded his car with nitro. I learned about it from a video game. I didn't change my writing. I just added.</td>
</tr>
<tr>
<td>Student ID</td>
<td>Simon</td>
<td>Caitlin</td>
<td>Ethan</td>
</tr>
<tr>
<td>------------</td>
<td>-------</td>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td>1. a) I saw C's drawing of an astronaut so I drew my own. And then I drew a cowboy and wrote about how they met. b) Normally, I might use the Silly Starters and now I think of my own stuff.</td>
<td>a / b) I really like dogs and I like to make new friends. I chose the topic by using the Silly Starters to begin writing. c) I thought about it. I thought about a picture in my head and then I wrote about the picture. d) I like the pictures. I'm still colouring.</td>
<td>The pictures are drawn first. I usually do not write first because I have all these ideas so I draw them first, then I write, and copy almost everything in the picture. The pictures help me.</td>
<td></td>
</tr>
<tr>
<td>2. a) I think my drawings really look good and they actually look like a cowboy, an astronaut, and a spaceship</td>
<td>a) The flowerbed has flowers. Rosy lives here and Nicole is the new dog, Rosy's friends.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. a) I prefer the drawing. I drew first and then came up with the title and made up a little story. b) I do a lot of changes in a picture like I usually do long hair and you wanted to do a boy, but made it a girl. I erased it though because I wanted to do something else.</td>
<td>a) I write first and then draw. I wrote, did a picture, wrote, then did a picture. c) The drawings helped me write more because I thought about what I drew and I kept on going after the picture and wrote about Rosie. I did not change my writing though.</td>
<td>(Q: By allowing you to draw first and then write, how does the process help you? It's like a journal and it helps me see the people and events of my story more clearly)</td>
<td></td>
</tr>
<tr>
<td>Student ID</td>
<td>Julio</td>
<td>Caitlin</td>
<td>Kayden</td>
</tr>
<tr>
<td>------------</td>
<td>-------</td>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>1. a)</td>
<td>I drew the house and then thought about how to make the story interesting and then started drawing the people. Usually I use people in my stories. I drew a spaceship/robot then began writing. If I have ideas in my head I can get distracted. The drawing helps me stay focused and on task.</td>
<td>a) it is about Rosy who took a pet to school for Show and Tell b) I just think of things that pop into my head c) I plan it in my head like a huge picture and more in my head of my writing. d) I like it because it sort of interesting. What will happen to Rosy at school? Will she listen, or be bad, or will she stay with Danielle?</td>
<td>The Winter Olympics</td>
</tr>
<tr>
<td>2. a)</td>
<td>Drawing helps me write and gives me ideas. It helps me brainstorm to make a good story.</td>
<td>a) I drew snakes, snails, and cats. This is Danielle and the teacher. Rosie was scared at first and then came in. It was sort of a zoo with all the creatures. Rosy is by the desk with the leash. b) I like drawing with some details. I still need to add more background like kids, animals, and desks. c) Not really no.</td>
<td>If I did have to do it (draw) I would draw first to get it over with. I probably would not look at my drawing to get ideas.</td>
</tr>
<tr>
<td>3. a)</td>
<td>Usually I do a drawing at the beginning</td>
<td>a) Writing first, then a picture and then I keep on writing and then I did a picture when I knew I had a big space. I just kept on drawing and writing. c) Not exactly, I had to write more 'cause I only wrote some. If I added some more to my pictures, I might add details.</td>
<td>If my writing is published I'll draw pictures to illustrate like in a book, but not to help me write or to tell me what to write.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>e) I changed my drawings but not my writing. f) Write first 'cause than I know what to draw and know what to do before drawing</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I like drawing and writing. Sometimes I get stuck on things to write about. I might look at a book to get ideas but drawing does not help me to write.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student ID</td>
<td>Ethan</td>
<td>Michael</td>
<td>Becky</td>
</tr>
<tr>
<td>------------</td>
<td>-------</td>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td>1. a)</td>
<td>The Winter Olympics I used the planning sheet and drew about my memories</td>
<td>The Winter Olympics I sketched and it helped me plan for writing and gave me ideas for writing. I wrote about how the events happened, and sort of who and where it happened.</td>
<td>Winter Olympics Pictures helped me remember all of the Olympic stuff I did. I did not really use the pictures from the planning sheet to help plan my writing.</td>
</tr>
<tr>
<td>b)</td>
<td>The drawing helped me to write because it helps me explain the story because I can see pictures. It helps make me understand the story.</td>
<td>I looked to see what was next and then wrote it down. The pictures helped me tell me what to write about.</td>
<td></td>
</tr>
<tr>
<td>c)</td>
<td>I usually write first. I prefer to write, but I do enjoy drawing. Sometimes I change my writing like a time I drew a superhero I drew him flying so I wrote it down. Sometimes drawing helps me to write and helps me get ideas. I draw randomly to get ideas for stories. I just draw to go along with a story usually, and sometimes drawing will help me write.</td>
<td>I like to draw more than write. I usually draw to match my writing and draw mostly when finished writing. When I was writing, ideas came to me when I sketched other things. Sometimes drawing helps me with writing, sometimes when I draw it helps me write a different story. I usually write first and then draw if there's room. When I have enough space where words do not need to be I draw after the first page and I don't really draw first.</td>
<td></td>
</tr>
<tr>
<td>d)</td>
<td>a) I drew first b) Yes I like to write, drawing is my best actually. I would draw instead of write. It's kind of a rough copy. Drawing helps me to see the story better and readers can understand it better too. Stories could have both pictures and words. You don't have to have both, but they make the story better when together.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. a)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. a)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix E: Coded Conference Transcripts

<table>
<thead>
<tr>
<th>Student ID</th>
<th>Susie</th>
<th>David</th>
<th>Kayden</th>
</tr>
</thead>
<tbody>
<tr>
<td>I add to or change my drawings as I write</td>
<td>No not really.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>I add to or change my writing when I draw</td>
<td>My picture reminded me that she had a sparkle dress on so I added a sentence afterwards.</td>
<td>No the pictures did not help.</td>
<td>No.</td>
</tr>
<tr>
<td>I begin to draw first and then write</td>
<td>I drew the picture first. It is easier to draw first because I have pictures in my mind that is hard to make words for.</td>
<td>I drew a picture and I talked about it. I believe I did start with the drawing and some writing and then some more writing.</td>
<td>I don't really feel like I need to write because I make pictures in my head and sometimes when I look at books I get ideas from the pictures</td>
</tr>
<tr>
<td>I begin writing and then draw</td>
<td></td>
<td></td>
<td>I started to write first. Writing is easier.</td>
</tr>
<tr>
<td>Drawing helps me to begin writing</td>
<td>It is easier to draw first because I have pictures in my mind that is hard to make words for.</td>
<td>Begin with drawing, because if I would have my story in my head and it helps me a little bit to add to my writing</td>
<td></td>
</tr>
<tr>
<td>Finding ideas to write about is easy</td>
<td>I imagined it in my mind and drew it to look like a pumpkin. I created the drawing by putting my imagination cap on and thinking hard.</td>
<td>I used my imagination to add to my story. I used my memories(to draw the pictures)</td>
<td>I just thought back about what happens and looked at books and sometimes titles</td>
</tr>
<tr>
<td>Student ID</td>
<td>Simon</td>
<td>Allie</td>
<td>Julio</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>I add to or change my drawings as I write</td>
<td>Yah! It really helped me to do what I should do. I feel I should do more. More detail like snow falling and the monkey dashing to see what is the matter.</td>
<td>I wrote about half a page and then drew the broken house. It gave me an idea for something.</td>
<td>It changed my story and helped me to add to it. I add to my writing, but I don't go back to change my writing.</td>
</tr>
<tr>
<td>I add to or change my writing when I draw</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I begin to draw first and then write</td>
<td>Maybe the picture, I could make speech bubbles.</td>
<td>I drew the picture first. The picture helped me because when I looked at it, it gave me ideas for writing. It's easier to draw then write a bit and draw.</td>
<td></td>
</tr>
<tr>
<td>I begin writing and then draw</td>
<td>I just thought of a sentence about the whole thing and I drew a picture. I wrote and than I found a place to write that. A place to fit the picture. Writing was first.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drawing helps me to begin writing</td>
<td>I didn't do a lot of drawing, at first it was a novel and then you saw other children drawing, and I thought Hmmm I want to do it because my stories are just novels. To draw, because it makes it easier to think of a title and then you can do more writing and kind of add more details.</td>
<td>I did not draw any pictures 'cause I kind of already knew what I was going to write about.</td>
<td></td>
</tr>
<tr>
<td>Finding ideas to write about is easy</td>
<td>Our sloth story was what I thought about. I just thought of writing more.</td>
<td>A lot of thinking and talking.</td>
<td>Originally I used the Silly Starters and I continued on.</td>
</tr>
<tr>
<td><strong>Student ID</strong></td>
<td><strong>Ethan</strong></td>
<td><strong>Romina</strong></td>
<td><strong>Becky</strong></td>
</tr>
<tr>
<td>----------------</td>
<td>-----------</td>
<td>------------</td>
<td>-----------</td>
</tr>
<tr>
<td>I add to or change my drawings as I write</td>
<td>When I was writing, I was stuck about it, so I thought okay, I'll draw a picture and I thought hmm what can I add. So I added a play castle, a bed, fairies, and a TV and fairy dust. Yes, the writing helped me with the picture and the picture helped me with the writing.</td>
<td>It (the drawing) meant the same thing as my words and it's the same thing on every page mostly. I added a little more to my drawing like grass. No, not really.</td>
<td></td>
</tr>
<tr>
<td>I add to or change my writing when I draw</td>
<td>After I drewed it, I thought okay I will write about it so I squeeze two fairies in. I thought, &quot;I'm going to write about the picture.&quot;</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>I begin to draw first and then write</td>
<td>I drew the picture before I began writing. I did the drawings first. It can be kinda hard. I add details.</td>
<td>... the picture helped me with the writing...</td>
<td></td>
</tr>
<tr>
<td>I begin writing and then draw</td>
<td>Writing and then I did a little picture and went back to write because I wanted to know where the fairies come from so I added them to my story at the bottom.</td>
<td>I mostly did the writing first on each page. It (the writing) gave me a good idea, sort of chasing something, and he was so full of energy.... It is easier to begin with writing.</td>
<td></td>
</tr>
<tr>
<td>Drawing helps me to begin writing</td>
<td>I did the drawings first. It can be kinda hard. I add details. I have too many ideas and sometimes I don't know what to draw next, so I keep the pictures in my mind.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finding ideas to write about is easy</td>
<td>I have too many ideas and sometimes I don't know what to draw next, so I keep the pictures in my mind.</td>
<td>I used the silly sentence starters to get my idea. I've seen the Chipmunks and it gave me ideas for my own ideas. When I watched the movie at the theatre I thought I could write about puppies.</td>
<td></td>
</tr>
<tr>
<td><strong>Finding ideas to write about is easy</strong></td>
<td></td>
<td></td>
<td>I wrote about the three dogs on my DS I looked at the flip book called Story Starters</td>
</tr>
<tr>
<td>Student ID</td>
<td>I add to or change my drawings as I write</td>
<td>I add to or change my writing when I draw</td>
<td>I begin to draw first and then write</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------</td>
<td>------------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Michael</td>
<td>I thought of the story I wanted to write and the pictures came. Yes, it helped me. There was a town so I drew a map of the town. There's a hospital... I thought since I wrote about a shield, I added a shield to my picture</td>
<td>I made changes. I did the people. I did more than I should, so I added more people in my writing like Isaac and my family. Because I wanted to add lava spraying out and some action, I wrote &quot;the lava squirted onto Jake, Nicole and Isaac.&quot;</td>
<td>I drew a picture first. I drew a picture first to give myself ideas.</td>
</tr>
<tr>
<td>Caitlin</td>
<td>A little, I already thought it and wrote it. Then I drew it and write it and then I drew the boat. The writing helped me a little. After I wrote I made him kneeling.......and I put a palm tree on the island because I feel like adding it on.</td>
<td>I really did not make changes to my writing.</td>
<td></td>
</tr>
<tr>
<td>Lexi</td>
<td>Some parts I forgot to write about. Jake is up here but I forgot to put him in the picture, so I added him to the picture.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student ID</td>
<td>Christopher</td>
<td>Simon</td>
<td>Caitlin</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>-------</td>
<td>--------</td>
</tr>
<tr>
<td>I add to or change my drawings as I write</td>
<td>No not really.</td>
<td>I do a lot of changes in a picture like I usually do long hair and you wanted to do a boy, but I did a girl. I erased it though because I wanted to do something different.</td>
<td></td>
</tr>
<tr>
<td>I add to or change my writing when I draw</td>
<td>I got stuck on my writing so I drew some pictures to help me. It gave me lots of ideas to write. I didn't change my writing, I just added.</td>
<td></td>
<td>The drawings helped me to write more because I thought about what I drew and I kept on going after the picture and wrote about Rosie. I did not change my writing though.</td>
</tr>
<tr>
<td>I begin to draw first and then write</td>
<td></td>
<td>I prefer the drawing. I drew first and then came up with the title and made up a little story.</td>
<td></td>
</tr>
<tr>
<td>I begin writing and then draw</td>
<td>I did the writing first. The writing gave me ideas for drawing. I write first because I like to write more than drawing. I wrote a little and drew a little.</td>
<td></td>
<td>I write first and then draw. I wrote, drew a picture, wrote, then did a picture.</td>
</tr>
<tr>
<td>Drawing helps me to begin writing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finding ideas to write about is easy</td>
<td>I like cars and I know lots of different kinds of cars. I thought about what to write before writing.</td>
<td>I saw C's drawing of an astronaut so I drew my own. I think of my own stuff now.</td>
<td>I used a Silly Starter. I really like dogs and I like to make new friends. I thought about it. I thought about a picture in my head and I wrote about the picture.</td>
</tr>
<tr>
<td>Student ID</td>
<td>Ethan</td>
<td>Julio</td>
<td>Caitlin</td>
</tr>
<tr>
<td>------------</td>
<td>-------</td>
<td>-------</td>
<td>---------</td>
</tr>
<tr>
<td>I add to or change my drawings as I write</td>
<td></td>
<td></td>
<td>I like drawing with some details. I still need to add more background like kids, animals, and desks. If I added some more to my pictures, I might add details. I changed my drawings but not my writing</td>
</tr>
<tr>
<td>I add to or change my writing when I draw</td>
<td></td>
<td></td>
<td>Not exactly, I had to write more 'cause I only wrote some</td>
</tr>
<tr>
<td>I begin to draw first and then write</td>
<td>It's like a journal and it helps me to see people and events of my story more clearly.</td>
<td>Usually I do a drawing at the beginning.</td>
<td></td>
</tr>
<tr>
<td>I begin writing and then draw</td>
<td>Writing first, then a picture, then I keep on writing and then I did a picture when I knew I had big space. I just kept on drawing and writing. Write first 'cause than I know what to draw and know what to do before drawing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drawing helps me to begin writing</td>
<td>The pictures were drawn first. I usually do not write first because I have all these ideas so I draw them first, then I write, and copy almost everything in the picture. The pictures help me.</td>
<td>If I have too many ideas in my head I get distracted. The drawing helps me stay focused and on task. Drawing helps me write and gives me ideas. It helps me brainstorm to make a good story.</td>
<td>I drewed snakes, snails, and cats. This is Danielle and the teacher. Rosie....</td>
</tr>
<tr>
<td>Finding ideas to write about is easy</td>
<td>I drew the house first and then thought about how to make the story more interesting and then started drawing people. Usually I use people in my stories. I drew a spaceship and robot then began writing.</td>
<td>I just think of things that pop into my head. I plan it in my head like a huge picture and more in my head of my writing. I like drawing and writing. Sometimes I get stuck on things to write about. I might look at books to get ideas but drawing does not help me to write.</td>
<td></td>
</tr>
<tr>
<td>Student ID</td>
<td>Michael</td>
<td>Ethan</td>
<td>Kayden</td>
</tr>
<tr>
<td>------------</td>
<td>---------</td>
<td>-------</td>
<td>--------</td>
</tr>
<tr>
<td>I add to or change my drawings as I write</td>
<td>I looked to see what was next and then wrote it down. The pictures helped me tell me what to write about. Sometimes I do change my writing like a time I drew a superhero I drew him flying so I wrote it down. I just draw to go along with a story usually, and sometimes drawing will help me write.</td>
<td>I used a planning sheet and drew about my memories. I drew first. I like to write, drawing is my best though. I would draw instead of write. It's (the drawing) kind of a rough copy. Drawing helps me to see the story better and readers can understand it better too. Stories could have both pictures and words. You don't have to have both, but they make the story better when together.</td>
<td>If my writing is published, I'll draw pictures to illustrate like in a book, but not to help me write or to tell me what to write.</td>
</tr>
<tr>
<td>I add to or change my writing when I draw</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I begin to draw first and then write</td>
<td>I sketched and it helped me plan for writing and gave me ideas for writing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I begin writing and then draw</td>
<td>I usually write first. I prefer to write, but I do enjoy drawing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drawing helps me to begin writing</td>
<td>Sometimes drawing helps me to write and helps me get ideas. I sketched and it helped me plan for writing and gave me ideas for writing. I wrote about how the events happened, and sort of who and where it happened.</td>
<td>The drawing helped me write because it helps me explain the story because I can see pictures. It helps me understand the story.</td>
<td>If I had to do it, I would draw first to get it over with. I would not look at my drawings to get ideas.</td>
</tr>
<tr>
<td>Finding ideas to write about is easy</td>
<td>I draw randomly to get ideas for stories.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student ID</td>
<td>Becky</td>
<td>Hardeep</td>
<td>Tyler</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>I add to or change my drawings as I write</td>
<td>I usually draw to match my writing and draw mostly when finished writing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I add to or change my writing when I draw</td>
<td>When I was writing, ideas came to me when I sketched other things. Sometimes drawing helps me with writing, sometimes when I draw it helps me write a different story.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I begin to draw first and then write</td>
<td>I did not really use the pictures from the planning sheet to help plan my writing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I begin writing and then draw</td>
<td>I usually write first and then draw if there's room. When I have enough space where words do not need to be I draw after the first page and I don't really draw first.</td>
<td>I just began writing. I did no pictures.</td>
<td></td>
</tr>
<tr>
<td>Drawing helps me to begin writing</td>
<td>I like to draw more than write.</td>
<td>I did not draw pictures. I do pictures when I do a good copy not a draft.</td>
<td>I sometimes will do pictures but writing is preferred.</td>
</tr>
<tr>
<td>Finding ideas to write about is easy</td>
<td>Pictures helped me remember all the Olympic stuff I did.</td>
<td>Books give me ideas</td>
<td>Story starters helped me with an idea.</td>
</tr>
</tbody>
</table>