THE RELATIONSHIP AMONG MINDSET INSTRUCTION, KINDERGARTENERS' PERFORMANCE, AND MOTIVATION IN WRITER'S WORKSHOP

by

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A Dissertation Submitted to the
Faculty of the College of Graduate Studies at
Middle Tennessee State University
in Partial Fulfillment
of the Requirements for the Degree of
Doctorate of Philosophy
in Literacy Studies

Middle Tennessee State University May 2015

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This dissertation is dedicated to my b	pest friend and the love of my life, my husband, Jacob.

ACKNOWLEDGEMENTS

I would like to acknowledge my dissertation committee for their support and encouragement throughout this process. I gratefully thank Dr. Elleman for countless hours of wise counsel from beginning to end; her expertise in research methods, intervention work, and dedication to empowering her students to be the best they can be are invaluable. I thank Dr. Tharp for offering an experienced teacher perspective to my work, as well as a unique dedication to research relevant to teachers and students. Dr. Tharp's words of encouragement were priceless through this process. I humbly thank Dr. Barnes for accepting my request to serve on my committee without knowing me. Dr. Barnes offered expertise in qualitative research methods, providing valuable support in coding and qualitative data analysis. I thank you, Dr. Kim, who taught me all I know about statistics, and encouraged me to expand my research into the world of statistics, enhancing the strength of my research.

Dr. Michelle Hasty has been my life support through this process- from everything to helping me with testing, to showing up every Friday to help teach, to fielding frantic phone calls, to collaborative thinking. Michelle graciously gave herself and her time to make this work the best it could be. I would not share a conference hotel room with anyone else! And to Sang Hee Jung who helped support me through the statistics of this dissertation, and who picked up the slack when I had my twins ten weeks early. I am so grateful to everyone.

I was only able to do this work because of a vast village of support. Most especially to my husband Jacob, who believed in me enough to let me quit my job and pursue a dream. Jacob has listened to countless hours of academic jargon and allowed

me to lean on him through the ups and downs of the past three years. To my beautiful children, Matilda and Monroe, for making your entrance a week after my intervention was complete, and making it the most beautiful part of my life. To my wonderful parents, Dr. Arthur Edwards and Peggy Edwards who have supported me both emotionally and financially so I could become a doctor just like my daddy. To my sister Kristen, who read and edited this paper when I was too tired with babies to do so!

I would like to acknowledge some very inspirational teachers who have pushed me to be the best teacher I can be. Dr. Bobbie Solley for showing me the love of teaching writing, giving me the world by taking me to Haiti, and being-the light that led me to realize God made me a teacher. To Melanie Maxwell for laughing and crying our way through our classes together, and always reminding me that this is all for the children! And to Alisa Allen, Amanda Tabor, Jenny Armentrout, Jamye Hall, Erin FitzPatrick, and Angie Tisdale- you are the greatest teachers I know.

I would like to acknowledge the teachers and administrators at the school where this research took place. Tara Blue and Rachel Anderson graciously opened the doors of the classrooms to me, a privilege I could never repay. Their constant support and willingness to change their schedules and routines for me is truly a blessing. The headmaster and academic director welcomed me into the school, supported and encouraged my work with the students, and made me wish every school could have this brilliant and caring leadership they bring to their elementary school.

Finally, I want to acknowledge the students I worked with this semester. They are hilarious, creative, wildfire kind of kids. Their willingness to work hard and push

themselves at the age of five and six to become writers with a voice made every moment of work worthwhile.

ABSTRACT

This mixed-methods study employs an experimental intervention supported by qualitative observation, interaction, and analysis in the area of motivation and writing in elementary school. The quantitative questions of this study are: 1) How does the writer's workshop plus mindset instruction affect the overall writing achievement on a standardized measure?, (2) Is the writer's workshop plus mindset instruction effective on a near measure of writing closely aligned to instruction?, (3) Does the writer's workshop and mindset instruction increase literacy and writing motivation in young children?, and (4) Do children persevere through challenging writing tasks? The qualitative questions are: (1) Does children's thinking about their writing and motivation change when teachers use the writer's workshop plus mindset intervention?, (2) How are writing and mindset skill strategies evident as children work through difficult writing hurdles?, (3) Does children's writing change qualitatively over time when teachers use the writer's workshop plus mindset intervention?, and (4) How are children verbalizing their thinking when working through writing tasks and self-reflecting on their personal motivation?

This study used a convenience sample of 27 kindergarteners randomly assigned to an experimental group and a business-as-usual control. The intervention lasted for approximately 27 hours over the course of nine weeks and is based on the writer's workshop model for writing instruction, plus self-regulated strategy instruction and mindset instruction.

Quantitative data collection came from two writing and two motivation assessment measures. MANCOVA, ANOVA and one-sample *t*-tests were used to analyze the data. The qualitative data came from interviews, during instruction

discussion and lessons, writing samples, and recorded conversations during measurement tasks. Data was analyzed using grounded theory (Glaser & Strauss, 1967).

Results of the study indicate that adding mindset instruction and self-regulation strategy instruction to a writer's workshop framework could be useful for teachers who are attempting to scaffold students into becoming motivated, self-regulated writers.

Results show this intervention could help provide authentic writing and motivation instruction that not only helps students become independent and inspired writers within a classroom context, but also shows an increase in their achievement on standardized test scores.

Keywords: writer's workshop, kindergarten, mindset, motivation

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CHAPTER I

Introduction

History of Writing Instruction

"Writing is essential to communication, learning, and citizenship. It is the currency of the new workplace and global economy. Writing helps us convey ideas, solve problems, and understand our changing world. Writing is a bridge to the future" (National Writing Project, 2012). Writing helps us learn, communicate, remember, and reflect. It has unlocked mysteries of our history, and given us a way to understand our present and surroundings, and changed the course of our future. Although writing is a powerful and necessary communicator, its history in classroom instruction has been a journey of ups and downs. As our students grow and change, it is important to continue understanding writing and its instruction as our bridge to the future.

It has been said that a look into history can serve as a powerful reminder of our mistakes, as well as a memorial of our greatest successes and triumphs. To ignore history disables us as learners and human beings; it blinds us to integral pieces of the puzzle of culture and society. As educators we carry the extra burden of passing this knowledge to the next generation, making it even more important for us to understand the teachers of the past, and the culture and ideals that surrounded their instruction.

The reauthorization of the Elementary and Secondary Education Act of 2010 has left our present educational climate focused on high-stakes testing, accountability, and standards. With the increased focus on high-stakes achievement, writing instruction in schools has taken a particularly hard hit in recent times. Studies have shown that across the last decade, the time teachers spend on writing instruction has steadily decreased,

during their grade school instruction (Applebee & Langer, 2006). The National Assessment of Educational Progress' (NAEP) 2011 report card revealed that nearly three-quarters of students in grades eight and twelve are not proficient in writing (National Center for Education Statistics, 2011). There is the tendency for writing instruction to be unclear, with history showing writing instruction to live in a constant state of ambiguity among educators and parents, especially in regards to reading instruction (Brandt, 2001). Monaghan and Saul (1987) posit that reading has had "divine status" (p. 91) throughout history and that reading instruction fits better with traditional teacher roles, can be more easily assessed by standardized tests, and lends itself well to control by those in power. The ambiguity of writing instruction has caused many to dismiss writing instruction all together, opting for reading instruction instead of searching for clear and effective writing instruction methods (Monaghan & Saul, 1987).

Throughout history, patterns and trends of writing instruction have helped us come to a closer approximation of the best way to teach writing. Regardless of instructional preferences, one fact is not debated: writing must be *taught*. Although infinitely complex, language seems to be acquired in children innately, as if each person is hard-wired to learn the spoken word (Chomsky, 1986). Writing, however, is not acquired in the same way. It requires practice and skills that necessitates explicit teaching in order to master.

Over time, writing instruction has ebbed and flowed from an intense focus on handwriting and copying to a more process-oriented approach that encourages content over handwriting. For a significant amount of time, the purpose of writing in our culture

was for ornamental transcription, but the mid-1900s marked some of the first whisperings of process-oriented writing. Theorists such as John Dewey began to preach a progressive education message of learning as a social and interactive process (Hawkins & Razali, 2012). Teaching materials began to deemphasize reading and to distinguish between writing and penmanship; the term "handwriting" became more frequently used to separate the physical act of writing and the mental process of composing (Hawkins & Razali, 2012).

Furthermore, manuscript print was invented as an easier alternative to script, once again taking some of the importance off of handwriting and shifting it toward ideas and composition. The child, now seen as an active participant in the learning process, was afforded a voice in a democratic classroom. An Experience Curriculum in English (Yancey, 2009) released by The National Council of Teachers in English (NCTE) in 1935 supported this progressive view. The report called for a more open-minded way of teaching language arts by providing experiences for both social and expressive writing. The curriculum centered on the child, and was rich with practical writing genres, such as letters, recipes, diaries, reports, reviews, summaries, and news stories (Yancey, 2009). The report denounced the "reign of red ink" (Hawkins & Razali, 2012, p. 310) and encouraged teachers to let go of the control and simply allow children to write. The NCTE would continue to be a mover and shaker in literacy curriculum as they invited cutting-edge researchers, such as James Britton, who would champion treating children as collaborators in literacy meaning-making, which encouraged teachers to facilitate and collaborate with children in the writing process (Wyatt-Brown, 1992). Britton (1970)

also urged teachers to refrain from correcting all of the students' errors and stressed content, artistry, and creativity in learning to write.

Throughout this period of reimagining in the mid-1900s, writing instruction wavered back and forth between measurable outcomes and expressionist composition.

Jerome Bruner's *The Process of Education* (1960) championed writing as a process instead of a product (Hobbs & Berlin, 2001). Bruner valued children learning to write by actually participating in writing experiences instead of being passive actors. He would be the front-runner in the process-writing era to come.

In 1966, The Dartmouth Conference brought together scholars from around the world to discuss writing and Language Arts instruction. Bringing foreign scholars to the United States provided invaluable and novel insight to American academics, allowing them to move away from the disciplinary, standards-based objectives of the time and encouraging them to look at writing in terms of communicating, expressing, exploring, and creating (Bazerman, 2005). The movement paved the way for Janet Emig (1971) to publish her landmark book, *The Composing Process of Twelfth Graders*, which would be some of the first research to support process-oriented writing.

In 1969, the National Association of Educator Progress (NAEP) put out its first national report card evaluating the writing skills of Americans ages 9 to 35 (National Center for Education Statistics, 2011). It was a scathing report, finding almost no mastery of basic writing skills among 9 year olds. It also reported extreme deficiencies in spelling, vocabulary, and sentence structure among 17 year olds, and reluctance of 18 year old participants to write at all (Sheils, 1975). The report card led to a public shaming, with *Newsweek* magazine publishing a similarly wounding report about the

state of writing instruction in America. Titled, *Why Johnny Can't Write*, Sheils for Newsweek printed embarrassing examples of American teenagers' writing that included obvious mechanical, grammatical, and logical errors. The author criticized writing instruction of the time and called for change (Sheils, 1975). All of these factors succeeded in drawing the attention of lawmakers and researchers to the dismal state of writing in American school.

Applebee, Auten, and Leher (1981) confirmed that writing and writing instruction in high school classrooms was on the decline. High stakes testing forced teachers to shift the view of their students from individuals to test-takers, and the focus on writing was completely disregarded in many schools. As Hobbs & Berlin (2001) so aptly stated, "After all, machine-graded, multiple-choice tests do not require writing ability" (p. 275). Some teachers, however, were already responding to this writer-less climate of education. The National Writing Project (NWP), created in 1974, and the whole language movement would make a significant mark on writing instruction over the next decades (Hobbs & Berlin, 2001).

The NWP was created with the goal of empowering teachers in the instruction of writing so they might teach other teachers and champion writing with the children in their classrooms. Since its creation, the NWP has trained over 70,000 teacher leaders in writing instruction, who have in turn taught 1.2 million other teachers (NWP, 2010). Although the NWP does not take a hard stance on a specific approach to writing instruction, most of the writing project sites use a process-oriented, workshop model to writing instruction. This style of instruction is a 180-degree turn from the handwriting-focused, product-driven instruction of the past, and centers on a writing process that is

not linear, but rather cyclical in nature. It has become accepted that students differ in their advancement through specific stages of the writing process. Children are encouraged to write for extended periods of time at all ages and levels in order to progress naturally through these stages. The stages include rehearsal for writing, drafting, revision, editing, and publishing (Calkins, 1986).

The publication of three widely read professional texts- *Children at Work* (Graves, 1983), *The Art of Teaching Writing* (Calkins, 1986), and *In the Middle: Writing, Reading, and Learning with Adolescents* (Atwell, 1987)- together with Hayes and Flower's (1980) cognitive model of writing supported and spread the popularity of process-oriented writing instruction (Troia, Lin, Monroe, & Cohen, 2009; Hawkins & Razali, 2012). These authors continued the trend of promoting writing as a social process that could be done by children of all ages and of all levels of intelligence, with a focus on content and process rather than correct spelling and grammar. Applebee and Langer (2009) found that by 1992, process-oriented writing instruction had become conventional wisdom, with over 71% of teachers surveyed reporting it to be a central to their writing instruction.

As researchers look at the impact of writing instruction through time, many ask themselves the question, "What is effective writing instruction in classrooms today?" The purpose of this study is to explore the popular process-writing approach of writer's workshop. This study will add mindset and self-regulation instruction to writer's workshop and analyze its effectiveness both qualitatively and quantitatively through a mixed-methods convergent parallel design study.

CHAPTER II

Review of the Literature

Evidence-based Writing Instruction

Although process-oriented writing instruction has become an accepted method of writing instruction, there is still much ambiguity on the best way to teach writing within this framework, and there is some evidence that this approach is not effective for struggling writers (Graham & Sandmel, 2011). Studies have shown a significant amount of variance among teachers who claim to use process-oriented methods on the amount of time they spend on writing instruction and how exactly they deliver that instruction (Graham, Harris, Fink-Chorzempa, & McArthur, 2003; Cutler & Graham, 2008). Some teachers claim a heavy focus on mechanics, grammar, and usage, while others focus more on processes such as planning and revision. All claim a process-approach to writing (Graham, Harris, Fink-Chorzempa, & McArthur, 2003).

In a time where evidence-based methods are essential to researchers and law-makers who often dictate classroom trends, process-oriented writing approaches are lacking in the amount of scientific research supporting its effectiveness in the classroom. The research that has been done has produced varying results. But the differences in findings allow researchers to review and synthesize the studies, providing the ability to paint a picture of effective writing instruction and to see the gaps in the literature.

Three meta-analyses have been conducted reviewing the experimental research on writing instruction. Graham and Sandmel (2011) completed a research synthesis of the process-writing approach to writing instruction. This research considered 29 experimental and quasi-experimental studies conducted in grades 1-12 to see if the

approach improved the quality of students' writing and motivation to write. The results revealed a modest but significant improvement in the overall quality of students' writing in the general education classroom (average weighted effect size [ES] = 0.34); it did not show any statistically significant improvement in students' motivation or in the quality of struggling writers' compositions (Graham & Sandmel, 2011).

The second meta-analysis focused on writing instruction in elementary school (Graham, McKeown, Kiuhara & Harris, 2012). This study synthesized the results of 115 articles, calculating an averaged weight ES for 13 writing interventions. Six of the interventions involved using explicit teaching and strategy instruction to teach writing processes, skills, or knowledge. Grammar instruction was the only intervention that did not produce a significant effect. Strategy instruction, adding self-regulation to strategy instruction, text structure instruction, creativity/imagery instruction, and teaching transcription skills, all produced statistically significant effects for writing improvement (Graham, McKeown, Kiuhara & Harris, 2012). Four writing interventions involved procedures for scaffolding children into writing or supporting students in writing. The use of pre-writing activities, peer assistance when writing, product goals, and writing assessment all produced significant results. Lastly, word processing, increased writing, comprehensive writing programs, self-regulated strategy development model, and the process approach to writing instruction all showed significant improvement in the quality of students' writing (Graham, McKeown, Kiuhara & Harris, 2012).

In the third study, Graham and Perin (2007) studied 176 effect sizes through meta-analysis to understand the most effective elements of writing instruction for adolescents, grades 4-12. The study led to ten specific recommendations for effective

writing instruction in the classroom today, listed in order of greatest to least effect size (Graham & Perin, 2007, p. 4):

- 1. Teach adolescents strategies for planning, revising, and editing.
- 2. Teach adolescents strategies and procedures for summarizing reading material, as this improves their ability to concisely and accurately present the information in writing.
- 3. Develop instructional arrangements in which adolescents work together to plan, draft, revise, and edit their compositions. Such collaborative activities have a strong impact on the quality of students' writing.
- 4. Set clear and specific goals for what adolescents are to accomplish with their writing product. This includes identifying the purpose of the assignment as well as the characteristics of the final product.
- 5. Make it possible for adolescents to use word processing as a primary tool for writing, as it has a positive impact on their writing quality.
- 6. Teach adolescents how to write increasingly complex sentences.
- 7. Provide teachers with professional development in how to implement the process-writing approach.
- 8. Involve adolescents in writing activities designed to sharpen their inquiry skills.
- 9. Engage adolescents in activities that help them gather and organize ideas for their composition before writing a first draft.
- 10. Provide adolescents with good models for each type of writing that is the focus of instruction

The results of these three meta-analyses suggest that a process-oriented writing approach, such as writer's workshop, can be effective on its own for some writers.

However, the approach could be improved and expanded to more writers by adding more explicit strategy instruction, putting less focus on grammar and mechanics, and adding motivational techniques.

Writer's Workshop Approach and Emergent Writers

Writer's workshop grew into a popular approach to process-oriented writing in the mid-1980's. This approach to writing instruction values continuous, repeated exposure to the writing process through four essential elements (Calkins, 1986; Troia et al., 2009):

- Mini-lessons, which are approximately 10 minutes in length and serve as the time of direct instruction where the teacher addresses craft elements, writing skills, and strategies;
- Sustained writing time, in which students engage in personally meaningful writing topics while experiencing the writing process through planning, drafting, revising, editing, and publishing;
- *Teacher and student-led conferences*, which serve as a vehicle for dynamic assessment and individualized instruction while teachers and student help coach each other with one or two teaching points for improving writing;
- *Sharing Writing*, which involves frequent opportunities for students to share his or her writing with authentic audiences.

One of the hallmarks of the writer's workshop approach is the freedom and time that is given to students to write authentically and independently on topics they care about. This approach helps foster student independence as well as explore new facets of the writing process (Snyders, 2013). The term "writer's workshop" was coined by Calkins (1986), but its origins are rooted in emergent writing and can be traced back and connected to the work of seminal researchers such as Clay (1975), Chomsky (1979), and Graves (1983).

Emergent writing is the early stages in which children begin to understand writing as a form of communication and that marks on paper convey a message (Mayer, 2007). There is considerable research to support the idea that children understand writing conveys meaning *before* entering school (Clay, 1975; Chomsky, 1979; Ferreiro & Teberosky, 1979; Graves, 1983). Particularly illustrative is the fact that when children enter school 90% believe they can write, while only 15% believe they can read (Graves, 1983). Chomsky (1971) first supported the idea of young children beginning to write *before* they begin to read in her ground breaking article, *Write First, Read Later*. She was one of the first teacher researchers to promote children's writing in an independent "workshop" type format. She suggested that children as young as preschool should begin to experiment with writing independently. Furthermore, Chomsky suggested that children show an amazing capacity to write when they are given the opportunity to trust their own ears and sounds- they begin to write using their own invented spellings.

Invented spelling refers to young children's attempts to use their best judgment to spell, based on what they already know about letters, sounds and spelling patterns.

These spellings are nonconventional in nature, and usually carry common characteristics across children that shed light on children's knowledge about language (Read, 1971).

Similar to oral language development, writing development does not occur in a rigid,

linear fashion, but is developed through a series of stages, constructed through interaction between what is known and unknown about conventional spelling (Ferreiro & Teberosky, 1979). A writer's workshop format provides space for this interaction of the known and unknown, allowing children to begin to construct writing knowledge.

There is a growing body of research revealing the many ways learning to spell helps form connections in phonological awareness, grapheme-phoneme relationships, and the promotion of alphabetic principles (Richgels, 1987, 1995; Tangel & Blachman, 1992; Gentry, 2000; Hecht & Close, 2002; Ehri, 2005). Learning how to write letters and spell words appears to allow children active participation in learning how print works (Edwards, 2003). All of these skills play a role in learning to read (Adams, 1990). There is also evidence that children who are allowed to write using invented spelling are more confident, motivated, and take more ownership and initiative in their literacy development (Calkins, 1986; Chomsky, 1979).

The roots of writer's workshop can also be found in social constructivism. Social constructivism emphasizes the critical importance of the cultural and social context for cognitive development and the construction of meaning and knowledge. In the same light, Calkins (1986), called writing a "process of developing meaning" (p. 325). Four main ideas from the work of Soviet psychologist Vygotsky (1986), considered the father of social constructivism, are carefully integrated into the writer's workshop framework. The four main ideas and how they relate to writer's workshop instruction are:

• The child is a constructor of mediated knowledge. The role of the teacher in a writer's workshop is one of facilitator, collaborator, and learner. Graves (1994), states that teachers should listen to children in the writer's workshop,

and allow children to "teach them what they know" (p. 17). The teacher helps scaffold and mediate (Vygotsky, 1978) this knowledge through mini-lessons that are created from student conversations and conferences. These mini-lessons target the writing needs of the children in the classroom and help meet students within their zone of proximal development (Vygotsky, 1978) to create space for a new level of learning.

Cooperative learning in a social context helps mediate knowledge and learning. The writer's workshop is a collaborative and interactive environment (Calkins, 1986). Students are encouraged to dialogue with peers about their writing through informal conversations, structured peer-led conferences, and group share time. These times of sharing are meant to become writing conversations that help children understand each other's writing processes, both the successes and the struggles, and allow them to rehearse for the next independent writing time. Whole group sharing usually consists of a few children reading their writing to the group and sharing the experience and story behind the writing process. Many of these sharing sessions become what Calkins (1986) calls "conversation circles" (p. 344) as children grapple with the writing struggle, while also being inspired by the writing of others. The role of the teacher is collaborative-facilitator, as he or she asks questions, such as "How's it going?," "Can you tell me more?," and "What did you do differently this time?" Calkins (1986) refers to teacherstudent and peer conferences as "the heart of teaching writing. Through them, students learn to interact with their own writing" (p. 223). The collaboration

- of writer's workshop provides students with an invitation to talk, sit quietly and listen, and write (Calkins, 1986; Graves, 1994).
- The cultural context of the child plays a significant role in learning. Donald Graves stated, "You can tell a good writing classroom by the presence of the children's own interests in the room" (as cited in Calkins, 1986, p. 233). A hallmark of writer's workshop is allowing children to write what they know and love, meeting them in that space, and building from it to learn new facets of the writing process. Giving children time to write daily and the choice to write about what they want allows children to use their personal culture and knowledge to scaffold their writing learning. The culture of the classroom is also a significant factor in writer's workshop. Creating a culture of writing and respect through daily writing time, sharing, listening, and community building helps children feel safe to take writing risks and begin to view themselves and their peers as writers (Fletcher, 2001).
- Language as vital link to development. Oral language is a foundation for literacy development. A social constructivist himself, James Britton (1970) famously said, "Reading and writing float on a sea of talk" (p. 164). Writer's workshop uses oral language and storytelling to create a bridge to story writing (Campbell, 2009). By telling stories and talking about their writing, students are able to rehearse and revise stories. Storytelling frees reluctant and emergent writers from the constraints and conventional expectations of academic writing, allowing every student a story to share (Campbell, 2009). Writer's workshop is also built on studying the language of others, including

the writing styles of published authors through mentor texts. During minilessons, teachers immerse children in the kinds of quality texts they hope the children will write. The writing community studies and admires the texts together asking themselves, "What did this author do that I could try?" (Calkins, 1986). As students begin to see themselves as writers, they begin to read like writers, noticing the language and craft the author's use, and hopefully begin to carry them over into their own writing (Calkins, 1986).

The social constructivist nature of writer's workshop lends itself well to research using qualitative methods, since children collaborate in their writing and write on topics of their own choice. Hallmarks of qualitative data collection, such as interviews, observations, and coding, help the researcher understand the experiences, thought processes, and writing choices of the children in a workshop setting. Due to these traits, few experimental studies have been conducted to test its effectiveness. The ones that have been conducted suggest the writer's workshop model is effective, but not complete. With a lack of explicit strategy instruction for writing skills and crafts, as well as for creating habits of self-regulation and motivation to write, students (especially struggling writers) come up short in the quality of their writing (Troia et al., 2009; Graham & Sandmel, 2011; Graham et al., 2012). Although writer's workshop does not show up frequently in the empirical literature, many elements of writer's workshop can be found in experimental studies on effective writing instruction. Five of the ten recommended strategies from Graham and Perin's (2007) meta-analysis can consistently be found in a writer's workshop approach:

- Writing strategies. Teachers use mini-lessons to teach writer's strategies to help
 them in each of the stages of the writing process, including rehearsal,
 drafting/revising, and editing (Jasmine & Weiner, 2007).
- *Collaborative writing*. Students collaborate through peer conferences, teacher conferences, and writing share time (Calkins, 1986).
- Prewriting. "Quick writes" (Graves & Kittle, 2005) are used in writer's
 workshop to help students generate writing topic ideas. Writing rehearsal
 includes ideas for noticing and naming writing ideas within the lives of the writers
 (Calkins, 1986).
- *Process writing approach*. Calkins (1986) divided the writing process into four subtopics for the writer's workshop framework: rehearsal, drafting, revising, and editing.
- *The study of models*. Teachers use quality children's books as models for specific traits of writing, including craft and convention. These mentor texts serve as models of quality writing to which the children and the teacher repeatedly come back (Calkins, 1986; Ehmann & Gayer, 2009).

The writer's workshop paradigm can also be connected to the cognitive processing theory of writing first introduced by Hayes and Flower (1980). This model represents the act of writing as a complex process involving a highly embedded organization of distinctive thinking processes, as well as a growing network of goals (Flower & Hayes, 1981). One of these goals includes supporting the complex web of decisions the writer makes in order to bring purpose, clarity, and content to the writing. The cognitive processing model involves three interacting units: the task environment,

the writer's long-term memory, and the writing processes. As research has continued to develop, Hayes (1996) expanded the second unit- the writer's long-term memory- into a more complex system that broadens the narrow long-term memory view into a system that involves the whole individual writer (Hayes, 1996). The whole individual uses long-term memory, cognitive processes, working memory, motivation and affect to interact with the task environment and the writing processes (Hayes, 1996, 2006). The motivation piece in Hayes' framework includes incorporating the writer's goals, predispositions, beliefs and attitudes, and his or her cost-benefit analysis of the writing (Hayes, 1996).

These affective factors of learning have become essential to understanding what motivates children to write. With the adoption of the Common Core standards, researchers are exploring the relationships between writing development, self-efficacy beliefs, perseverance, and effort (Snyders, 2013). The recognition of the role of affective factors in learning could be key to understanding the mind and motivation of a learner.

Affective Factors of Learning

Children's learning is infinitely complex. Academic achievement cannot always be reduced to simple strategy instruction for cognitive skills. Other affective factors, such as motivation, must be considered (Wentzel & Wigfield, 2009). Over the past 40 years, the role of motivation in learning has grown into a field of its own as researchers seek to find why children are motivated or not motivated in certain academic and social situations. This accumulating research has brought motivation to the forefront of the current standards-based achievement climate, drawing attention to the fact that the National Reading Panel's (2000) call for evidence-based research strategies for cognitive

learning should extend to acknowledge motivational functioning as well (Wentzel & Wigfield, 2009).

Motivation research is a multi-dimensional and dynamic network of theories that help tease apart the many affective factors that influence learners and impact their academic achievement (Schuck & Zimmerman, 2007). These areas include:

- *Interest*. What attracts a child's attention and gives them a desire to learn more (Schiefele, 2009);
- *Perseverance*. What influences a child to continue trying even when it is difficult (Zimmerman, 2011);
- *Self-Regulation*. The mindful and intentional thoughts, emotions, and actions that can help a child take charge of and evaluate his or her own learning (Harris, Santangelo, Graham, 2008; Zimmerman, 2011);
- Mindset. Beliefs about the nature of intelligence (Dweck, 2007; Dweck & Master, 2009);
- Attributions. What a student contributes his or her success or failure to (Perry, Nordby & VandeKamp, 2003; Dweck & Master, 2009);
- Self-Efficacy. The learner's perceived capabilities (Zimmerman, 2011).

Mindset and Motivation. Motivation and prior achievement are predictive of students' future academic achievement (Wilson & Trainin, 2007). Linked closely to the umbrella of motivation are a child's self-theories and beliefs about their knowledge and skills to succeed at a task (Dweck & Master, 2009). This perceived competence is accompanied by the perceived need for competence, or whether the child sees the need to

develop mastery of knowledge and skills. What are the child's expectations about accomplishing a specific goal? What does he or she do when faced with a problem? Motivation involves self-theories that emphasize taking initiative in learning, persisting in the face of obstacles, valuing effort, and seeking challenges (Harris, Santangelo, & Graham, 2008; Dweck & Master, 2009). Without growth-seeking self-theories, a child can learn an arsenal of self-regulation strategies but never become a self-regulated learner because he or she does not believe these strategies are necessary for learning (Dweck & Master, 2012).

Two distinct patterns of behavior have been identified as the underlying force behind the self-theories of many children facing challenging situations (Dweck & Leggett, 1988). Research in cognitive psychology has long linked learned helplessness with the perceived inability to persist through failure and difficulty (Diener & Dweck, 1978; Dweck, 1975; Dweck & Reppucci, 1973). When a child has adopted learned helplessness, many times the child attributes failures to an external control, such as lack of ability, unfairness of the teacher, luck, or chance. In this situation the learner sees himself as possessing low locus of control in relation to learning, despite effort (Dweck & Reppucci, 1973). On the other hand, children who have not adopted this pattern of thinking may attribute failure to an internal control, such as effort. These children believe in their own ability to change the failure outcome through hard work, persistence, time, and new learning tools (Dweck & Reppucci, 1973). The earliest research indicated these two patterns of behavior did not apply to young children, due to their lack of understanding of intelligence (Dweck & Leggett, 1988). However, Burhans and Dweck

(1995) expanded the Dweck and Leggett (1988) research to include children as young as preschool, indicating that even the youngest school children demonstrate these mindsets.

The two patterns of external and internal locus of control have been recently labeled as *fixed* mindset and *growth* mindset (Dweck, 2007). A child with a fixed mindset views intelligence as unchangeable, and therefore believes that effort is not useful in reaching academic achievements. When intelligence is viewed as innate ability, the child views failure as equivalent to low-ability and lack of competence. A child with a fixed mindset is looking for ability praise, and therefore chooses easy tasks they know they can accomplish in order to look "smart" rather than fail. These children do not take learning risks and tend to adopt a pattern of helplessness when faced with a difficult task. A fixed view of intelligence discourages students from taking "active charge of their learning" (Dweck & Master, 2012, p. 31). The results of this mindset usually lead to lack of confidence and poor performance over time (Dweck, 2007).

A growth mindset views intelligence as changeable, and therefore believes that challenging tasks can be accomplished through effort and practice. When faced with failure, the growth mindset child perseveres and makes a plan to try harder. These children view effort and growth as part of the learning process and seek challenging work to master through incremental chunks of persistence. They seek effort praise, rather than ability praise, and maintain dedication to hard work. A malleable view of intelligence allows students to take ownership of their own learning as they put in effort, learn and apply strategies, and undertake challenges (Dweck & Master, 2012). Over time, growth mindset learners perform better and gain confidence as they take learning risks and continue to develop (Dweck, 2007).

In summary, the fixed mindset student believes that intelligence is permanent and that learning is static based on native ability. The goal of the fixed mindset student is to look smart, even if learning is sacrificed (Dweck & Master, 2012). These children feel successful if they feel smarter than others, and believe that failure and effort are equivalent to low intelligence (Dweck & Master, 2012). A growth mindset student believes that intelligence is malleable and that effort and strategies create learning. The goal of a growth mindset student is to learn new things even if they are hard or risky (Dweck & Master, 2012). These children feel successful when they improve or master a skill, and believe that failure means they need to try harder or use a new strategy (Dweck & Master, 2012). These students believe that increased effort activates and uses intelligence (Dweck & Master, 2012).

Parents and teachers alike can be involved in shaping the mindsets of children by the way they talk and teach children. Strategy instruction, growth-mindset language, and awareness of the mindsets can help children adopt a growth mindset in order to become self-regulated, motivated learners, who believe in themselves and their ability to work hard. These mindsets can be seen across school curriculum, but especially in the area of writing.

Self-Regulation. Throughout history, even the most accomplished writers have spoken of the difficulty of putting words to a blank page (Zimmerman & Risemberg, 1997). Famous authors, such as Dahl demonstrated techniques of self-discipline that got him writing each day (Dahl, 2013). He used multiple forms of self-regulation as he set aside a specific time, place, and strategies to accomplish his writing. Writing depends on high levels of personal regulation because writing activities are usually "self-planned,

self-initiated, and self-sustained" (Zimmerman & Risemberg, 1997, p. 73). Influences from the environment and personal behavior require writers to self-monitor and self-react to surroundings and to oneself in order to effectively continue in the writing process (Zimmerman & Risemberg, 1997). The self-regulation process is not innate or natural in most children. In fact, many children lack the ability to sustain the creation of ideas, to keep going, and to use writing skills and strategies to generate a little more writing (Flower & Hayes, 1981). Children also tend to rank their motivation for writing lower than reading (Mata, 2011). Because of this, teachers must understand and teach affective skills to children.

The explicit instruction of self-regulation strategies empowers children to face academic challenges. Self-regulated learning training programs have been proven effective, even in elementary school (Dignath, Buettner, & Langfeldt, 2008). A consensus among researchers indicates that students can benefit from self-regulated learning in the areas of academic performance, motivation to learn, and learning strategies (Dignath, Buettner, & Langfeldt, 2008). By explicitly teaching students knowledge and skills that allow them to become self-regulated, self-reflective learners, students can move forward into academic challenges with approach motivation, success, and confidence. According to their meta-analysis, Dignath, Buettner, and Langfeldt (2008) found the most effective self-regulation interventions include the use of a variety of strategies that include feedback, motivation, group work, and cognitive and metacognitive strategy instruction.

Many researchers have sought to measure and understand the motivation and mindsets of children during writing. A growing body of research continues to look for

the most effective strategies for teaching children to become growth motivated and selfregulated writers. To consider the most effective instructional and motivation techniques in emergent writing, the extant research was reviewed.

Inclusion Criteria

The studies for this review were chosen based on several criteria. First, to establish confidence in the quality of the studies, only studies published in a peerreviewed journals were included. No unpublished doctoral dissertations were selected due to conflicting opinions about whether gray literature, such as unpublished doctoral dissertations, should be included in systematic reviews and meta-analyses (Moyer, Schneider, Knapp-Oliver & Sohl, 2010). An electronic search was conducted using the PsychINFO database. The first search was completed using the category limiters, "writing" and "motivation." This search produced 1,141 studies. All 1,141 abstracts were read and reviewed to determine relevance. Only studies written in English using elementary aged children were included in the review. Digital writing and content area studies were excluded, as well as studies that only addressed classroom practice and teacher training. Studies that addressed spelling only were not considered relevant to the process-approach for writing and were excluded. Studies using participants with exceptionalities (e.g. gifted students, students with hearing impairments) were excluded from the study.

In the end, eighteen studies were coded and considered for review. They were collapsed into four groups based on the research method: quantitative experimental studies, questionnaire/survey studies, qualitative studies, and mixed-method studies. The three quantitative experimental studies can be found in Table 1 (Graham, Harris &

Mason, 2005; Harris, Graham, & Mason, 2006; Neumann, Hood, & Ford, 2013). The three questionnaire/survey studies can be found in Table 2 (Mata, 2011; Miller & Meece, 1999; Wilson & Trainin, 2007). The five qualitative studies can be found in Table 3 (Abbott, 2000; Nolen, 2007; Oldfather, 2002; Perry, VandeKamp, Mercer, & Nordby, 2002; Snyders, 2013), and seven mixed-method studies can be found in Table 4 (Gambrell, Hughes, Calvert, Malloy, & Igo, 2011; Gutman & Sulzby, 2000; Jasmine & Weiner, 2007; Mason, Meadan, Hedin & Cramer, 2012; Mavrogenes & Bezruczko, 1993; Troia, Lin, Monroe, & Cohen, 2009; Troia, Harbaugh, Shankland, Wolbers, & Lawrence, 2013).

Table 1

Writing + Motivation Elementary School Quantitative Experimental Studies

Study	Intervention	Grade	Student Description	Fidelity Reported	Length	Treatment Delivery	Standardized Measures	Standardized Measure Effect	Researcher Designed Measure	Researcher Designed Effect
Graham, Harris, & Mason, 2005	Self- Regulated Strategy development (SRSD) vs SRSD with peer support	3 rd	72 struggling writers, 44 boys/28 girls, predominate- ly AA, 67% free and reduced lunch	Yes	20 hours	Graduate students	Test if Written Language TOWL-3	a) composing time: 2.17 (SRSD) 1.73 (SRSD + peer) b) length: 3.23 (SRSD) 2.29 (SRSD + peer) c) elements: 1.79 (SRSD) 1.76 (SRSD + peer) d) quality: 2.42 (SRSD) 1.90 (SRSD + peer)	Knowledge Measure (4 questions) Self- Efficacy Measure (5 questions)	.50 (SRSD) 2.20 (SRSD + peer) no effect
Harris, Graham, & Mason, 2006	SRSD vs SRSD with peer support	2 nd	66 struggling writers, 37 boys, 26 girls, predominately AA, 57% free and reduced lunch	Yes	28 hours	Graduate Students	TOWL-3	Average effect for planning and story completeness: 1.50 (SRSD and SRSD + peer)	Knowledge Measure (3 questions) Effort and Intrinsic Motivation (teacher ranking)	.97 (SRSD and SRSD + peer) no effect

Table 1 (Continued)

Writing + Motivation Elementary School Quantitative Experimental Studies Continued

Neumann, Hood, & Ford (2013)	Teaching letters and sounds using environmental print (EP), standard print (SP), or no intervention control	PreK	73 typically developing 3 and 4 year olds, 37 boys, 36 girls, Australian	Yes	4 hours	PPVT-IV	Used as a screener and covariate	Letter Name Letter Sound knowledge Letter writing	No difference .71 (EP vs control) no difference with intervention groups
								Print concepts (Clay, 2005) Environmental Print Reading Standard Print Reading	.59 (EP vs control) no difference with intervention groups .41 (EP vs control) 1.52 (EP vs. SP) .62 (EP vs. control)
								Print Motivation	.84 (SP vs. control) .42 (EP vs. SP) EP showed higher motivation than both

Table 2

Writing + Motivation Elementary School Questionnaire/Survey Studies

Study	Description	Delivery	Grade	Student Description	Fidelity Reported	Length	Measures	Results
Mata, 2011	Interviews to assess literacy motivation using the Reading and Writing Motivation Scale	Researcher and assistant with 2 stuffed animals	K	451 children, half boys/girls, will be passed to 1st grade, half parents have higher education	No	15 min. interview	Researcher created 36-item Motivation for Reading and Writing Profile using two contradictory statements for rating (I like/ I do not like)	Scale 1-4 Enjoyment: R: 3.55 W: 3.46 Value: R: 3.67 W: 3.59 Self-Concept: R: 3.57 W: 3.54 No gender differences Motivation scores for writing tend to be lower

Table 2 (Continued)

Writing + Motivation Elementary School Questionnaire/Survey Studies Continued

Miller & Meece, 1999	Evaluated students' motivational preferences for reading and writing tasks by giving performance judgments and value ratings for 2 high and 2 low challenge tasks	Individually interviewed by first author, 85% within one hour of task completion, all within 24 hours	3	24 students, 2 low, average and high achievers from four classrooms, predominately European American	No	2 weeks	Student interviews evaluated how they thought they did, preferences, and understanding on a Likert scale 1-10. Preferences were explained further in free response. Interviews coded into "content" and "learning" related categories. Teachers were rated for high/low challenge tasks in the classroom	All students expressed preference for high vs. low challenge tasks Max exposure to high challenge kids = positive responses Minimal exposure to high challenge kids = negative reactions All students generally don't like the low-challenge tasks.
Wilson & Trainin, 2007	Examined factors affecting motivation for reading, writing, and spelling in primary grades	One-on-one, administered by graduate students	1	198 English Speakers, 47% white, 42% Hispanic, 7% African American (AA), 4% other, one low socio- economic status (SES) school, one middle SES school	No	15-20 mins each interview	Early Literacy Motivation Survey: Researcher created, perceived competence (7items), self- efficacy (6 items), attributions (10 items) Used scenarios and short tasks to contextualize questions	Self-efficacy for writing was significantly greater than for spelling Literacy attributions mediated between achievement and self-efficacy and perceived competence There is a strong link between literacy achievement and attributions- students with higher achievement articulated more internal attributions like effort, while lower literacy achievement attributed to external factors.

Table 3

Writing + Motivation Elementary School Qualitative Studies

Study	Description	Method	Grade/ Student Description	Theoretic al Frame	Data Collection	Length	Results
Abbott, 2000	Interpretive study that examines two boys' intrinsic motivation for writing, specifically the ways in which children who self-sponsor writing express "flow experiences"	Multiple Case Studies Constant Compar- ison Analysis	Two 5 th grade boys, mixed race Latino/ Caucasian and African American	Self-determination theory Flow in writing Vygotsky sociocultural theory	Interviews with students, children's texts, field notes, individual interview with a child-designated informed other, interviews with child-designated teachers, & demographic & academic achievement data	10-14 hours of inter- views and 200 pages of trans- cripts for each student	-Categories were collapsed into three larger categories: Person, Activity, Social Contexts -The degree of perceived choice matters -Teachers with autonomy-supporting rhetoric early -Merging of the self with the activity -Collaborate with a community of readers and writers; The social context plays a role in the learning -Engaged in interesting activities; Personal interests & student perceptions considered

Table 3 (Continued)

Writing + Motivation Elementary School Qualitative Studies Continued

Nolen, 2007	A longitudinal design to examine changes in individuals' motivations to read and write across 2 or 3 years.	Longitudinal Triangulation Constant Comparison Analysis	67 students beginning in grade 1 and ending in grade 3 from two elementary schools- one high SES and one low to medium SES	Motivation theory Social contexts in literacy motivation Grounded Theory	Child interviews, Reading scenarios (pictures of students alone & in groups, model of a reading group with disfluent reader), teacher interviews	3 years, students and teachers interviewed each year	Analysis of field notes, teacher interviews, and child interviews suggests that children's motivation for literacy is best under- stood in terms of development in specific contexts. Development in literacy skill and teachers' methods of instruction and raising motivation provided affordances and constraints for literate activity and its accompanying motivations. The positions of poor readers and the strategies they used were negotiated and developed in response to the social meanings of reading, writing, and relative literacy skill coconstructed by students and teachers in each classroom.
Oldfather, 2002	Qualitative study to gain insights about students' thoughts, feelings, and actions when not initially motivated for literacy tasks, and to give ways in which some of those students were able to become intrinsically interested	Interpretive case study Constant comparison coding of the interviews Students checked the interpretations	5th and 6th graders, 31 students total, purposive sampling for interviews was 8 males and 6 females	Vygotsky's sociocultural theory Constructivist view Students as corresearchers	Interviews: The purpose was not to measure motivation or achievement but to understand the students' experiences and report what they say their worlds are like. Classroom observation (95 hours)	8 months, 95 hours, 41 interviews	Situation 1: Cases of evolving positive motivation: students lacked initial motivation, but ultimately gained motivation for the tasks and complete them (Choosing a positive attitude, Searching for worthwhileness, Observing classmates' interest, Self-regulating attention, Learning from boredom, Just starting the activity) Situation 2: Cases of negative motivations: students lacked initial motivation and did not gain intrinsic motivation, but completed the tasks. (Maybe an extrinsic motivation is needed) Situation 3: Cases of nonmotivation: students lacked initial motivation, did not become motivated, and either avoided or felt unable to complete the activity (Feel anger and rebellion, Want autonomy, Feel anxious and less than competent, Feel the need for an energy release, Need hands on activities) Student-teacher should develop a relationship that is open and honest

Table 3 (Continued)

Writing + Motivation Elementary School Qualitative Studies Continued

Perry, VandeKamp, Mercer, & Nordby, 2002	Uses qualitative methods to study young children's engagements in self- regulated learning, and what characterizes high self- regulated classrooms	Observation with protocol Coding into categories, interviews and observations (Constant Comparison)	K-5, suburban school district	Self- Regulated Learning research	"Running Record" Observation Protocol: 1st section: Who, where? 2nd section: What is going on? 3rd section: lists categories, that distinguish high Self-Regulated Learning (SRL) environments Coding: assign each running record a rating of 0 or 1 for each of the overarching categories (choice, challenge, self-evaluation)	Over two school years, once a month for 2-3 hrs.	In high SRL classrooms: Lowachieving students did not shy away from challenging tasks, Engaged in complex tasks, Monitored and evaluated their learning, Saw errors as opportunities to learn, Saw challenging tasks as worthwhile and fun At the beginning of the study 64% of students interviewed indicated that errors made them feel unhappy, and 47% said that they believed errors made their teacher unhappy At the end of the study 37% said errors made them feel unhappy, and 22% said errors made their teacher unhappy Number of students indicating preference for an easy task reduced from 50% to 26%
Snyders, 2013	Uses Qualitative Multi-case study to explore how kindergarteners describe themselves as writers, grow in self- efficacy, and notice and utilize writing processes from the literature	Multiple case study Constant Comparison	kindergarten	Case studies (Creswell, 2009) Vygotsky's social constructivist view (1978) Writer's Workshop (Calkins, 2011)	Student writing interviews, video-taped student- teacher conferences, and student written work	10 weeks, three days a week from 8:15- 9:20	Student stamina and engagement increased. Students utilized strategies and techniques from the Writer's Workshop mini-lessons. Students adopted the qualities of writers in their views of themselves.

Table 4

Writing + Motivation Elementary School Mixed-Methods Studies

Study	Description	Delivery	Grade	Student Description	Fidelity Reported	Length	Measures	Results
Gambrell, Hughes, Calvert, Malloy, & Igo, 2011	Reading, writing, and discussion were examined within the context of a pen pal intervention focusing on	Classroom teachers with 12 professional development trainings, no control group	Grades 3-5	180 students from 4 different schools, diverse	No	7 month period, 3 letters exchanged	Literacy Motivation Survey (LMS) Small-group discussion transcripts 28 semi-	LMS: .39 Authentic literacy tasks have the potential to support and sustain students' literacy motivation.
	authentic literacy tasks.						structured interviews	Students demonstrated accountability, community, and critical thinking.
Gutman & Sulzby, 2000	Examined children's intrinsic motivation during an emergent letter writing task in both controlling and autonomy-supportive adult-child interactions.	One on one with researcher and student, random assignment with order or intervention, video taped	K	20 African American students, 10 boys, 10 girls	No	Two weeks	Video tapes transcribed and coded using Harter's Scale of Intrinsic- Extrinsic orientation and perceived competence scale Sulzby's forms of writing and rereading checklist	Children in the autonomy- supportive made more statements of interest than children in the controlling context. Children in the controlling followed by autonomy- supportive made more statements of dependent mastery. Children in the autonomy- supportive produced more emergent like writing such as drawings, letter-like units, random-letter strings, etc.
Jasmine & Weiner, 2007	Exploring to what extent does writer's workshop enable first graders to become confident, independent writers	Implemented by the teacher as the researcher, no control group	1 st grade	21 students, ages 5-6, 12 boys and 9 girls	Yes	January 26-March 8 in the same semester, 2-3 times a week for 35-40 minutes	Writing Attitude Survey: 12 close-ended questions regarding child attitudes toward writing on a 4-point Likert scale. Observation checklist: systematic observation Pre/Post student writing sample: graded on a rubric Interviews/ Transcriptions: 7 students asked 6 open- ended questions	Survey: slight increase in enjoyment of writing (2.39 to 2.89), increase in enjoyment for sharing writing (2.37 to 3.32) Observation checklist: not reported Writing samples: adding sentences improved (2.11 to 3.84), capitals and punctuation improved (2.0 to 3.95), and spelling improved (4.12 to 4.56) Interviews: Students gained confidence in writing topics, sharing work, and using the writing process.

Table 4 (Continued)

 $Writing + Motivation \ Elementary \ School \ Mixed-Methods \ Studies \ Continued$

Mason, Meadan, Hedin & Cramer, 2012	To evaluate motivation of 20 students who struggle with reading and writing prior to and after receiving SRSD for reading comprehension (TWA) and SRSD for reading comprehension plus informative writing (TWA + PLANS)	Researcher and graduate assistants collaborated to conduct interviews and administer questionnaires	4 th grade	20 students, 7 boys, 13 girls, general education classroom	No	Ten 30 minute instruction al lessons	Open-ended motivation interview (Grounded Theory) Motivation for Reading Questionnaire (Wigfield & Gutherie, 1997) Open-ended interview specific to the intervention	Codes: importance, motivation, efficacy beliefs, task perceptions TWA group favored TWA + PLANS with ES = .42 Each group reported that the intervention helped them become better readers and writers, and increased motivation. Lack of findings for the social aspects of the reading and writing.
Mavrogenes & Bezruczko, 1993	Longitudinal study (K-3) to measure influences on writing development	Paper questionnaires sent home and researcher interviews	K-3	735 African American children from Chicago Public Schools, predominately low income and "at risk"	Yes	Over 4 years	-Teacher questionnaire (each year) Parent questionnaire (year 2 and 4) Child questionnaire (year 3 and 4) Writing ability (2 questions) -One qualitative case study -Student samples	Significant correlations between writing ability and effort, attitude, teacher and student expectations, maturity, motivation, self- confidence, and behavior More writing should be included in curriculum, and more attention to affective factors
Troia, Lin, Monroe, & Cohen, 2009	The effects of writer's workshop on both achievement and motivation writing-related outcomes	6 classroom teachers using a comprehensive school-wide literacy program supporting Writer's Workshop	2-5	Six 2 nd graders, fourteen 3 rd graders, six 4 th graders, six 4 th graders, and five 5 th graders, 55% male, 45% female, 50% African American, 25% European American, 22% Asian American, predominately low SES, 10 strong writers, 11 average writers, 10 weak writers	Yes	4-5 days a week for 45 mins a day for one school year	WJ-III (four subtests for Reading, five subtests for writing) Portfolios: Samples graded by quality traits and structural elements Motivation: Attitudes and Self-Efficacy Rating Scale Writing Goals Scale	Good and poor writers did not benefit appreciably from writing workshop instruction in terms of their writing performance when entering literacy skills were held constant. Good writers demonstrated significant growth in the quality of their writing portfolio samples, scored by their teachers from September to June. Poor writers made a 28.5% improvement in the quality of their portfolio samples, this gain was not significant. Children's motivational stance toward writing improved regardless of writing competence-there was a small but significant increase in task goals and a small but significant decrease in ego goals and avoidance goals.

Table 4 (Continued)

Writing + Motivation Elementary School Mixed-Methods Studies Continued

Troia, Harbaugh, Shankland, Wolbers, & Lawrence, 2013	Exploring relationships between writing motivation, writing activity, and writing performance - specifically for grade, sex, and ability	Group administered by teacher	4 -10, excluding 8 th grade	618 students, 320 girls, 298 boys, majority European American, with 14% Latin American, 9% African American, and 5% Native American, half considered good writers by teacher, 16% poor writers	Yes	After 3 rd month of school, each measure within one week of each other	Writing Activity and Motivation Scale: 30 items related to writing motivation: 7 self- efficacy, 4 success attributions, 5 task interest/values, 4 mastery goals, 4 performance goals and 6 avoidance goal items. An 11 point scale was used for each item ranging from 0 (totally disagree) to 11 (totally agree) Teacher judgment: ranking good, average, and poor writers Narrative writing task: Respond to one of two prompts	Female students and older students wrote qualitatively better fictional stories, as did students with high writing ability ranking from teacher Females, better writers, and younger students reported more frequent writing activity in and out of school Grade and sex directly influence writing activity Sex, teacher judgments, and writing activity directly influenced writing motivation Teacher judgments, grade level, and motivational beliefs each exerted a significant direct positive influence on narrative quality Performance goals
								exerted a significant direct negative impact on quality

Quantitative Experimental Studies

Three quantitative experimental studies were found in this search (Graham, Harris & Mason, 2005; Harris, Graham, & Mason, 2006; Neumann, Hood, & Ford, 2013). Two of the studies were similar experimental studies implemented by the same authors, with different populations (Graham, Harris & Mason, 2005, 2006). The third study used three

experimental groups to test the effectiveness of an environmental print intervention on print motivation and literacy achievement (Neumann, Hood, & Ford, 2013).

The first two studies tested the effectiveness of the self-regulated strategy instruction intervention (Graham, Harris & Mason, 2005, 2006). Each of these studies had over 50 participants and completed an average of 24 hours of intervention. The control groups of these studies used the writer's workshop approach to writing instruction. The Test of Written Language Third Edition (TOWL-3) was used for each of these studies as a standardized measure. This measure seemed to work effectively for measuring writing achievement in various sub categories. Self-Regulated Strategy instruction resulted in large effects for all of the measures except for self-efficacy, effort, and motivation. This could be because the researcher-designed measures were not sensitive to growth in these areas. The self-efficacy measure in Graham, Harris, and Mason (2005) only used five questions to determine the self-efficacy of the children. Increasing the number or nature of the questions may increase the measure's sensitivity to change. To be more effective, this assessment should add more questions, or triangulate with a qualitative interview. The motivation measure for Harris, Graham, & Mason (2006) was a teacher-report measure in which teachers were asked to rank students' intrinsic motivation on an 11-point scale ranging from not motivated at all to highly motivated. This teacher ranking could be triangulated by asking the students to rank their own motivation, as well as by adding in qualitative interviews. The youngest participants in both of these studies were in second grade. It would be beneficial to extend an experimental study into kindergarten when children are just beginning to learn to write. As for writing instruction, the results of these studies show that writer's

workshop could be improved upon with explicit strategy instruction, as well as self-regulation techniques.

The third study did extend into preschool, focusing on environmental print as a literacy motivator (Neumann, Hood, & Ford, 2013). Although this study reached into preschool, the intervention involved mostly letters, sounds, and print, without any writing instruction. The writing motivation measure and the age of the students made the study relevant to this work, although writing instruction would make the study more pertinent.

Questionnaire/Survey Studies

Three questionnaire/survey studies were found in this search (Mata, 2011; Miller & Meece, 1999; Wilson & Trainin, 2007). These surveys focus on value, self-perception, and enjoyment of reading and writing, as well as literacy task preferences. Two of the survey studies had large sample sizes of 198 (Wilson & Trainin, 2007) and 451 (Mata, 2011), while the Miller and Meece (1999) study had only 24 participants. The researchers in each of these studies spent less than 15 minutes with each child, making their judgment of the children based solely on one questionnaire or survey. The brevity of the studies combined with the limited number of data points makes the results of the studies highly dependent on the reliability and validity of the test. Wilson and Trainin's (2007) measure covered more attributes of motivation than the other studies by providing questions from three subcategories: perceived competence, self-efficacy, and attributions. Reliability and validity were reported within acceptable range at $\alpha = .87$ (Nunnally & Bernstein, 1994). Two of these studies extended into a younger age range than the experimental studies, assessing students from kindergarten and first grade (Mata, 2011; Wilson & Trainin, 2007). The studies could be improved by adding multiple measures

or qualitative analysis. By doing this, the researchers would triangulate their findings, as well as reduce bias.

Mata's (2011) study showed that kindergarten students see more value, enjoyment, and perceived ability with reading over writing. Wilson and Trainin (2007) observed a strong link between literacy achievement and attributions. Students with higher achievement articulated more internal attributions like effort, while lower literacy achievement attributed to external factors (Wilson & Trainin, 2007). This lack of motivation in writing should be addressed through strategy instruction that can help students build their confidence, love for writing, and growth mindset. Miller and Meece (1999) suggested one way to do this is through high challenge tasks that get children working together over time.

Qualitative Studies

Five qualitative studies were found in this search (Abbott, 2000; Nolen, 2007; Oldfather, 2002; Perry, VandeKamp, Mercer, & Nordby, 2002; Snyders, 2013). In qualitative methods, the researcher becomes a part of the classroom, engaging in their learning environment (Gall, Gall, & Borg, 2007). One of the strengths of these studies is the length of time spent with the participants. Each of the researchers spent close to an entire school year with the participants, allowing the students to become an integral part of the research. Oldfather (2002) even allowed the participants to crosscheck the analysis and play a role in future research objectives. Another strength was the development and use of rigorous observation protocols. These protocols included scripted areas for observation as well as checklists to focus the observer. Perry, VandeKamp, Mercer, & Nordby (2002) took great care to implement an observation protocol, making their

observations more reliable. The qualitative researchers were able to give specific recommendations for classroom practice that could improve motivation in writing. Choice, community, challenge, and time and tools to write in a workshop format are some of the recommendations given by the researchers. The qualitative methods here support the complexity of motivation by seeking to understand the experiences of the children, but a quantitative experimental design using valid and reliable measures could strengthen these methods. Without these, the findings cannot be generalized or used for predictive purposes due to extraneous variables and biases that occur when a design does not employ comparison randomization in a larger sample size.

This allows for classroom practice to play a role in the conclusions, but again, cannot be generalized because the findings might be unique to the relatively few people included in the research study. Support from quantitative methods can help support this research.

Mixed-Methods Studies

Seven mixed-method studies were found in this search (Gambrell, Hughes, Calvert, Malloy, & Igo, 2011; Gutman & Sulzby, 2000; Jasmine & Weiner, 2007; Mason, Meadan, Hedin, & Cramer, 2012; Mavrogenes & Bezruczko, 1993; Troia, Lin, Monroe, & Cohen, 2009; Troia, Harbaugh, Shankland, Wolbers, & Lawrence, 2013). The strength of the mixed-method design is that the multiple data points that serve to triangulate and confirm the conclusions from the study. In these studies, the researchers used a variety of measures that included at least three of the following: teacher measures, student surveys, parent questionnaires, student writing samples, case studies, and standardized measures to assess the children. With this many data points, the researchers were able to analyze

writing and motivation from multiple perspectives in order to confirm or disconfirm the evidence.

Significant correlations between writing ability and the affective factors of effort, attitude, teacher and student expectations, maturity, motivation, self-confidence, and behavior were found, supporting the idea that these qualities play an important role in writing instruction (Mavrogenes & Bezruczko, 1993). Troia et al. (2013) found that younger children reported more writing in and out of school; they appeared to be more motivated than older children. By understanding how and why emergent writers stay motivated, we can use that information to help older children continue to be inspired to write. Only two of these studies address kindergarten participants (Gutman & Sulzby, 2000; Mavrogenes & Bezruczko, 1993). Gutman and Sulzby (2000) found that emergent writers make more statements of interest and produce more emergent-like writing when taught in an autonomy-supportive environment.

Regarding the writer's workshop approach, Troia et al. (2009) found that good and poor writers did not benefit appreciably from the writer's workshop approach to writing. They suggested that this is due to lack of explicit strategy instruction, goal setting, progress monitoring, and self-evaluation within the writer's workshop method. This confirms the need for affective factors to be addressed during writing instruction. By including motivation strategies that will help students see themselves as writers, and give them the tools to persist and problem-solve in writing, we can help improve the writer's workshop process approach.

The mixed method design was the most used for elementary writing motivation studies, but only two of the seven studies employed an experimental design (Gutman &

Sulzby, 2000; Mason, Meadan, Hedin, & Cramer, 2012). More studies using an experimental mixed-method design with multiple groups would be beneficial to the literature.

Across the Studies

When the studies are examined together, across the boundaries of method, it can be determined that there is a need for a mixed-method study that employs an experimental intervention supported by qualitative observation, interaction, and analysis in the area of motivation and writing in elementary school-specifically in emergent writing levels, such as kindergarten. With topics as complex and multi-faceted as writing and motivation, more than one data source from both experimental and exploratory viewpoints could help strengthen the weaknesses found when using quantitative and qualitative designs alone (Creswell, 2011). Mixed methods research collects and analyzes both qualitative and quantitative data within a single study in order to provide the researcher with expanded viewpoints, this allows for "multiple ways of seeing and hearing" (Greene, 2007, p. 20) in the study. More specifically, there is a need for two specific kinds of assessments: a writing task measure and a self-report measure. The mixed methods studies reviewed above use a variety of assessments, but none of them employ a standardized writing measure or a writing task that requires students to support their talk about writing motivation with writing action.

CHAPTER III

Methodology

Research Design

This study used a convergent parallel mixed methods design, where qualitative and quantitative data were collected in parallel, analyzed separately, and then merged together for an overarching interpretation (Creswell, 2011). Rooted in the tradition of triangulation, convergent parallel designs seek to obtain triangulated results about a single topic through multiple and varied data points (Creswell, 2011). This mixed methods study addressed four quantitative research questions and four qualitative questions. The quantitative questions were: (1) How does the writer's workshop plus mindset instruction affect the overall writing achievement on a standardized measure?, (2) Is the writer's workshop plus mindset instruction effective on a near measure of writing closely aligned to instruction?, (3) Does the writer's workshop and mindset instruction increase literacy and writing motivation in young children?, and (4) Do children persevere through challenging writing tasks?. The qualitative questions were: (1) Does children's thinking about their writing and motivation change when teachers use the writer's workshop plus mindset intervention?, (2) How are writing and mindset skill strategies evident as children work through difficult writing hurdles?, (3) Does children's writing change qualitatively over time when teachers use the writer's workshop plus mindset intervention?, and (4) How are children verbalizing their thinking when they are working through writing tasks and self-reflecting on their personal motivation?.

In the present study, various writing and motivation measures were used to understand the impact of the intervention on writing achievement and motivation for

kindergarteners at Acorn Academy (pseudonym). Qualitative data of interviews, task discussions, field notes, and observations explored the experiences of the children as they made meaning of the intervention through writing and motivation tasks. By collecting and converging data from both the quantitative and qualitative traditions, greater insight was obtained than if either type of data was collected and interpreted independently (Creswell, 2011). Data was collected from a convenience sample (Gall, Gall, & Borg, 2007) of two kindergarten classes, totaling 28 children. The sample was randomly assigned to either the control group or the experimental group, creating two groups of 14. Midway through the study, one student in the control group moved to another school and subsequently withdrew from the study, leaving 14 participants in the experimental group 13 participants in the control group.

Participants

This study took place at a small private elementary school in the mid-south. Acorn Academy (pseudonym) serves approximately 220 students ages pre-kindergarten through 6th grade. The school's mission statement maintains its dedication to serving an economically, racially, and culturally diverse student body. This diversity is accomplished by providing full scholarships or financial assistance to over 65% of the student population. Over 138 families are served, with 30% of students coming from single-parent households, and 50% of the students from minority backgrounds.

The participants for this study included all of the kindergarten children that attend Acorn Academy. Each kindergarten child was asked to participate, with no exclusion criteria. Parental consent was collected prior to the study. All families signed consent. In the beginning, two classes of 14 children served as a sample of 28 total participants.

By the end of the study, there was an attrition rate of one, as a student moved to another school, bringing the total number of participants to 27. These children ranged in age from 5-6 years old, and came from a variety of economic and cultural backgrounds. The control group consisted of nine boys and four girls. Forty two percent of the students in the control group were on free or reduced lunch. The control group consisted of five African American children, five Caucasian children, two Latino children, and one child reported having multiple ethnicities. The experimental group consisted of nine boys and five girls. Forty six percent of the students in the experimental group were on free or reduced lunch. The experimental group consisted of five African American children, six Caucasian children, one Latino child, and two children reported having multiple ethnicities. Each student was assigned a number, one through 28 and 14 of the numbers were randomly selected to form the experimental group. Number 20 dropped out of the study half way through. Each participant had an equal chance of being picked through the random assignment, and was measured for pre-test differences. The experimental group was instructed by the researcher in a separate classroom three times a week for one hour, and the control group experienced a business-as-usual writing instruction time, which included instruction in writer's workshop.

Procedures

Students were individually randomly assigned to two conditions including the experimental group (i.e., writer's workshop plus mindset) who received a writer's workshop plus growth mindset instruction from the researcher and a control group (i.e., writer's workshop only) who received a writer's workshop without growth mindset instruction from the classroom teacher.

Experimental Condition. The independent variable of this study was the presence or the absence of a growth mindset in an intervention based on the writer's workshop model for writing (Dweck, 2007), especially mindset and motivation as it relates to writing. This intervention contained lessons and instruction for a one-hour time block, three days a week on Tuesdays, Thursdays, and Fridays. The researcher and one research assistant implemented the instruction. The intervention began the week of August 18th in the Fall of 2014, and ended the last week of October. Each session was divided into a 20-minute mindset lesson, followed by a 40-minute writer's workshop format of mini-lessons, independent writing, and sharing. The intervention lessons can be found in Appendix A.

The motivation lessons focused on the brain and how it can grow when people learn new things and persist through difficulties in the learning process. Many of these lessons stemmed from children's literature with characters that persist through failure and difficulties. See Appendix B for examples of mindset lessons and a list of the children's literature used in the intervention.

The writing lessons included explicit strategy instruction for persevering through writing when a student gets stuck, as well as lessons on writing craft and some grammar lessons. See Appendix C for examples of writer's workshop lessons. Learners were taught specific strategies to help them persevere and persist through writing challenges, the specific strategies taught the use of self-talk strategies, self-editing checklists, anchor chart references, and mini-lessons for spelling difficult words and coming up with writing ideas. See Appendix D for examples of strategy instruction materials.

Mindset instruction was the most unique part of the experimental condition.

Ziggy and Nash, two fictional characters, served as the mascots for both the growth and the fixed mindset, respectively. These characters were introduced at the beginning of the semester through researcher-created books found in Appendix F and were referenced throughout the semester when learning about the growth verses fixed mindsets. Each character is represented as a male figure. Although it was considered to use male representations with male students and female representations with female students, the whole group nature of the lessons did not make that possible. Thus male pronouns are used for the characters, but the names and physical representations of the characters do not represent any specific gender.

Ziggy is a representation of the growth mindset, as he faces challenges with increased effort. Ziggy likes to learn new strategies and thinks that practice will help grow his brain and he will get better. Nash is a representation of the fixed mindset, as he quits in the face of challenges. Nash likes to stick with activities that are easy for him, and does not pursue challenges or new strategies to help him learn more. These characters were referenced throughout the intervention, as students were encouraged to think like "Ziggy" and say, "I can do it! Bring on the challenges!"

Along with Ziggy, children's literature was used to teach the growth mindset. Specific language and skills were taught through these read alouds. Children's book characters were used to relate specifically to the children as these characters faced difficulty and persevered. Examples of lessons using children's literature read alouds can be found in Appendix B. Each book cover was copied for each book that was read in the experimental condition. In the style of Vasquez (2004), these book covers were placed

on tri-fold posters to keep an audit trail of the characters and as well as ideas learned from each book. This audit trail was referenced repeatedly throughout the intervention as students attempted to grow their mindsets and motivation.

A combination of Ziggy and Nash, as well as the children's book literature, helped create a classroom culture centered around growth mindset talk. Appendix D contains a student self-talk checklist that focused on teaching children mindset language such as, "With a little effort and time, I can do this!" or "A mistake? Great! I can learn from my mistakes." This self-talk helped students train their brains to push through difficult learning challenges with increase effort and motivation. A mindset language checklist for the teachers and researchers can be found in Appendix J.

Lastly, students participated in mindset tasks using games from *Think Fun* (Ricci, 2013a, 2013b). These games were designed to increase perseverance, build motivation and develop reasoning skills in students, as they face challenging tasks. Rush Hour Jr. is one example of these games. In this game, students shift blocking cars and trucks out of his or her way to clear a path to the exit. Another example is the game Swish Jr. where students created a "Swish" by layering two or more cards so every shape fits into the outline of the same shape and color. A researcher-created game called "Challenge Words" was also played during this time. In this game students drew items out of a brown paper bag and used their best phonetic spelling to spell the name of the item on a white board. These challenge words were added up at the end for stickers. These games were played every Friday in center and small groups, and students worked to build stamina and face challenges together.

One research colleague was present with the experimental group once a week to observe and assist with the intervention. She served as a second set of eyes and ears in order to corroborate the findings through fidelity checklists and collaborative discussions to confirm, disconfirm, and notice in the qualitative measures. The research assistant was trained over two days for a total of five hours on the implementation of the intervention. See Appendix E for fidelity checklist and an observation sheet.

Control Condition. The control condition took place in a separate classroom where students participated in a business-as-usual control that used writer's workshop as a literacy and writing framework. This writer's workshop included mini-lessons on specific writing content and independent writing time. Shared writing and independent writing on a student-led topic were also a part of the control group instruction. The control condition did not participate in the motivation and mindset portion of the experiment. Self-regulation strategies like the editing checklists and self-talk strategies were also not used with the control group. The Ziggy and Nash books were read to the control group prior to the Literacy and Writing Motivation pre-test, but were not referenced again after that time.

Quantitative Data Collection and Analysis

The quantitative portion of this mixed-methods study was an experimental, prepost-test control group design. Using a pre-test/post-test control-group design allowed
the researcher to attribute post-test change in the treatment group, beyond that of the
control group change, to the intervention (Gall, et al., 2007). Multiple quantitative
measures were used to determine the effectiveness of the intervention and were given as
both a pre-test and a post-test at the beginning and end of the study. A research assistant

helped administer these tests and was trained over two days for approximately five hours total on the testing procedures. The first two measures addressed research questions concerning the outcome of writing achievement. The second two measures addressed research questions concerning the outcome of motivation and mindset. In the following sections, each measure will be addressed with a description of the measure, the research question it addresses, the analysis plan, and the hypothesis.

TEWL-3. The first measure was a standardized writing measure called the Test of Early Written Language, Third Edition (TEWL-3) (Hresko, Herron, Peake, & Hicks, 2012). This measure was used to answer the question, "How does the writer's workshop plus mindset training affect the overall writing achievement on a standardized measure?" The TEWL-3 is a companion to the Test of Written Language Fourth Edition (TOWL-4) (Hammill & Larsen, 2009) and extends the assessment range to younger children, ages 4:0 to 11:11. This validated, norm-referenced test, assesses two constructs through two subtests: Basic Writing and Contextual Writing. The Basic Writing subtest measures a child's understanding about language and his or her ability to use the writing tools of language. The Contextual Writing subtest measures a child's ability to construct a story when provided with a picture prompt. The Contextual subtest measures story format, cohesion, thematic maturity, ideation, and story structure. Across all forms of reliability, the reliability of the composite index is in the mid to high 90s, specifically 99 for Basic Writing and 97 for Contextual Writing. Two separate one-way Multivariate Analysis of Covariance techniques (MANCOVAs) were performed to test the effect of the intervention on the linear combination of the Basic and Contextual Writing scores with each of the pre-test scores as a covariate. The hypothesis for this measure was that the

intervention would show a significant effect on the linear combination of the Basic and Contextual Writing scores with each of the pre-test scores as a covariate.

Writing Sample Rubric. The second quantitative measure was collected from a writing rubric. This writing rubric score was used to answer the question, "Is the writer's workshop plus mindset training effective on a near measure of writing closely aligned to instruction?" Two writing samples were collected from the students' writer's notebooks at the beginning and end of the study and were evaluated using a writing rubric that can be found in Appendix H. This writing rubric addressed seven areas of writing: drawing, word form, organization, voice/word choice, sentences, conventions, and the quantity of the letters, words and sentences. The rubric was scored on a scale from one to four, adding up to a possible total of 52 points. A one-sample *t*-test was conducted on the pre and post-test differences in order to test the intervention effect on the post-test scores of the Writing Rubric. The hypothesis for this measure was that writer's workshop plus mindset intervention would show a significant effect on the difference scores between the pre and post-test scores of the Writing Rubric.

Literacy and Writing Motivation Survey. The third quantitative measure had data collected from a researcher-designed motivation measure called the Literacy and Writing Motivation Survey, adapted from the Early Literacy Motivation Scale (ELMS) (Wilson & Trainin, 2007). The Literacy and Writing Motivation Survey used tasks and scenarios with the help of two stuffed animals, named Ziggy and Nash to understand the literacy motivation of young writers. This measure was used to answer the question, "Does the writer's workshop and mindset training increase literacy and writing motivation in young children?" Cronbach's alpha (1951) was used to measure internal

consistency and reliability of the measure. Both the pre-test and the post-test were found to be reliable, with α = .91 and α = .89, respectively. Appendix F contains the Literacy and Writing Motivation Survey and the materials needed before implementing the assessment. A one-sample *t*-test was conducted on the pre and post-test differences to test the intervention effect on the post-test scores of the Literacy and Writing Motivation Survey scores. The hypothesis for this measure was that the writer's workshop plus mindset intervention would show a significant effect on the difference scores between the pre and post-test scores of the Literacy and Writing Motivation Survey.

Writing Challenge Task. The fourth quantitative measure was collected from a researcher-created Writing Challenge Task that asks students to progress through increasingly difficult writing tasks. This task was used to answer the question, "Do children persevere through challenging writing tasks?" At each stage of the test, the students are asked if they would like to continue on to a more challenging task or continue with a task at the same difficulty level. The Writing Challenge Task can be found in Appendix G. A one-way ANCOVA was used to test the intervention effect on the post-test scores of the Writing Challenge Task after controlling for the pre-test scores as a covariate. The researcher hypothesized that the intervention would show a significant effect on the post-test scores of the Writing Challenge Task after controlling for the pre-test scores as a covariate.

It was expected that the instruction would improve writing and motivation on the respective measures and that there would be a significant increase in scores on all measures. The hypothesis assumed there would be significant differences between pretest and post-test scores, supporting the effectiveness of the intervention. A table of the

quantitative data sources and data analysis tools can be found in Table 5. Each assessment was collected both pre and post intervention. All of these measures were checked for inter-rater reliability by the rescoring of 25% of each test by a second scorer.

Table 5

Quantitative Data Sources and Data Analysis Tools

Data Source	Data Analysis Tools
TEWL-3	MANCOVA
Writing Sample Rubric	One-Sample <i>t</i> -test
Literacy and Writing Motivation Survey	One-Sample <i>t</i> -test
Writing Challenge Task	ANCOVA

Qualitative Data Collection and Analysis

Qualitative data was collected through out the entire study in four specific areas: interviews, during instruction discussion and lessons, writing samples, and recorded conversations during measurement tasks. Each of these areas is discussed below with the research question and analysis for each measurement. See Table 7 for a list of all of the qualitative data and its analysis.

Interviews. One-on-one student interviews were conducted pre and post-study. Questions for these interviews can be found in Appendix I. Each interview was audio recorded. These interviews were used to answer the question, "Does children's thinking about their writing and motivation change when teachers use the writer's workshop plus mindset intervention?" The data was analyzed using grounded theory (Glaser & Strauss, 1967), which is discussed in further detail below.

During Instruction Discussion and Lessons. Intervention lessons and student conferences were audio recorded. Observations and field notes were written at the end of each lesson in a researcher reflection time, where the researcher reflected and recorded notes from the day. These during-instruction recordings were analyzed using grounded theory (Glaser & Strauss, 1967) and constant comparative analysis (Strauss & Corbin, 1990) in order to understand the personal and collective experiences of the students in the intervention. This data was used to answer the question, "How are writing and mindset skill strategies evident as children work through difficult writing hurdles?"

Writing Samples. Student writing samples were collected and coded for writing achievement data in order to answer the question, "Does children's writing change qualitatively over time when teachers use the writer's workshop plus mindset intervention?" These writing samples were analyzed using grounded theory (Glaser & Strauss, 1967).

Measurement Recordings. All of the quantitative measurements listed above were recorded. All measurement recordings, except for the TEWL-3, were listened to and coded for important conversations and comments in order to contextualize and understand the thinking of the students during the quantitative measurements. These discussions helped the researcher better understand why students choose the answers they do in the quantitative measures. It aided in answering the question, "How are children verbalizing their thinking when they are working through writing tasks and self-reflecting on their personal motivation?"

Grounded Theory and Coding. A grounded theory design (Glaser & Strauss, 1967) was the overarching method for the qualitative data analysis in this study. Glaser

and Strauss (1967) believed that a theory can be *grounded* in the data is the basis for the name of this qualitative method of analysis. As the participants and researchers interact, information emerges from the qualitative data to create codes and theories of the central phenomenon. Constant comparative analysis (Strauss & Corbin, 1990) was used as the researcher developed concepts from the data by coding and analyzing simultaneously. The constant comparisons of the data helped evidence converge, creating a solid triangulated theory.

Coding played a significant role in the analysis of each of the data points. Saldaña (2009) defined a code in qualitative inquiry as "a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (p. 3). Coding happens in several cyclesthe researcher is continually confirming and disconfirming patterns of thinking in writing and conversation for the students. The coding process begins first with open coding. In open coding the data is read repeatedly, patterns in the students' responses emerge, and words and phrases for focus become apparent. In the second round of coding, called axial coding, open codes are read and reread, compared and questioned, and finally integrated into categories and their properties (Glaser & Strauss, 1967). The last step in the coding process is selective coding. In this final step, the researcher weaves and refines all the major categories into a selection of core categories so that a grounded theory can emerge (Kolb, 2012). Some examples for this study were codes for student interest, writing strategies, self-regulation strategies, intrinsic and extrinsic motivations, demonstration of effort and persistence, and the use of mindset language.

Internal validity of the study was checked through triangulation, external audit, and participant involvement. Although generalization is not a focus of qualitative research, systematic attempts were made to allow the study to be replicated. Detailed lesson plans and clear, systematic procedures help enhance external validity (Kolb, 2012). The research assistant consistently used observation protocols, fidelity checklists, and external audits in order to strengthen and confirm the findings.

As a qualitative researcher, the author recognizes her bias as a classroom teacher who used writer's workshop as a method of writing instruction for six years. While the author fully acknowledges her bias toward a constructivist approach to writing instruction, she remained committed to an open view of what she might find in the data as the students participated in this study. This commitment was held accountable through consistent personal reflection and awareness throughout the study. The author's research colleague served as a reflection partner and outside evaluator with a second eye on the data. Fidelity checklists (Appendix E) and the quantitative portion of this mixed methods study also allowed triangulation of the findings.

Table 6

Qualitative Data Sources and Data Analysis Tools

Data Source	Data Analysis Tools	Time of Data Collection
Writing Samples	Grounded Theory	1 sample per week
Interviews	Grounded Theory	Pre/Post
During Instruction Recordings	Grounded Theory	Daily (T,TH,F)
Quantitative Measurement Recording	Grounded Theory	Daily (T,TH,F)

CHAPTER IV

Results

This mixed-methods study employed an experimental intervention supported by qualitative observation, interaction, and analysis in the area of motivation and writing in elementary school. This convergent parallel designed mixed-methods study addressed four quantitative research questions and four qualitative questions. The quantitative questions were: (1) How does the writer's workshop plus mindset instruction affect the overall writing achievement on a standardized measure?, (2) Is the writer's workshop plus mindset instruction effective on a near measure of writing closely aligned to instruction?, (3) Does the writer's workshop and mindset instruction increase literacy and writing motivation in young children?, and (4) Do children persevere through challenging writing tasks after receiving mindset training?. The qualitative questions were: (1) Does children's thinking about their writing and motivation change when teachers use the writer's workshop plus mindset intervention?, (2) How are writing and mindset skill strategies evident as children work through difficult writing hurdles?, (3) Does children's writing change qualitatively over time when teachers use the writer's workshop plus mindset intervention?, and (4) How are children verbalizing their thinking when they are working through writing tasks and self-reflecting on their personal motivation?.

Quantitative Data Results

Quantitative data collection came from two writing and two motivation assessment measures. Across analyses, the alpha level was set at .05. A table of the quantitative data sources and data analysis tools can be found in Table 6. Inter-rater reliability was computed by having 25% of the test protocols rescored by a second trained

researcher. The inter-rater reliability was calculated by percent agreement. The inter-rater reliability for both the TEWL-3 and the Motivation Survey was 96%. It was 100% for the Writing Challenge task and 92% for the Writing Rubric. The disagreements in the Writing Rubric and the Motivation Survey came from a scoring error. Once the errors were corrected, agreement was 100%.

Prior to the intervention, the treatment and control groups were tested for pre-test differences on each of the measures. Four separate independent samples t tests revealed no significant difference between the treatment and control groups at the time of pre-assessments. The control group was not significantly different than the experimental group on the TEWL-3 Basic pre-test score, t(25) = .49, p = .63, TEWL-3 Contextual pre-test score, t(25) = .72, p = .48, the Writing Sample Rubric pre-test scores, t(25) = 1.54, t = .45, the Motivation Survey pre-test scores, t(25) = .22, t = .21, and in the Writing Challenge task pre-test scores, t(25) = .32, t = .27. Table 7 contains descriptive statistics for each group according to each pre-test. The mean differences and the standard deviations between the experimental and control group were very closely related, indicating equal levels of achievement and motivation between the two groups.

Table 7

Means and Standard Deviations by Pre-Test for Experimental and Control Conditions

Pre-Test	Treatment	N	Mean	SD
Writing Rubric	Experimental	14	14.93	2.09
	Control	13	16.15	2.04
Writing Challenge Task	Experimental	14	2.43	2.50
	Control	13	2.77	2.95

Table 7 (Continued)

Means and Standard Deviations by Pre-Test for Experimental and Control Conditions

Continued

Motivation Survey	Experimental	14	11.50	6.68
	Control	13	12.00	4.85
TEWL-3 Basic	Experimental	14	99.79	7.93
	Control	13	101.15	6.32
TEWL-3 Contextual	Experimental	14	63.21	5.42
	Control	13	64.85	6.30

TEWL-3 Standardized Writing Measure. The TEWL-3 was used to help answer the research question, "How does the writer's workshop plus mindset training affect the overall writing achievement on a standardized measure?" The descriptive statistics for the TEWL-3 post-test are shown in Table 8. The mean scores for the experimental group are higher than the control group.

The result of the equal slopes test was found not significant, indicating

Multivariate Analysis of Covariance (MANCOVA) was appropriate for the data. Two
separate one-way MANCOVA techniques were performed to test the effect of the
intervention on the linear combination of the Basic and Contextual Writing scores with
each of the pre-test scores as a covariate. The researcher hypothesized that the
intervention would show a significant effect on the linear combination of the Basic and
Contextual Writing scores after controlling for each of the pre-test scores as a covariate.
Both covariates were entered individually to consider the effects of the intervention

separately on each subtest. Results for the first one-way MANCOVA revealed a significant effect on the linear combination of the TEWL-3 Basic and Contextual writing scores after controlling for the TEWL-3 Basic Writing pre-test score as a covariate, F(2, 23) = 12.69, p < .001, Wilks' $\lambda = 0.48$. The second one-way MANCOVA also revealed a significant effect on the linear combination of the TEWL-3 Basic and Contextual writing scores after controlling for the TEWL-3 Contextual Writing pre-test score as a covariate, F(2, 23) = 13.59, p < .001. Wilks' $\lambda = 0.46$.

Table 8

Descriptive Statistics for TEWL-3 Post-Test Scores by Condition

Test	Treatment	Pre-Test <i>Mean</i> Reference	Post-Test Mean	SD	N
Contextual Writing	Experimental	63.21	98.79	16.10	14
Score	Control	64.85	71.15	15.12	13
Basic Writing	Experimental	99.79	116.64	8.50	14
Score	Control	101.15	108.54	13.55	13

Figure 1 graphs the Basic and Contextual writing score growth in standard scores of students in the experimental group versus the control group. The experimental group made a greater improvement between the pre-tests and post-tests than the control group.

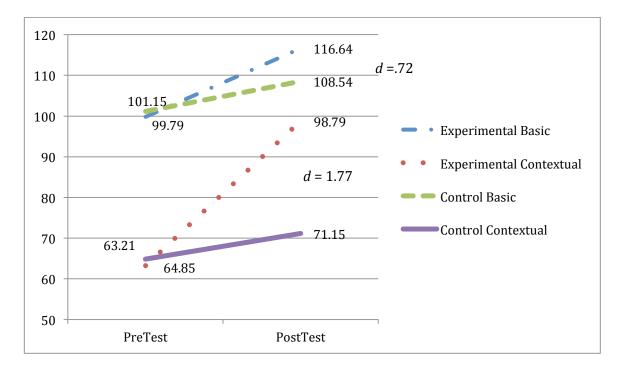


Figure 1. Students' Performance on Basic and Contextual TEWL-3 Subtests by Condition

Writing Sample Rubric. The Writing Sample Rubric is a researcher-created measure used to score writing samples of the participants. This writing rubric was used to consider the impact of mindset training on the literacy skills and writing motivation of the young children on a near measure of writing closely aligned to instruction. Two writing samples were collected from the students' writer's notebooks at the beginning and end of the study and were evaluated using a writing rubric that can be found in Appendix H. Descriptive statistics can be found in Table 9. The mean scores for the experimental group are higher than the control group. First, a one-way Analysis of Covariance (ANCOVA) was used to test the intervention effect on the post-test scores of the Writing Rubric after controlling for the pre-test scores as a covariate. It was

hypothesized that the intervention would show a significant effect on the post-test scores of the Writing Rubric after controlling for the pre-test scores as a covariate. The equal slopes assumption was not met, indicating ANCOVA was not appropriate for the data. A one-sample *t*-test on the pre and post-test differences was conducted to test the intervention effect on the post-test scores of the Writing Rubric.

The one-sample t-test on the pre and post-test differences for the Writing Rubric indicated the scores were higher for the experimental group than for the control group, t(26) = 11.48, p < .001. Figure 2 shows the growth of the experimental and control groups for the Writing Rubric. The experimental group made a greater improvement between the pre and post-tests than the control group, indicated by the slope differences between groups. The experimental group wrote more complex, lengthy writing pieces in their writer's notebooks than the control group.

Table 9

Means and Standard Deviations for Writing Rubric by Condition

Treatment	N	Adj. M	Std. Error	Mean	Adj. SD
Experimental	14	45.52	1.49	45.50	4.18
Control	13	29.98	1.55	30.00	6.39

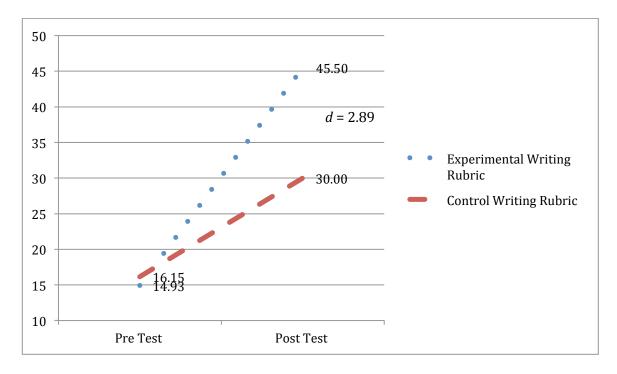


Figure 2. Students' Performance on Writing Rubric by Condition

Literacy and Writing Motivation Survey. The Literacy and Writing Motivation Survey, adapted from the Early Literacy Motivation Scale (Wilson & Trainin, 2007), was developed for this intervention to assess possible changes in motivation. The Literacy and Writing Motivation Survey uses tasks and scenarios with the help of two stuffed animals, named Ziggy and Nash, to understand the literacy motivation of young writers. This measure was used to consider the impact of mindset training on the literacy skills and writing motivation of the young children. Cronbach's alpha (1951) was used to measure internal consistency of the assessment. Both the pre-test and the post-test were found to be reliable, $\alpha = .91$ and $\alpha = .89$ respectively. Appendix F contains the Literacy and Writing Motivation Survey and the materials needed before implementing the assessment. Descriptive statistics can be found in Table 10. The mean scores for the experimental

group were higher than those of the control group. First, a one-way Analysis of Covariance method (ANCOVA) was used to test the intervention effect on the post-test scores of the Literacy and Writing Motivation Survey scores after controlling for the pretest scores a covariate. The researcher hypothesized the intervention would show a significant effect on the post-test scores of the Literacy and Writing Motivation Survey scores after controlling for the pre-test scores a covariate. The equal slopes assumption was not met, indicating ANCOVA was not appropriate for the data. The researcher then used a one-sample *t*-test on the pre and post-test differences to test the intervention effect on the post-test scores of the Literacy and Writing Motivation Survey.

The one-sample t-test on the pre and post-test differences for the Literacy and Writing Motivation Survey indicated the scores were higher for the experimental group than for the control group, t(26) = 3.36, p < .001. Figure 3 shows the growth of the experimental and control groups for the Literacy and Writing Motivation Survey. It is evident that the effect of intervention is much greater in the experimental group than in the control group indicated by the slope difference between the pre-test and the post-test. The experimental group self-reported greater motivation for literacy and writing when promoted than the control group.

Table 10

Descriptive Statistics for Literacy and Writing Motivation Survey by Condition

Treatment	N	Adj. M	Std. Error	Mean	Adj. SD
Experimental	14	18.87	0.67	18.79	1.48
Control	13	11.91	0.69	12.00	4.24

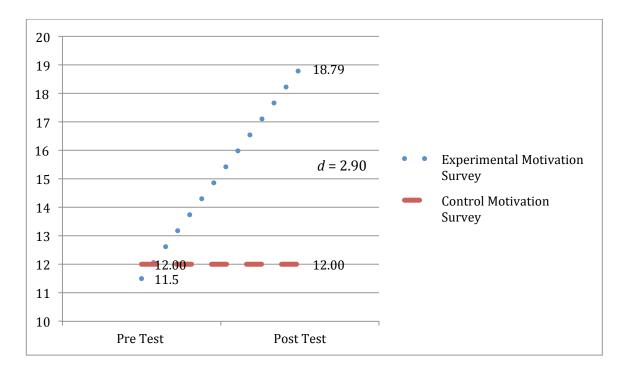


Figure 3. Students' Performance on Literacy and Writing Motivation Survey by Condition

Writing Challenge Task. The researcher-created Writing Challenge Task asks students to progress through increasingly difficult writing tasks. This measure was used to answer the question, "Do children persevere through challenging writing tasks?" At each stage of the test the students were asked if they would like to continue on to a more challenging task or continue with a task at the same difficulty level. The Writing Challenge Task can be found in Appendix G. Descriptive statistics can be found in Table 11. The experimental group means were higher than the control group means. The result of the equal slopes test was found not significant, indicating a one-way ANCOVA was appropriate for the data. A one-way ANCOVA was used to test the intervention effect on

the post-test scores of the Writing Challenge Task after controlling for the pre-test scores as a covariate. The researcher hypothesized the intervention would show a significant effect on the post-test scores of the Writing Challenge Task after controlling for the pre-test scores as a covariate.

The one-way ANCOVA indicated the post-test scores of the Writing Challenge Task differed for the control group than the experimental group when controlling for the pre-test scores, F(1, 24) = 39.76, MSE = 4.11, p < .001. The Writing Challenge Task scores were higher for the experimental group than for the control group when controlling for the pre-test scores. Figure 4 shows the growth of the experimental and control groups for the Literacy and Writing Motivation Survey. It is evident that the effect of intervention is much greater in the experimental group than in the control group indicated by the slope difference between the pre-test and the post-test. The experimental group persevered through more challenging writing tasks, asking for more difficult tasks when prompted, than the control group.

Table 11

Descriptive Statistics for Writing Challenge Task by Group

Treatment	N	Adj. M	Std. Error	Mean	Adj. SD
Experimental	14	7.86	0.54	7.86	1.83
Control	13	2.92	0.56	2.92	2.14

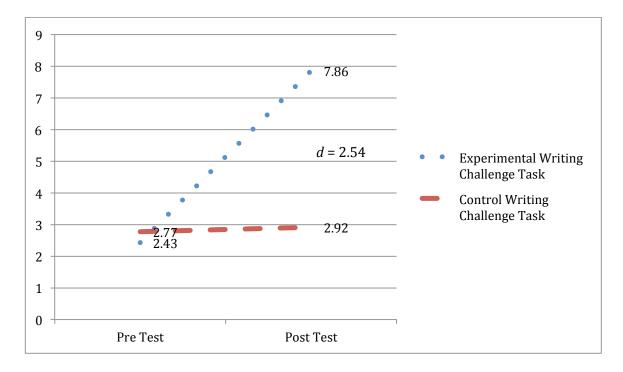


Figure 4. Students' Performance on the Writing Challenge Task by Condition

Qualitative Data Results

Interviews. One-on-one student interviews were conducted pre and post-study with both the control and the experimental groups in order to answer the research question, "Does children's thinking about their writing and motivation change when teachers use the writer's workshop plus mindset intervention?" Each interview was audio recorded, and the data was analyzed using Grounded Theory (Glaser & Strauss, 1967).

Pre-Interviews. Pre-interviews were conducted one-on-one in a quiet setting one week prior to the intervention. After each student participated in an interview, the researcher listened to and transcribed the interviews verbatim. After the transcription the author read and reread the transcriptions, creating open codes in the first round of analysis. The researcher highlighted and recorded significant statements and repeating

ideas and themes, organizing them by interview question. After creating the open code, the codes were then collapsed into axial codes, streamlining the repeating phrases into smaller categories. Finally, these axial codes were purposefully simplified into two categories made up of eight final codes. These codes were also made into a visual model to more clearly illustrate the thinking of the students.

Figure 5 and Table 12 show the results of the grounded theory analysis of the preinterviews. Both the experimental group and the control group demonstrated similar
thinking about writing, therefore both groups' views were incorporated into one model.
The students were asked to consider themselves and others as writers in the classroom.
They were asked to share their thinking about making mistakes, as well as what they
think about learning to write. From the interviews, the responses fell into two broad
categories: writing barriers and perceived pathways to writing. Each final code fell
within these two categories as students considered themselves as writers now and in the
future.

Writing Barriers. Five repeating themes within the interviews emerged demonstrating what is keeping children from viewing themselves as writers:

- 1. Difficulty: One of the most obvious perceived barriers to writing for the students was the idea that writing is too difficult to accomplish. Students referenced writing as "hard" and said they did not believe it was something they could do because of its difficulty level.
- 2. Mistakes: When asked if mistakes were good or bad for their learning, most of the students said they were bad and did not view mistakes as an opportunity to learn.

- 3. Comfort Zone: When the students were asked if they were good writers, some said yes, but when asked if they were good at writing hard or challenging words, almost every student answered no. Students were then asked what kinds of words they like to write and they answered with "easy words" or words that they were already comfortable with, such as "mom" or "the." The students did not want to get out of their writing comfort zone in order to be challenged.
- 4. Uncertainty: Students remained uncertain whether or not they could become writers, making statements such as, "I am not really sure I can do it."
- 5. Fixed Mindset: In this category students showed a tendency to want to avoid challenges in writing or give up in the face of challenges. In this category students believe that being a good writer requires one to be "smart." This relates to the fixed mindset, rather than the growth mindset.

Writing Pathways. The second category that emerged was the students' perceived pathways to becoming a writer. The children repeatedly mentioned three ways that one might become a writer.

- 1. Age: Students believed that good writers are people who are "older" than them. Many students believe they can become writers in the future, once they are "in first grade" or "6, 7, or 8" years old. The students did not believe that writing was something they could do right now.
- 2. Requirement: Themes emerged that indicated students' belief that writing was something they would do when required to by a parent or teacher. Students rarely mentioned initiating writing by his or her own initiative.

Help: Students mentioned needing help from a parent in order to write.
 Students also described writing as copying words or listening to someone spell for them.

Figure 5 demonstrates the mindsets and perceptions of both the experimental and control conditions. Table 12 gives data exemplars to support each theme.

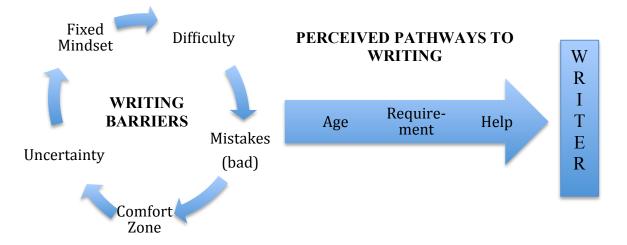


Figure 5. Visual Model of Students' Pre-Interviews: Initial Writing Perceptions

Table 12
Students' Pre-Interviews: Codes for Initial Writing Perceptions

Writing Barriers		Category Description	Data Exemplar
	Difficulty	Writing is perceived as very difficult to accomplish.	Writing words is hard by myself; It's hard to get the words right; I have tried but I can't write words that I don't just copy.

Table 12 (Continued)

Students' Pre-Interviews: Codes for Initial Writing Perceptions Continued

	Mistakes	Mistakes in writing are perceived as not good for learning.	Mistakes are not good for learning; You keep not getting it right; Mistakes make me embarrassed; I would scribble so no one could see [my mistake].
	Comfort Zone	Students do not perceive they can write "hard" words but like to stick with "easy" things like letters, drawing, and short words.	I just write easy words; I can write short words like "and" and "mom;" I only write the word "the;" I am only good at drawing pictures.
	Uncertainty	Students are uncertain they can become writers.	I am not really sure I can write hard words; I don't really think I can do it.
	Fixed Mindset	Students do not want challenges in writing and give up in the face of challenges. Writing requires one to be "smart."	I might give up; I can never write hard words by myself; [A boy/girl who struggles] will always get messed up; Kids who write well are smart; The hardest thing about writing is being smart.
Writing Pathways			
	Age	Writers are people who are older; I will become a writer when I am older.	In first grade I will be a good writer; When I get big; When I get to be 6, 7, or 8.
	Requirement	Writing will only happen if someone makes me do it; I do not initiate my own writing.	Sound it out if my mom makes me; Only if my mom tells me to; If the teacher tells me to write a word I say, "yes mam;" My mom says its time to do some homework; Only if I have to write a birthday card.
	Help	Writing will happen if someone writes it for me or tells me what to write.	I need my mom's help; My dad helps me; He tells me what to write; I can't write words that I don't just copy.

Post-Interviews. Post-interviews were conducted as the final piece of data collection. Both the experimental and control groups participated in the post-interviews. Similar to the pre-interviews, these post-interviews were conducted one-on-one in a quiet area. The transcription and coding procedures were the same as the pre-interviews, except for one difference: the researcher and a research assistant blindly coded the postinterviews. This was done for internal validity and reliability of the post-interview results. By using a blind coding system, the researchers hoped to eliminate bias and confirm and disconfirm qualitative findings. The researcher and the assistant both received copies of the transcribed interviews and separately coded the interviews for themes. After each person had coded the interviews, the researchers came together to compare results, as well as confirm and disconfirm findings. The results showed that both researchers found similar contrasts between groups. The primary researcher found two more themes than the assistant. These themes were independent writing and writing challenges. Both agreed they should be added to the results. After this discussion, the themes contained 100% agreement between researchers.

Table 13 shows the results of the grounded theory analysis of the post-interviews. The analysis showed a change in the thinking of the experimental group. Though some of the questions did not produce obvious differences between groups. For example, most of the students in both groups believed they could become better writers. Both groups also believed that a student who struggled to read and write could change and get better. Five of the post-interview questions in particular stood out with significant differences in the answers between groups:

- 1. Mistakes: When the students were asked if mistakes were good or bad for their learning, only 8% of the control group stated that mistakes were good for their learning, while 100% of the experimental group stated that mistakes were good for their learning. The experimental group described mistakes as an opportunity to learn and do better next time.
- 2. Getting Stuck: When the students were asked what they do when they get stuck in their writing, 100% of the control group said they would ask a teacher or a parent for help, while 100% of the experimental group gave answers that addressed different tools they could use to help them work through the writing challenges. Some of these tools included the ABC chart, sight word wall, and a picture dictionary. Three children stated that they "use their brain" as a tool to help them write. These students also said, "Keep trying" and "I stretch out my words," and "I use my sounds." The experimental group sighted asking for help as a last resort, stating, "Keep trying, but then if you have tried a bunch of times you can ask for help." The experimental group used self-regulation strategies and tools to be more independent writers.
- 3. Writing Ideas and Writing Advice: This interview question asked the students what they liked to write about as well as if they had any writing advice for a pre-kindergarten student who is learning to write. Eighty five percent of the answers from children in the control group either said, "I don't know" or they gave vague "school-like" answers such as "I like to write CVC words," or "Pay attention to your handwriting." One hundred percent of the students in the experimental group could articulate specific and detailed writing advice and writing ideas.

These students mentioned creative writing topics such as super heroes and the wilderness, as well as gave advice such as, "You can't give up" and "Stretch out your words." One student even said that pre-kindergarten students should, "Learn the alphabet and mix it up," indicating a strategy for learning letter sounds.

Practice was an important part of the advice of the experimental group, stating that the pre-kindergarten students should, "practice and practice and concentrate and concentrate."

- 4. Writing Challenges: The students were asked if they think they are good at writing hard words. Seventy seven percent of the control group said "no" they do not like to write hard words, making statements such as "I like to write easy and short words" and "I only like hard words if I can copy them." In contrast, 79% of the experimental group answered, "yes" that they are good at writing hard words, stating "I am good at lots of hard words" and "I like writing a really big word." One student said when he is writing he works hard to "search all [his] brain for something to write."
- 5. Independent Writers: The students were asked if they can write on their own or if they need help. Ninety two percent of the control group stated they do not write on their own. These students said, "I need help from someone" and "I want help from the teacher." In comparison, 100% of the experimental group believed in themselves as independent writers, stating, "I can write words on my own," "I like to write about stuff I really like, like I know what I'm going to write about," and "I don't really need help." These students also viewed themselves confidently as writers, stating, "I have gotten better at sounding out my words," "I am really

good at writing and drawing pictures," and "I have gotten really good at writing."

Figure 6 shows a contrasting visual model from the pre-interview model in Figure 5. This new figure represents the change of the experimental group. The experimental group has changed from the five barriers of writing found in Figure 5, to five writing facilitators. Instead of seeing mistakes as bad for their learning, the experimental group viewed them as a chance to learn. The experimental group was more willing and equipped to work through writing challenges than they were before. In contrast to the control group, the experimental group viewed themselves as independent writers who could use self-regulation tools to help them grow as writers. All of this was enveloped within a growth mindset. This growth mindset changed the pathways to becoming a writer by leaving behind the Figure 5 perceived pathways to writing (growing in age and requirements and help from teachers and parents), and moving to the idea that hard work, practice, and using the brain can help one become a better writer.

Table 13
Students' Post Interview Contrasts

Control Group				Experiment	al Group
Question	Group Definition	Data Exemplar (percentages)	Question	Group Definition	Data Exemplar (percentages)
Mistakes	Mistakes are not good for learning.	Mistakes are bad; sometimes bad. (92%)	Mistakes	Mistakes are good for learning.	Mistakes are good because they help your brain not do it next time; It makes you learn better; If you make a mistake, you can just erase it with an eraser. (100%)

Table 13 (Continued)

Students' Post Interview Contrasts Continued

Getting Stuck	When stuck in their writing, these students ask for help.	I go to the teacher for help; I stop writing. (100%)	Getting Stuck	There are a variety of tools to use when I get stuck.	I use my word wall; I like the picture dictionary; I use the ABC chart; Keep trying, but then if you have tried a bunch of times you can ask for help. (100%)
Writing Ideas and Writing Advice	Vague answers or "school" answers given on these topics.	Pay attention to your handwriting; I like to write "CVC" words; I don't know; Write sentences. (85%)	Writing Ideas and Writing Advice	Students could articulate specific and detailed writing advice and writing ideas.	Use your imagination; You can't give up; Stretch the words out; Practice and concentrate; I like writing about the wilderness; I like to write about super heroes. (100%)
Writing Challen- ges	These students do not like writing challenges.	I like to write easy and short words; I only like hard words if I can copy them. (77%)	Writing Challen- ges	These students do like writing challenges	I am good at lots of hard words; I like writing a really big word. (79%)
Independent Writing	These students do not consider themselves independen t writers.	I need help from someone; I want help from the teacher. (92%)	Independent Writing	These students do consider themselve s independent writers.	I can write words on my own; I like to write about stuff I really like, like I know what I'm going to write about: I don't really need help. (100%)

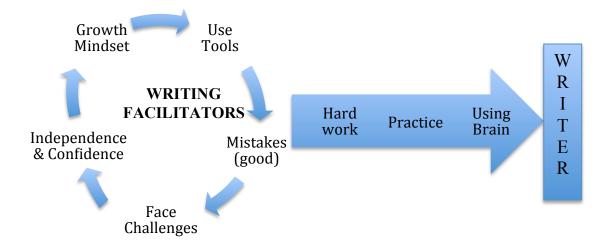


Figure 6. Visual Model of Experimental Group's Post-Interviews

Pre and post interviews were used to determine a beginning and ending point of student self-perceptions. Next, discussions within the intervention will be discussed. These discussions were used to gain further understanding of students' writing achievement, motivation, and self-perception.

During instruction discussion and lessons. Intervention lessons and student conferences were audio recorded. Observations and field notes were written at the end of each lesson in a researcher reflection time. These during-instruction recordings were analyzed using Grounded Theory (Glaser & Strauss, 1967) and constant comparative analysis (Strauss & Corbin, 1990) in order to understand the personal and collective experiences of the students in the intervention. This data was used to answer the question, "How are writing and mindset skill strategies evident as children work through difficult writing hurdles?"

The Writer's Workshop plus mindset intervention consisted of one part mindset training and one part writer's workshop writing time. The students were recorded during each of these times. The researcher listened to the recordings, as well as took field notes during the intervention. These recordings and field notes were repeatedly reviewed, and portions of the recordings were transcribed. Writing and mindset skill strategies were coded in order to best answer the research question. Three overarching themes were chosen to represent the collective experiences of the students in the intervention: spelling strategies, strategies for writing ideas, and strategies for improvement.

Spelling Strategies. During the pre-interviews, students continually referenced spelling words as the hardest part of writing. Some of the most common phrases heard among the students at the beginning of the intervention was, "How do you spell..." or "I don't know how to spell..." As the intervention progressed, students became more independent in their ability to spell words as they began to learn and employ spelling strategies.

The first and most significant spelling strategy the students used to face difficult writing hurdles was the use of letter sounds to inventively and phonetically spell words. This ability and willingness to spell any word phonetically allowed students to be set free from the conventional rules of spelling in order to take risks in writing and become self-regulated writers. Inventive spelling must first begin with the knowledge of letter sounds. The students used a letter sound chart from the Wilson Language Systems Fundations Program (Wilson Language Training, 2011). This tool matches letter sounds with picture associations. This chart was printed and pasted in the students' writer's notebook for easy reference. The students' notebook can be found in Figure 7 to help support them

with their letter-sound knowledge. The students also drilled these sounds daily for extra practice. This resource allowed children to reference letters and reminded them of the sounds, supporting them in independently spelling words. One student, Adriana (all students' names are pseudonyms) commented on the use of the ABC chart to write the diphthong /ing/. She said, "I don't try to think of lots of /ing/ words but then sometimes I just have to write /ing/. That wasn't my plan, just to write lots of /ings/, but then I sound out the rest...but then, I remembered the word ring to write /ing/, so then I just write i-ng." Adriana's implementation of this /ing/ sound in her writing can be found in Figure 8. She wrote, "Huh? A burning bush? Moses sees a burning bush. God is talking to me through a burning bush." In this writing, Adriana using the diphthong /ing/ four times. The ABC reference chart helped her remember the letters that make the /ing/ sound, allowing her to be more independent when writing words like "burning" and "talking."



Figure 7. Student Notebook Containing Fundations Letter Sounds Tool

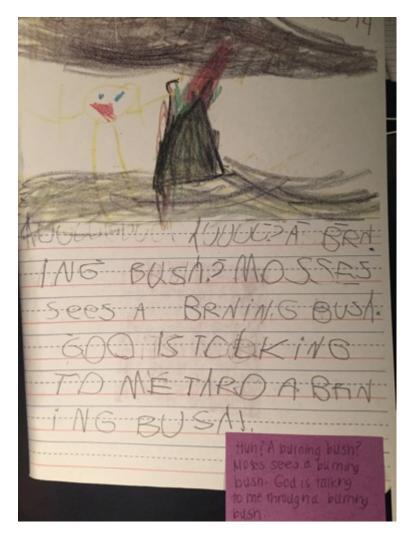


Figure 8. Adriana's ABC Chart Writing Sample

As students became more comfortable with their letter sounds, they began to use those sounds to phonetically and inventively spell words independently in their writing. Inventive spelling was encouraged throughout the intervention, as it allowed students to become more confident and fluent in their writing. At the end of the intervention, 11 out of 14 students from the experimental group said they were good at writing hard words. Every student used inventive spelling at some point in their writer's notebook, and every student attempted to write words with five or more letters. The TEWL-3 writing rubric

contains an item that measures the number of words with five or more letters. This is intended to be a vocabulary measure, judging the complexity of the words students are using. For the purposes of this section, the researcher used that same guideline to demonstrate the complexity of words that students chose to write using inventive spelling. Table 14 contains the children in the intervention and their use of inventive spelling. Students in the intervention group wrote 270 words with five or more letters using inventive spelling. Fourteen of these words were repeated among the students, making the variety of different words used approximately 237. The students in the intervention were not afraid to write many different complex words. Their lack of fear may have allowed them to self-regulate and work through difficult writing hurdles independently. Natasha commented on one of her inventive spelling experiences, saying, "When I was trying to spell the word *holiday world* it was hard but I thought 'I think I can' and then I did it."

Table 14

Children's Inventive Spelling for Words Five Letters and Above

Student (Pseudonym)	Words Over Five Letters Spelled Phonetically in Writer's Notebook
Constance	Fmle (family), pop (popcorn), mshn (machine), swet (sweet), fed (field), jt (jumped), rp (airplane), zebr (zebra), srips (stripes), hoc (house), prims (princess), munk (monkey), das (dance)
Leo	Brig (bridge), nif (knife), srpt (serpent), frinds (friends), stikc (stick), bathr (bathroom), firbl (fireball), seckr (secret), monstr (monster), namend (named), fam (family), membre (member), amrikn (American), tro (tornado), frting (farting), cert (carrot), shrp (sharp), sisches (stitches)

Table 14 (Continued)

Children's Inventive Spelling for Words Five Letters and Above Continued

Chase	Sfore (safari), animls (animals), bech (beach), shak (shark) giding (getting), udr (under), lk (looking), rivr (river), crek (creek), en (alien), monstr (monster), neatomk (Native Americans), chtring (trying), lidl (little), che (chief), indn (indian), hidat (hideout), fortr (fortress), hien (hyenas), taking (attacking), spas (space), tep (teepee)
Denisha	Cte (city), jlefe (jellyfish), wt (water), bl (bottle), brk (broke), jt (jumped), kwb (cowboy), chrled (cheerleader), bl (bleeding), gitr (guitar), los (loose), ic kam (ice cream), soc (sonic), woch (watch), sht (shooting), strs (stars), hc (house), aro (arrow), prte (party), hoos (house)
Natasha	Popkrn (popcorn), ym (yummy), bo (blocked), cande lad (candy land), retl (Rapunzel), bud (birthday), grpl (grandpa), trl (turtle), hulid (holiday), wluy (world), hagin (hanging), cuzn (cousin), frinds (friends), mrd (mermaid), set (sweetest), inian (Indian), poils (police), ching (chasing), pritey (pretty), nat (night), rac (wreck), las (loose), tof (tooth)
Jacob	Leit (Elliot), hape (happy), eting (eating), califrnu (California), cot (caught), snac (snake), chetus (cheetahs), supr (super), bagl (bagel), pdl (pulled), trudacl (pterodactyl), spiterman (Spiderman), asrn (astronaut), secis (seconds), gazilu (Godzilla), being (breathing), wopos (robots), crls (colors) mces (monkeys), midcaft (Minecraft), blox (blocks)
Shawn	St (skating), rd (riding), chuke chees (Chuck E. Cheese), com (coming), bus (boots), tdl (turtle), lg ln (lego land), legoz (Legos), ofes (office), bdr (brother), nde (named)
Adriana	Snaks (snakes), drem (dream), brothr (brother), chek (check), casle (castle), qeen (queen), brning (burning), tolking (talking), thro (through), fhit (fight), egishin (Egyptian), geting (getting), angil (angel), sudnle (suddenly), gowing (going), baro (barrel), woching (watching), moive (movie), frind (friend), prinses (princess), livd (lived), tgithr (together), wondr (wonder), spidr (spider), fevr (fever), headack (headache), tday (today), frst (first), nigt (night), hool (whole), famley (family), rostid (roasted), mrshmelos (marshmallows), capot (campout), pregnint (pregnant), oldist (oldest), aowsome (awesome), decratd (decorated), pukins (pumpkins), carv (carve)

Table 14 (Continued)

Children's Inventive Spelling for Words Five Letters and Above Continued

Keenan	Snak (snake), truk (truck), dlv (delivers), ba (basketballs), dnt (dentist), br (broke), hs (house), football (football), mushen (machine), sholdr (shoulder), res (restaurant), endn (Indian), toger (together), soprm (Superman), mite (mighty), sumwre (somewhere), studeo (studio)
Neal	Vi (video), gs (games), scrach (scratch), sld (sliding), pmkns (pumpkins), pling (playing), bsgo (basketball), ravn (raven), rulrkstr (rollercoaster), shog (strong), ste (city), bmn (Batman), bd (building), the (thinking), indn (Indian), ud (under), ac (attack), shapt (trapped), boc (broke), frest (forest), nvr (never), rbr (robber), pes (police), dfet (defeat), othr (other), holcons (holocron), dar vidru (Darth Vader)
Marcus	Frwk (fireworks), bor (brother), loch (lunch), sav (save), pe (people), inin (Indian), bat (battle), sr (surfboard)
Corinne	Gra (grandma), brb (Barbie), hs (house), br (brother), swet (sweet), necklase (necklace), crims (Christmas), fom (farms), prt (party), lit (light)
Tomas	Funy (funny), def (defeated), mosr (monster), hs (house), dlfn (dolphin), nvezobl (invisible), stol (stole), robt (robot), srcis (circus), fling (flying), ser (secret), bzn (business), emt (Emmit), saling (sailing), ild (island), wch (watch), fmli (family), pak (package), grding (guarding), ingr (angry), vdr (Vader)
Cory	Nnj (ninja), trtl (turtle), fle (family), aning (annoying), dsgo (disco), pod (parties), moreo (Mario), mas (mouse), fd (found), bsd (busted), swln (swollen), ud (under), at (attack), fit (fighting), msr (monster), blding (building), czsn (cousins), fmle (family), fs (friends)

Although students used inventive spelling frequently in their writing, there were times the students were encouraged to accurately spell sight words that do not follow phonetic rules. A sight word is a frequently used word that children are encouraged to memorize by sight instead of through decoding. In order to help students begin to

memorize these words, students were given a personal word wall, as well as a word wall in the classroom that contains these words. Figure 9 shows the classroom word wall that sight words were added to daily. The purpose of these walls was to help them spell high frequency words. Every child in the intervention group used the sight word tool at some point in their writing. The sight words each student wrote in their writer's notebooks were counted and put in Table 15. The students wrote a total of 168 words, counting the repeating words once per student. Students used this tool to help them write words that are frequently used in their writing, but may not follow conventional spelling rules. By using this tool repeatedly, students are also able to start memorizing these sight words. Leo said, "I don't need the word wall. I just need my brain." He had memorized how to spell the word "there" and used it multiple times in his writing after that, increasing his writing fluency and confidence. Adriana said, "I like the tools with lots of sight words." She really did like this tool, as she wrote 30 different sight words in her writer's notebook throughout the intervention.

The students used a combination of inventive spelling and sight word tools to become more fluent and self-regulated writers. When the students increased their fluency and self-regulation, they became more motivated to write.



Figure 9. Classroom Word Wall Tool

Table 15

Children's Accurately Spelled Sight Words

Student (Pseudonym)	Sight Words Spelled Accurately in Writer's Notebook
Constance	I, on, a, the, that, and, is, like
Leo	I, a, there, was, me, my, of, the, and, is, him, love, on
Chase	For, at, the, I, is, am, at, there, a, was, saw, are, his
Denisha	I, a, was, from, to, the, we
Natasha	I, a, out, go, to, went, was, she, the, am, to, my, love, it, in
Jacob	To, is, I, in, a, to, be, am, by

Table 15 (Continued)

Children's Accurately Spelled Sight Words Continued

Shawn	Is, I, because, saw, a, they, my, we, and, got, to, the
Adriana	Had, a, my, with, and, to, him, in, of, the, there, my, is, me, was, are, said, have, am, went, we, as, she, had, on, all, have, our, could, did
Keenan	I, this, a, the, to, will, be
Neal	I, is, saw, was, the, she, to, were, they, on, yes, love, you, am, that, his
Marcus	I, this, is, a, the
Corinne	I, came, had, and, me, had, to, the
Tomas	Up, the, I, in, this, his, on, to, of, my, saw, but, was
Cory	The, I, out, is, like, we, it, the, my, at, am, with

Spelling words was cited as a challenge for students during the intervention.

Students also cited facing a blank page, and independently choosing a writing topic as a writing challenge. Strategies the students' used to face this challenge are discussed next.

Strategies for Writing Ideas. "One of the hard things is thinking of a story," said Cory. Some of the children agreed, but Neal chimed in with, "No, it isn't that hard if you use your tools." The researcher asked the students to elaborate on what tools could help them with writing ideas. Discussions and coding revealed three primary ways students face the writing challenge of coming up with a writing topic: (1) Writing Ideas Chart; (2) Picture Dictionary; and (3) Collaboration.

Figure 10 shows the writing ideas chart that was glued into the students' writer's notebook, as well as posted on a trifold in the room. This chart was used as a reference tool for students when they were stuck on a writing idea.

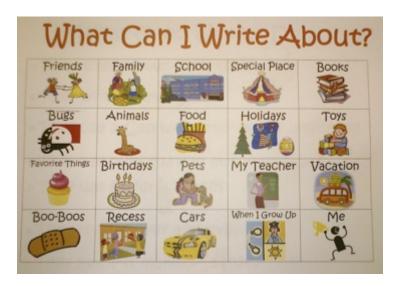


Figure 10. Writing Ideas Chart

Tomas was one of the first to use the writing tool for his story about the circus.

Tomas felt stuck as he faced a blank page. He did not have a writing idea, so he chose to use the writing ideas chart to help him. Tomas said, "I used that thing to help me remember the circus." Tomas was referring to the circus tent picture under the words "special places." Tomas was reminded of his trip to the circus with his family, and immediately began to draw a circus tent and write the story. Figure 11 contains Tomas' circus story. It says, "The clowns are funny."

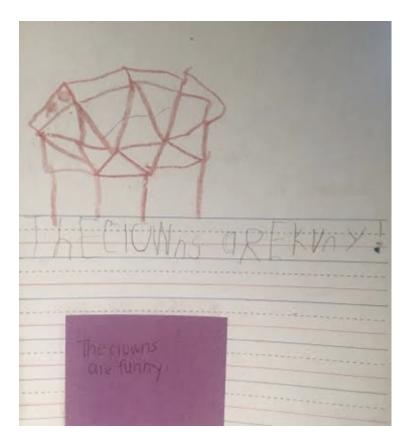


Figure 11. Tomas' Writing Ideas Sample

Similar to Tomas, Shawn was stuck in his writing. He told the researcher, "I don't know what to say." Just as the researcher was about to respond, Neal said, "Use your tools!" That small reminder helped Shawn remember the writing ideas chart in the tools section of his writer's notebook. After looking through the different ideas, Shawn pointed to the picture of the bandage and said, "I fell off my bike." The bandage reminded Shawn of an injury he recently got while riding his bicycle. Figure 12 shows Shawn's bicycle writing that was inspired by the writing ideas chart strategy. He wrote, "I was riding my bike and I fell off."

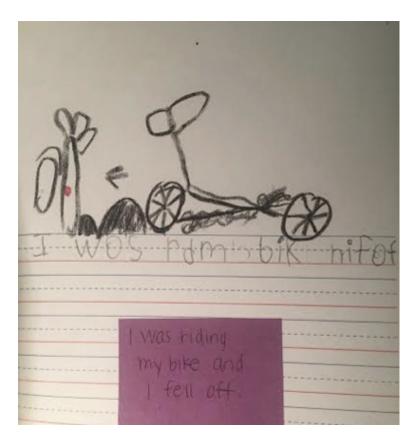


Figure 12. Shawn's Writing Ideas Sample

The students also used a picture dictionary that was placed in their notebooks to help them come up with writing ideas. The picture dictionary had pictures and words that went with each letter of the alphabet. The letter D section is shown in Figure 13.



Figure 13. Picture Dictionary Tool

Many students would use these pictures to help remind them of personal stories to write about in their notebooks. Shawn in particular loved to use this tool. He was reminded of a time he was able to play drums at church when he saw the picture of the drum set. He wrote, "I played drums. They are cool." When asked about this writing, he said, "I like this picture. It is a real story." Although Shawn used the help of the picture dictionary, he wrote a unique personal narrative story about playing the drums at his church (found in Figure 14). These tools were an aid to spur on individual and creative writing. The students used them independently to become motivated writers.

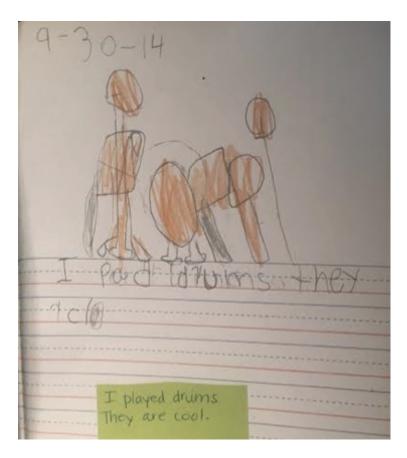


Figure 14. Shawn's Picture Dictionary Sample

Jacob also used the picture dictionary as a tool for writing ideas. He used the letter E page to write a pretend story about an elephant. Figure 15 shows his writing. He wrote, "My elephant is eating hay."

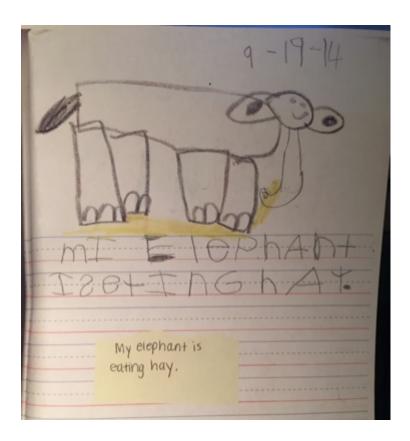


Figure 15. Jacob's Picture Dictionary Sample

Producing a writing idea was a difficult writing hurdle for many students. The tools section of their notebook helped the students use helpful devices to push through these writing hurdles. As time progressed students became less dependent on these charts. Adriana said, "Sometimes I like to just write about things that I can remember. Before I look on the board, I like to think myself about...I like to think how to get an idea before I look on the board, because I think that you should try before you look on the board." Adriana expressed what many of the children were already doing...moving away from dependency on the charts and independently and collaboratively coming up with their own writing ideas.

Collaboration played a significant part in generating writing ideas as well.

Students shared ideas as well as wrote during independent writing time together. One example in particular was when Jacob and Keenan wrote about superheroes together during writer's workshop. Keenan had the idea to write about Batman. He told Jacob of his idea and Jacob said, "Oh I like Spiderman! Let's write about Batman and Spiderman." The two boys sat next to each other and collaborated on two superhero stories. Jacob said, "Spiderman is a superhero." Keenan said, "Batman is cool." These stories are shown in Figure 16.



Figure 16. Jacob and Keenan's Superhero Collaboration

Throughout the intervention writing was a collaborative event. Many students worked out their ideas through discussion and conversation. Some of these ideas spread

like wildfire across the classroom. More on collaboration and wildfire ideas will be addressed further in the results section.

Strategies for Writing Improvement. As the students became more confident in their writing, they also became more aware of the strengths and weaknesses of their writing. This awareness spurred students to use strategies to improve their writing. Two strategies in particular were evident in the data: (1) Editing Checklist and (2) Mindset Language.

Figure 17 shows a picture of the editing checklist that was pasted into the tools section of the students' writer's notebooks. The parts of this checklist were first taught and practiced during writing mini-lessons, and then students began to use them to self-assess their own writing.

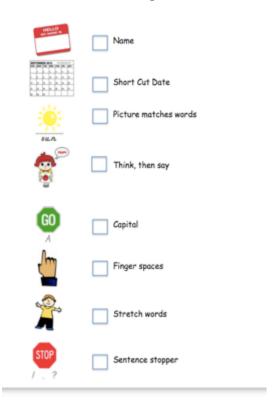


Figure 17. Editing Checklist

Figure 18 shows an example of a whole-group writing mini-lesson on putting spaces between words. The researcher wrote a piece of writing that did not contain spaces. She went through each of the checks on the editing checklist and when she got to the "finger spaces" check mark, the students said, "NO! There are no spaces." The students were beginning to learn about making their writing accessible to a reader by putting spaces in between their words. It was not long before the students were using this lesson to help them work through difficult writing hurdles.

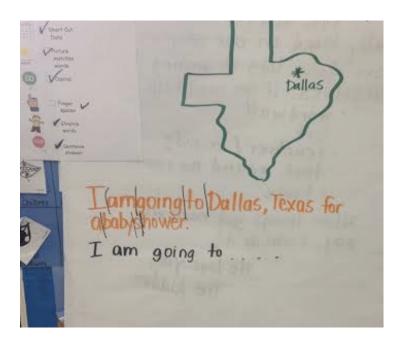


Figure 18. Shared Writing Spaces Mini-Lesson

Chase attempted to read his writing to one of his friends. He was excited to share his story about going snorkeling with his family (shown in Figure 19), but he was having trouble reading the words. His friend Adriana told him to look at his checklist to see what he did wrong. Chase and Adriana together decided he could not read the writing

mostly because he did not have appropriate spacing between his words. "You also need a capital and a period," said Adriana. The editing checklist helped Chase work through his writing hurdle and ultimately learn how to make his writing better.

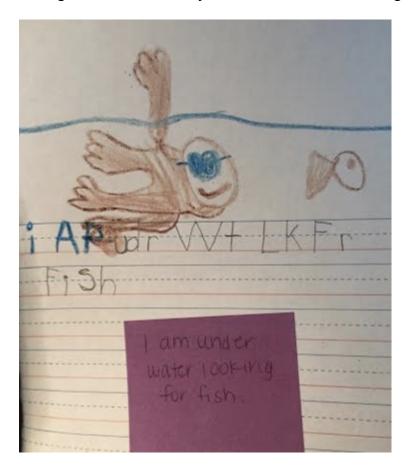


Figure 19. Chase's Editing Checklist Sample

The language the students and the researcher used in the intervention were also very important to helping students work through difficult writing hurdles. The way the students and the researcher spoke was intentional to foster a growth mindset and help students persevere through writing tasks. Figure 20 contains the language that was focused on during the intervention. The researcher and the students continually used this language during writing, making it a habit of thought. This language list was taught

during shared writing mini-lessons and trickled down into the writing and language of the children.



Figure 20. Mindset Language List

An example of a mini-lesson on mindset language is shown in Figure 21. The students and the researcher came up with a list of contrasting thoughts. When students begin to face a difficult writing challenge, instead of saying, "I can't do it," the students try and train their brains to say, "I can do it!" Instead of being upset at making a mistake, the students can say, "A mistake helps me learn!"

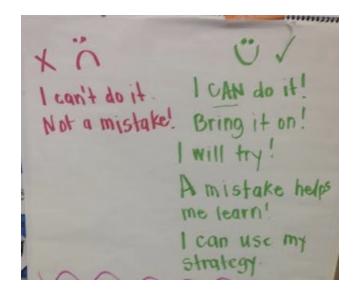


Figure 21. Mindset Language Mini-Lesson

The mini-lessons continued with more shared writing. As a class, the students dictated a letter to their parents (shown in Figure 22) explaining their strategies and thought processes when facing writing hurdles. The students referenced the use of tools but also the use of mindset language, saying, "When things get hard, we say, I can do it!"

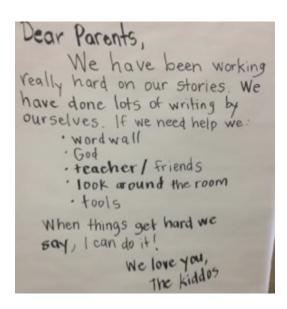


Figure 22. Mindset Letter Example

This mindset trickled down into the writing of the children. One day, Denisha wrote a story about her broken water bottle. The story, shown in Figure 23, said, "I broke my water bottle." When asked about this piece of writing, Denisha said, "I broke my water bottle last night, but I kept trying and trying and trying to fix it. Just like Ziggy. I kept thinking *I can fix it*!" Ziggy is the fictional character used in the intervention to represent the growth mindset. Denisha was applying growth mindset language outside of the intervention to help her when she faced any kind of challenge.



Figure 23. Denisha's Mindset Writing

Children's literature was used in the intervention to foster growth mindset language and ideas. The children's book, *Gumption!* by Elise Broach and Richard Egielski (2010) was one of the favorites. The researcher explained the word "gumption" as "courage, initiative, and guts." There is a repeating line in the text that says, "All it

takes is a little bit of gumption!" The children latched onto this phrase, using it in their daily speech as well as to encourage each other to write. Tomas even used the word in his writing, referencing a monster game the boys played a recess. He wrote, "The monsters chasing. I did a lot of gumption." Tomas explained that he ran really hard and fast to get away from the "monsters" chasing him at recess. Figure 24 shows his writing.

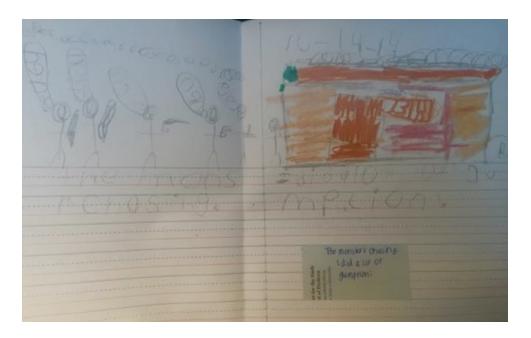


Figure 24. Tomas' Gumption Writing Sample

The students in the intervention used mindset language to encourage themselves and others to face writing challenges. "BRING IT ON!" is what the children would yell when asked if they would like to take a writing challenge. The students would say, "Don't give up!" and "I can do it." This language helped the children rise to a bar that was set very high for them, but more importantly they learned to believe in themselves and face writing challenges with courage and stamina. The evidence of the courage and

stamina can also be seen in the writing samples of the students, which will be discussed in the next section.

Writing Samples. Student writing samples were collected and coded for writing achievement data in order to answer the question, "Does children's writing change qualitatively over time when teachers use the writer's workshop plus mindset intervention?" These writing samples were analyzed using Grounded Theory (Glaser & Strauss, 1967).

Four Levels of Writing Achievement. The TEWL-3 writing assessment uses descriptive terms that coincide with the assessor's overall writing composite index scores. These descriptive terms include very poor (>70), poor (70-79), below average (80-89), average (90-110), above average (111-120), superior (121-130), and very superior (>130). Four students were chosen from the below average, average, above average, and very superior categories, based on their post-test composite writing score. Writing samples from each of these students were chosen to qualitatively represent the change in the students' writing. Each student will be discussed separately.

Constance. Constance is an African American female. She was 5 years and 5 months old when she took the TEWL-3 post-test. Constance's TEWL-3 pre-test score was 60, falling within the "very poor" range. By the end of the intervention, Constance had improved her TEWL-3 overall writing score to 83, placing her in the "below average" category on this test. Four writing samples from the beginning to the end of the intervention were chosen to qualitatively represent this writing achievement growth.

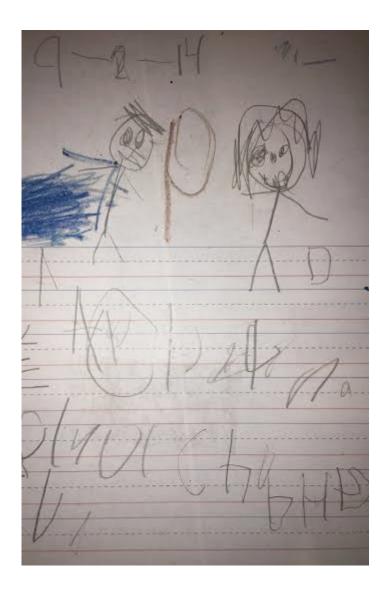


Figure 25. Constance's Writing Sample One

Figure 25 shows Constance's first writing sample in her writer's notebook. She drew a picture of two people, and wrote random letters and scribbles. In this writing, Constance was experimenting with writing and storytelling. She knew that her story should have a picture with print underneath, but she was still unaware that her print

carried meaning. When asked what the story was about, Constance could not articulate a story, stating, "I don't know."



Figure 26. Constance's Writing Sample Two

Figure 26 shows Constance's second writing sample nine days later. Constance quickly learned that her print should carry meaning. During this writing, Constance stated that she knew how to write the word *bat*. She wrote the word bat in a brown color first, and then the researcher prompted her to tell more about the bat. After the prompting, Constance sounded out "Bat hit balls." Constance was reaching out for a new facet of learning in her writing by attempting to sound out words, but she also stayed somewhat

within her comfort zone by writing a word she already knew how to spell. Her picture is clearly of a bat and a ball, accurately matching her picture to her words. In this writing sample, Constance correctly spelled two consonant-vowel-consonant (CVC) words (bat and hit), as well as experimented with the use of ending punctuation.

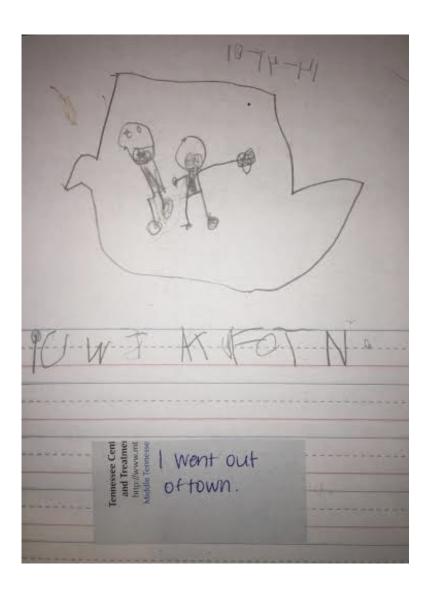


Figure 27. Constance's Writing Sample Three

Figure 27 shows Constance's third writing sample, in which she wrote, "I went out of town." This writing sample represents Constance's first personal narrative writing. She demonstrates knowledge of initial and final sounds, as each word has the beginning and ending sound written out. Constance came out of her writing comfort zone to write words that she did not necessarily know how to spell. She used her knowledge of beginning and ending sounds to write the words. Constance was experimenting with sight word knowledge, as she writes the word "of" backwards. It is evident that Constance was slowly stretching out her words when she wrote the first word "I." When the long letter sound "I" is stretched out slowly, some dialects can put a "yuh" sound at the end of "I," making it sound like, "I-yuh." Constance represented this sound by writing a letter "U." Constance's picture matches her words and she correctly uses final punctuation. Constance is still working on the conventional use of upper and lowercase letters.

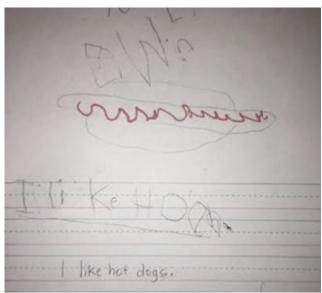


Figure 28. Constance's Writing Sample Four

In Figure 28, Constance wrote, "I like hot dogs." Although Constance continued writing just one sentence, her conventional writing improved since the last sample. She started the sentence with a capital letter and ended with a period. In this sample, she is still experimenting with spacing between words. There is evidence of the use of the sight word wall, since she wrote the word "like" conventionally. Constance is still hearing many of the sounds within the word "hot dog," and matched her picture to her words. Constance could also successfully read back her writing to her peers, pointing to each word. This was the first time she was observed being able to do this.

Although Constance's posttest TEWL-3 scores are still considered below average, she made gains by moving from the <1 percentile to the 13th percentile. Qualitatively this is evidenced through her improved writing samples.

Natasha. Natasha is a mixed race female student. This is Natasha's second year in Kindergarten, and she took the TEWL-3 post-test at the age of 7 years and 0 months. Natasha's TEWL-3 pre-test score was 79, falling within the "poor" range. By the end of the intervention, Natasha had improved her TEWL-3 overall writing score to 104, landing her in the "average" category. Four writing samples from the beginning to the end of the intervention were chosen to qualitatively represent this writing achievement growth.

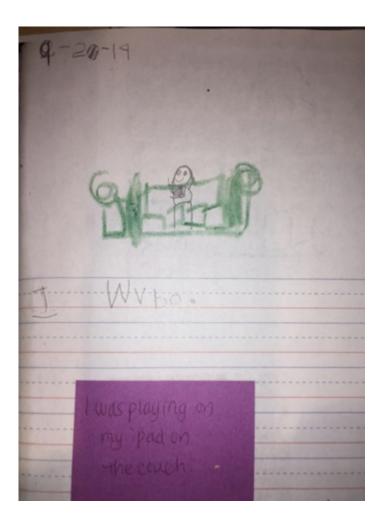


Figure 29. Natasha's Writing Sample One

Figure 29 shows the first writing sample Natasha produced in her writer's notebook, writing, "I was playing on my iPad on the couch." Natasha already has some idea that conventional sentences start with a capital and end with a period. She matches her words to her picture, and she makes an attempt at writing the words independently. Natasha succeeds in the first two phonemic sounds /I/ and /w/, but the rest of the sentence is missing words and corresponding sounds. Natasha was able to read back this sentences, stating exactly the meaning the print was meant to carry.

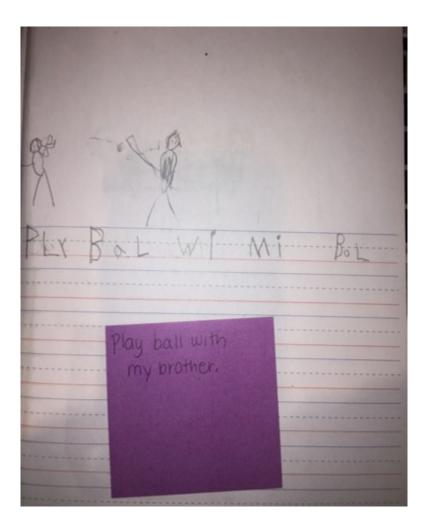


Figure 30. Natasha's Writing Sample Two

Figure 30 shows Natasha's second writing sample that states, "Play ball with my brother." Natasha has already improved with her letter sound correspondence, and has also included every word in the sentence. She has matched her picture to her words, and is using spaces between her words. Natasha seems to have focused more on the letters and sounds in this writing, leaving out the period at the end of the sentence. No words are spelled conventionally in this writing sample.



Figure 31. Natasha's Writing Sample Three

In Figure 31, Natasha writes about a time she was hit by her friend who did not feel sorry about it. Natasha continues to write personal narrative stories, successfully matching her picture to her words. There is a significant improvement in this writing compared to the last writing sample. Natasha is using a combination of inventive spelling and conventional spelling. Natasha spells four sight words correctly by using the word wall tool (i.e., I, she, was, it). She also spells two CVC words correctly (i.e., hit, got) by stretching out her sounds to hear the letter sound correspondence. Natasha is using spaces between her words and started the sentence with a capital and ended with a period. The most interesting part of her writing is the correction she made when

rereading her writing. During the first read, Natasha realized she was missing the word "hit" and she added it in by herself using an editing carrot symbol to insert the word.

This was taught in a conference to another student and Natasha quickly picked it up.

This self-assessment and subsequent action allowed her to self-regulate and improve her writing.

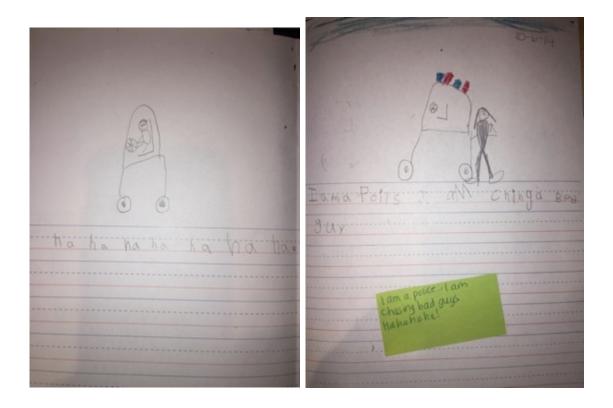


Figure 32. Natasha's Writing Sample Four

Figure 32 shows Natasha's creative writing about a police officer chasing bad guys. Natasha uses two pages in her writing, matching the pictures and the words on both. When Natasha reads this story, she reads "hahahaha" in a "bad-guy" voice.

Natasha demonstrates the use of a variety of tools in her writing. She has four sight words written conventionally (i.e., I, am, a,), and uses inventive spelling to attempt longer

words like "chasing" and "police." Natasha used her ABC chart to remember the /ing/diphthong when she was writing the word "chasing." She used spaces between her words, and experiments with punctuation at the end of "hahahaha."

Natasha's TEWL-3 pre-test scores placed her in the 8th percentile for total writing achievement. By the end of the intervention, Natasha had significantly improved her scores to the 58th percentile. This improvement is demonstrated qualitatively in her writing samples.

Leo. Leo is a Caucasian male who was 5 years and 9 months old when he took the TEWL-3 post-test. Leo's TEWL-3 pre-test score was 78, falling within the "poor" range. By the end of the intervention, Leo had improved his TEWL-3 overall writing score to 118, landing him in the "above average" category. Four writing samples from the beginning to the end of the intervention were chosen to qualitatively represent this writing achievement growth.



Figure 33. Leo's Writing Sample One

Figure 33 shows Leo's first writing sample from his writer's notebook. Leo wrote the word "bridge" using inventive spelling. When asked to read his story, Leo said, "There's a snake on the bridge." He proceeded to describe this story as true. Leo's picture matches his words, and he is aware that print carries meaning. Leo knew what he wanted his story to say but only wrote one word of the sentence. The word he chose to spell had all phonemes represented. Leo does not make any attempt to use punctuation.

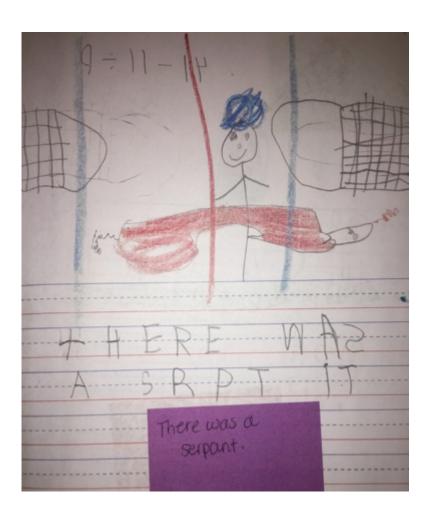


Figure 34. Leo's Writing Sample Two

Figure 34 shows Leo's second writing sample approximately two weeks into the intervention. Leo has already improved by venturing into conventional sentences, using three sight words from the word wall (i.e., there, was, a), and writing each word in the sentence using one to one correspondence. Leo is using spaces between his words and has matched his picture to his story. Leo has still only attempted one sentence and has not tried to use capitals or punctuation.

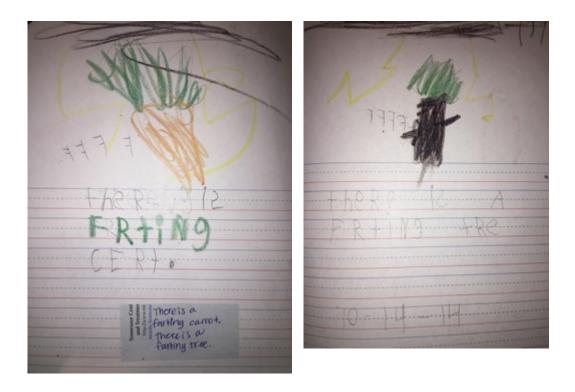


Figure 35. Leo's Writing Sample Three

Figure 35 shows Leo's third writing sample. Leo said in an interview on October 21st that he loved to write about "funny things." This sample showed Leo's sense of humor as he wrote about a "farting tree" and a "farting carrot." This writing sample made the other children laugh, and also the researcher. After this writing, Leo realized he

truly could write about anything he wanted to. Leo demonstrated lots of creativity and improvement in this writing. First, he accurately spelled three sight words from the word wall (i.e., there, is, a), and he used a combination of his tools and his inventive spelling to spell the rest of the words. He used his ABC chart to remember the /ing/ sound for the word "farting." Leo is experimenting with punctuation, as he ended one of his sentences with a period. He showed his creativity by adding "FFFFFF" to the carrot and the tree, indicating the sound of flatulence. Also, he made the word "farting" in a green color because "it smells" he said. Leo's pictures matched his words, and he used spaces between his words. In this sample, Leo still did not have a capital at the beginning of his sentence.

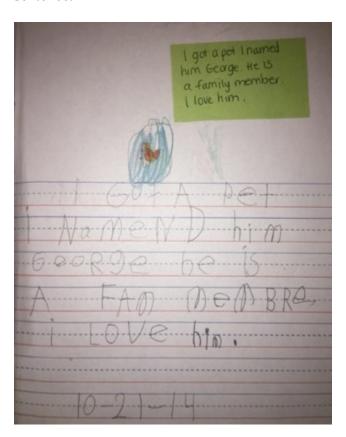


Figure 36. Leo's Writing Sample Four

Figure 36 shows Leo's fourth writing sample. In this sample Leo continued to improve in his writing stamina, as he wrote four sentences. Leo wrote eight sight words accurately (i.e., I, him, he, is, a, love, him, got), and demonstrated a knowledge of letter sound correspondence and stretching out words to spell by phonetically spelling long words like "named" and "member." He accurately spelled the CVC words "got, pet, and him." Leo was reaching out for a new facet of conventional writing by experimenting with the silent "e." He used but misused this English language convention in the words "named" and "member." Leo's picture matches his words and he continued to use spaces between his words. Leo also wrote about something important to him, his family pet. At the end of the intervention Leo was asked what he could still get better at in his writing and he said, "I want to write bigger stories." Leo is motivated to write more at the end of the intervention.

Leo's TEWL-3 pre-test scores placed him in the 7th percentile for total writing achievement. By the end of the intervention, Leo had significantly improved his scores to the 87th percentile. This improvement is demonstrated qualitatively in his writing samples.

Adriana. Adriana is a Caucasian female. She was 5 years and 9 months old when she took the TEWL-3 post-test. Adriana's TEWL-3 pre-test score was 99, falling within the "average" range. By the end of the intervention, Adriana had improved her TEWL-3 overall writing score to 132, placing her in the "very superior" category on this test. Four writing samples from the beginning to the end of the intervention were chosen to qualitatively represent this writing achievement growth.

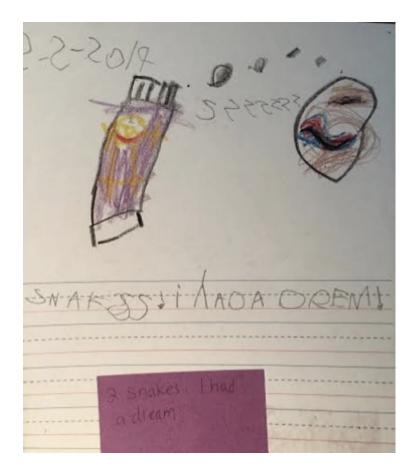


Figure 37. Adriana's Writing Sample One

Figure 37 shows Adriana's first writing sample. She wrote about a dream she had about snakes, saying, "Snakes! I had a dream!" Adriana is already using some complex conventional writing in her first notebook entry. She spelled three sight words (i.e., had, I, a) and she used inventive spelling to write the words snakes and dream. In these words she wrote a letter for every phoneme she heard. Adriana also used exclamation points in her writing to emphasize her fear in the dream, and even wrote the sound the snakes were making "ssssss." When asked about her writing, Adriana said, "I really did have a dream. It is real and scary!" She chose a writing topic that was important to her. The bad dream made an impact on her and she wrote about it to share with the class. Adriana is very

fluent in her letters and sounds and can already read many picture books and sight words, but when it came to writing she tired out quickly, saying, "I am done" when asked to elaborate on her dream. Adriana is also experimenting with spacing, but does not use spaces between all of her words. She is also using but misusing a combination of capital and lowercase letters.

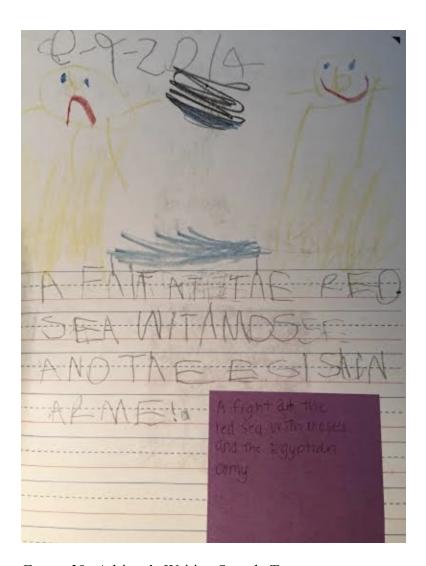


Figure 38. Adriana's Writing Sample Two

Figure 38 shows Adriana writing sample about a bible story. She wrote, "A fight at the red sea with Moses and the Egyptian army." This was Adriana's third bible story to write about. Prior to this writing, she wrote about Mary and an angel, as well as Moses and the burning bush. Adriana said, "I really only write things I know until I can think of another thing which is hard." Adriana was sticking with a familiar topic to her, bible stories, and faced a writing challenge of moving beyond these "easy" topics and challenging herself to write something different. In this sample, she had greatly built up her writing stamina, doubling her word count since the last sample. Adriana demonstrated her knowledge of sight words by conventionally spelling and, the, with, at. She continued her conventional spelling with the complex word, "sea." Adriana also used more complex inventive spelling since the last writing sample. Adriana uses the digraph /sh/ in the word "Egyptian," and she experimented with spelling the word "fight." In this word, she used a combination of inventive and conventional spelling. It is apparent through the "h" she inserted into the word, spelling it "fhit," that Adriana knew the word "fight" was not just spelled with the three phonemes she heard in the word, so she adds an "h," using but misusing the long vowel phoneme /igh/. When asked how she could improve this writing, Adriana knew she needed to practice her finger spacing.

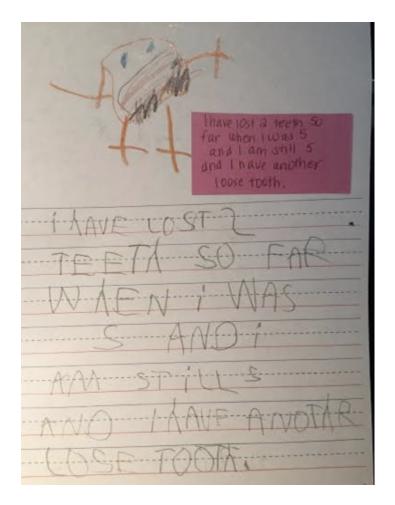


Figure 39. Adriana's Writing Sample Three

Figure 39 shows Adriana's third writing sample. This personal narrative said, "I have lost two teeth so far when I was 5, and I am still 5, and I have another loose tooth." Immediately two improvements are visible in this writing. First, Adriana successfully uses spaces in her writing. Secondly, Adriana pushed through her challenge of finding a writing topic different from a bible story. When asked about this topic she said, "I kept thinking and I remembered about my loose tooth!" Adriana did not give up trying to think of a new writing topic. She continued to think until she came up with an exciting topic about her loose tooth. The majority of the words that Adriana produced in this

writing were in conventional spelling. Adriana is still experimenting with capitals and lowercase letters, making some letters incorrectly lowercase and some letters capitalized. Specifically, Adriana makes the sight word "I" in lowercase. When asked about her writing, Adriana said, "I can get better at my pictures."



Figure 40. Adriana's Writing Sample Four

Figure 40 shows Adriana's fourth writing sample. In this sample Adriana wrote a personal narrative story about her family. It said, "My dad is from Australia. He owns a farm (my dad's mom and dad really own the farm)." Adriana showed her advanced

knowledge of writing by using parenthesis around a phrase as a side note. She spelled all of the words in her story conventionally, even writing the word "Australia" independently. Adriana continues to use a combination of upper case and lower case letters, but she accurately starts her writing with a capital and ends with a period. Her knowledge of sentences is evident, as she correctly places a period at the end of the word Australia. At the end of the intervention Adriana was interviewed about her writing. She said, "I am really good at doing my family members' names and writing stories about them." When asked what she could improve on and she said, "I could work on my letters being really small." Adriana is referring to correctly using capitals and lowercase letters. She is aware that this improvement is needed in her writing and she is working towards this improvement. Lastly, Adriana says, "When I make a mistake I try to erase it. Maybe I have some more words to sound out." Adriana uses self-assessment and metacognition to understand when she makes a mistake and works to "erase" or correct these mistakes. Although she is considered a "very superior" writer according to the TEWL-3 test, she knows she still has some more she could do.

Adriana's TEWL-3 pre-test scores placed her in the 45th percentile for total writing achievement. By the end of the intervention, Adriana had significantly improved her scores to the 98th percentile. This improvement is demonstrated qualitatively in her writing samples.

Creativity in the Writer's Notebook. Qualitative data analysis helped the researcher understand the writing achievement of students beyond that of a standardized or researcher-made assessment. This measurement goes beyond numbers and into the unique quality of the writing of the students. Creativity, voice, unique ideas, and writing

passion cannot easily be measured. Grounded Theory was used to get into the writer's notebook of the children and observe their writing authentically by engaging in their personal stories. It was found that when students were given choice and freedom to freely write on their own topics, it inspired creativity and ingenuity in their writing. Two themes related to creativity in the notebook were pulled from the data: "wildfire ideas" and "writing topics."

Wildfire Ideas. Wildfire ideas are defined in this context as unique writing ideas that start with one student and spread to other students during the intervention. These ideas were inspired by and used by students across all ability levels, including low achieving and high achieving writers. Four wildfire ideas were coded for this section:

1. Two Pages: This was the first wildfire idea that spread quickly through the writer's workshop. A student came to share time one day with a story that was written on two pages. His story is shown in Figure 41. By the end of the intervention, 12 out of 14 students had tried writing a "two-page" story. This wildfire idea encouraged students to keep writing and not quit. Many students increased their writing stamina by working hard to draw two pictures and write multiple sentences on two pages. This wildfire idea also encouraged students to make their writing seem more like a book.

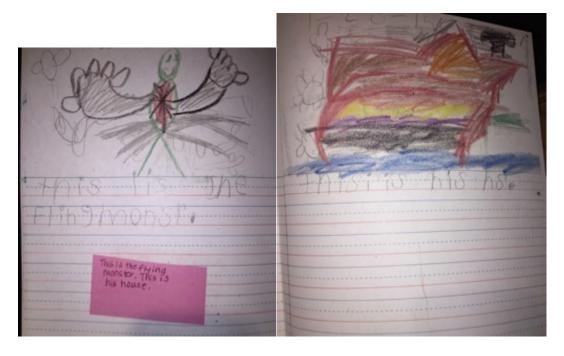


Figure 41. Tomas' First Two-Page Writing

Jacob stated from the very beginning of the intervention that he did not know how to write. He said, "I try and then I realize I can't do it and then I argue with my mom that I can't do it." Many times during the intervention, Jacob would get stuck and stop writing. After Tomas shared his story using two pages, Jacob was inspired to write more than he ever had. Jacob wrote two pages about a cheetah super hero. Figure 42 says, "Cheetahs are fast. Cheetahman is a super hero."





Figure 42. Jacob's Two-Page Writing

2. Sounds and Word Bubbles: The second wildfire idea came from Chase. Chase impressed his entire class when he wrote about a hyena attacking a tiger. In this writing, shown in Figure 43, Chase used word bubbles to show the sounds the animals were making. Chase explained that the hyena was laughing ("hehe") because he was about to attack the tiger, and the tiger "roared" to try and protect himself. The idea of using sounds and word bubbles in writing spread and other children began using them in their writer's notebook.



Figure 43. Chase's Sound and Word Bubble

According to the TEWL-3 standardized test, Corinne is an average writer, scoring in the 39th percentile. Corinne would hesitate to write on her own at times, but when it came to sound and word bubbles, she immediately followed Chase's idea and created her own story about going to the beach. Corinne added, "Yay!" to her picture to show her excitement about her beach trip. Figure 44 shows Corinne's use of Chase's sound bubble idea.

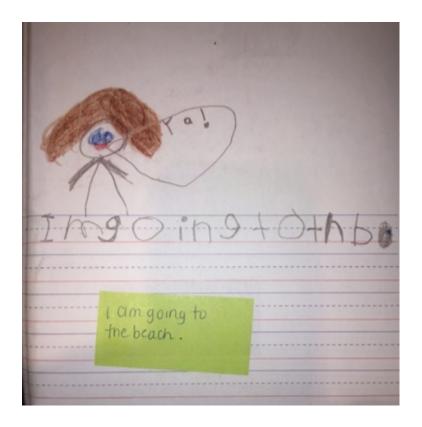


Figure 44. Corinne's Sound and Word Bubble

Shawn scored a zero on his pre-test motivation survey, indicating he did not view himself as a writer and was not motivated to write prior to the intervention. Shawn's writing stamina was low, and he did not like to write many words, but he was greatly inspired by Chase's word bubbles. Shawn loved to draw and the sounds gave his artwork a life-like quality. Shawn was very excited to show off his motorcycle story shown in Figure 45, and when he read it he did the "vrooooom" sound very enthusiastically.

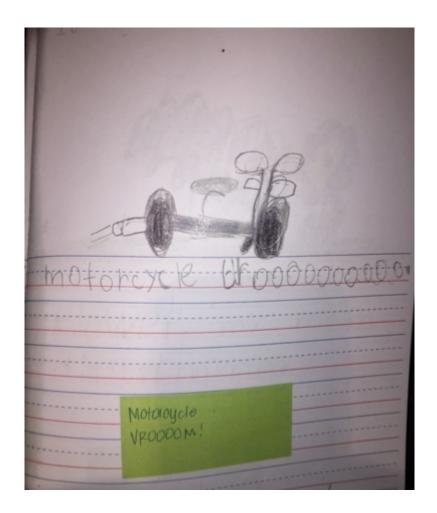


Figure 45. Shawn's Sound and Word Bubble

3. Font Change: The third wildfire idea came from Leo. One day during writing share time, Leo shared the story found in Figure 46. When Leo read his story, "Indian, a fire ball is shooting," to the class, many students commented on how he changed from writing in pencil to crayons. When the researcher asked why he did this he said, "Fireballs are orange so I wanted to make the words orange." Leo was demonstrating the writing craft idea that sometimes authors use text that is written

in bold letters, colors or capital letters to express an idea or for emphasis. The students quickly caught on to this idea and began to use it in their own writing.

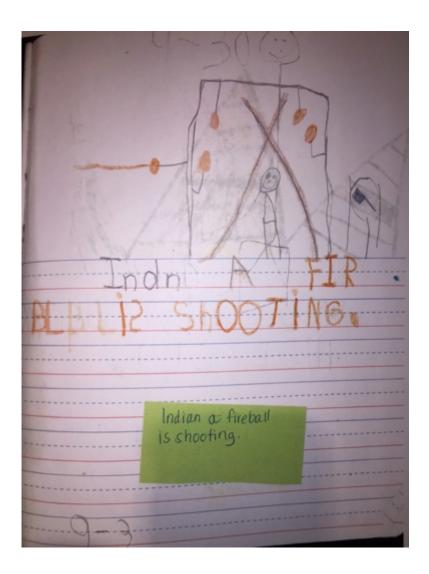


Figure 46. Leo's Font Change

Adriana used Leo's writing idea in her personal narrative about Halloween.

She wrote, "Last night was AWESOME! We decorated pumpkins. We did not carve pumpkins." Adriana changed font twice within this piece of writing, shown in Figure 47.

She intentionally wrote the word "night" in black to mimic the color of the sky at night. The word "awesome" in Adriana's writing is also intentionally written in a bright, bold color and underlined for emphasis. When asked about the font changes in her writing, Adriana said it was because last night was "really *really* awesome!" Adriana is using font change to indicate her excitement about decorating pumpkins. She also creatively used the color of the night sky to write the word night, similar to the way an artist would use color to add depth and novelty to a piece of art. Furthermore, Adriana used a sound and word bubble when she made her pumpkin think, "Wow! Good night!"

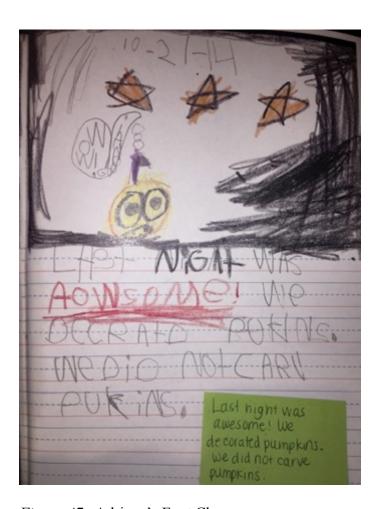


Figure 47. Adriana's Font Change

4. Battles and Native Americans: This wildfire idea all started with Marcus when he wrote the simple piece shown in Figure 48 that said, "Indian battle." Many of the boys swooned over his writing idea and his drawing. Marcus started the intervention in the 4th percentile with a TEWL-3 pre-test score of 74. He struggled to write more than a few words, but his writing idea spread across the room, giving him a confidence boost. Many of the boys began to write about battles and Native Americans in their writer's notebooks. By the end of the intervention Marcus had improved his score to a 95, placing him in the 35th percentile.



Figure 48. Marcus' Battle and Native American Writing

Before writer's workshop on September 23rd, Chase was interviewed about his writing. When asked what he was going to write about today he said, "I might get some Indian ideas because I do like Indians. I got two good ideas about Indians to write about." Chase quickly followed Marcus' lead and wrote a story shown in Figure 49 that said, "Little Indian boy, his dad is a Indian Chief." The spreading of these writing ideas led to excitement when it came to writing time. The boys were excited to use writing as a form of play, hashing out their imaginary battle scenes in their writer's notebooks. Before the intervention would even start many of the children were saying, "I know what I am going to write about!" Conversation and collaboration increased when students started sharing their wildfire ideas. Students encouraged each other to use the ideas and gave positive feedback when they were read to the group in share time.

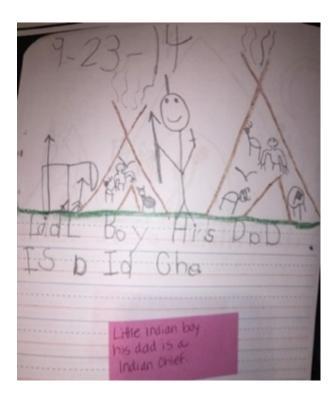


Figure 49. Chase's Battle and Native American Story

Neal combined two wildfire ideas by not only writing a story about Native American battle, but also by writing it over two pages. This story is shown in Figure 50. Neal wrote, "They were thinking (of their plan). Indians were under attack." Although Neal's writing is on the same topic of battles and Native Americans, the perspective on his writing is completely different. Neal wrote two pages for this story and each page is its own unique scene. Mimicking the style of a conventional picture book, the first page of his writing is the scene of the Native Americans making their battle plans, and the second scene is the actual battle. The students are learning about multiple perspectives and point of view when they are writing on similar topics from different standpoints. They are learning to write creatively and not just copy the story of the person next to them, but most importantly they are writing on topics they care about and becoming motivated writers. In fact, Neal became so motivated by this story, that his next two writing entries continued the story of the Native Americans in battle. This story ended up being six pages long total. The Native American children get trapped, "Mom and Dad Indians. The kids were trapped." Then, the kids break free, "Love miss you. Oh no! Yes! He broke out of the trap!" Neal's motivation increased his writing stamina and motivation to write a whole story about Native Americans in battle. The rest of his Native American story can be found in Figure 51.

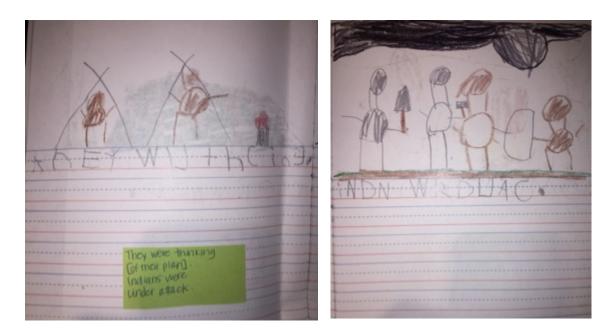


Figure 50. Neal's Battle and Native American Story





Figure 51. Part One and Two: Neal's Continuation of Native American Story

Wildfire ideas spread across the room during the intervention. Students began writing more and more, initiating creative writing ideas on many unique topics.

Writing Topics. Facing a blank page in writing is intimidating even for the most seasoned writers. Getting started on a writing topic can be one of the most difficult parts of the writing process. Many students look at a blank page and say, "I don't know what to write about" or "How long does this have to be?" The students in the writer's workshop plus mindset intervention demonstrated the ability to face a blank page with a unique writing topic. The experimental group produced a total of 257 writing entries, with each child producing approximately 18 journal entries. Out of these 257 writing entries, 182 unique writing topics were found. Topics that were repeated, such as the Native Americans and battles were only counted once. These unique topics include everything from video games to bad guys to roller coasters and mermaids. These topics were counted and organized into five overarching topic categories: Personal Narrative, Movies/TV/Books, Animals, Fantasy, and Food. Examples of topics used within those categories are listed in Table 16.

Table 16

Experimental Group Writing Topics

Overarching Writing Topic	Examples
Personal Narrative	 Ice skating with the family Losing a tooth Hunting for rocks in the river with dad Injury stories (Falling off bike, Getting a cut) Going to watch fireworks Field trips

Table 16 (Continued)

Experimental Group Writing Topics Continued

Movies/TV/Books	Wreck-It Ralph
	Wipe Out Reality Game Show
	Ninja Turtles
	• Star Wars
	Scaredy Squirrel
	• The Little Engine that Could
Animals	• Dolphins
	• Snakes
	• Cheetahs
	• Sting Rays
	• Elephants
	• Pterodactyls
Fantasy	• Princesses
	 Mermaids
	• Superheroes
	 Taking a trip to Candy Land
	• Monsters
	Native Americans and Battles
Food	• Popcorn
	 Hot Dogs
	• Pizza
	Birthday Cake
	• Smores
	• Ice cream

Comparatively, the control group was asked to share their favorite writing topics at the end of the intervention. Their responses included the following: I don't know (x2), CVC words (x2), easy things, sentences (x2), short words, can/hat/bat, rockets, friends, mermaids, and cousins. Four out of thirteen of the topics were specific, creative topics (i.e., rockets, friends, mermaids, and cousins), while the rest of the topics shared were vague, school-like topics (i.e., CVC words, sentences). Students also spoke about liking

to write easy, short words. The experimental group was asked the same question at the end of the intervention, and their responses included: camping, horses, wilderness, family, superheroes, Indians, Xbox, Batman, friends, cops, funny things, and things that I like. The actual writing that was done in their writer's notebooks supported these statements (see Table 15). The contrast between the two groups indicated the experimental group developed a creative and motivated stance toward writing, producing a variety of ideas for writing that were personally meaningful and interesting to the student. As one student stated, "I woke up this morning with a story idea in my head!"

The discussions and writing samples in the intervention helped the researcher to understand the experiences and achievements of the students in the intervention.

Measurement recordings supplemented these understandings by listening to comments and discussions made during assessments and writing conferences.

Measurement Recordings. All of the quantitative measurements listed above were recorded. All measurement recordings, except for the TEWL-3 were listened to and coded for important conversations and comments in order to contextualize and understand the thinking of the students during the quantitative measurements. These discussions could help the researcher better understand why students chose the answers they did in the quantitative measures. This helped answer the question, "How are children verbalizing their thinking when they are working through writing tasks and self-reflecting on their personal motivation?"

The measurement of young children's motivation has been challenged due to the developmental nature of young children's thinking (Fulmer & Frijters, 2009). Many young children may not be able to cognitively process the questions in a self-report

motivation survey, or clearly and accurately demonstrate their thinking in these assessments. For this reason, students in the intervention were not only asked to complete a self-report style motivation survey but also a challenge task. This combination of motivation assessments would allow for researchers to see if students could accurately express their thinking in a self-report (Literacy and Writing Motivation Survey) and then back up their self-report with an action task (Writing Challenge Task) that required them to complete the challenges they were self-reporting on. Even with these measures in place, it can still be difficult to measure and understand the thought process of young children's motivation. Audio recordings of the students completing these tasks help the researcher qualitatively learn more about young children's motivation. When the children completed these measures, they did not verbalize their thoughts to as great of a degree as expected by the researcher. They did, however, verbalize some of their thinking. When used in combination with interviews and discussions about their writing, a more complete picture of their writing motivation emerged. Three students were chosen from the experimental group to understand their thinking about writing and motivation from the pre-tests and as well as discussions throughout the intervention. These students were chosen through purposeful sampling of information-rich cases.

Cory. Cory is a six year and eight month old male. On his Literacy and Writing Motivation Survey pre-test, he scored a 20/20, self-reporting the highest literacy and writing motivation possible for that assessment. Cory likened himself to the character Ziggy, who enjoys reading and writing and likes to take on literacy challenges. While taking this assessment, Cory said, "Sometimes I like to have challenges." After taking the Literacy and Writing Motivation Survey, Cory took the Writing Challenge Task.

During this assessment students dictate how far they go into the assessment by choosing whether they want to complete another writing challenge or quit the test. When given a choice to take on a challenging writing task, Cory said yes three times before he wanted to quit the test. The maximum number of challenges Cory could have taken was nine. When Cory was on his third and final challenge, he stated, "Well, sometimes I just want easy." It is apparent that Cory wavers back and forth between accepting a challenge and wanting to stick with what is easy. Although he scored high on the Literacy and Writing Motivation Survey, he did not want to take many challenges in the Writing challenge task. Writing conferences with Cory revealed his thinking about his writing and helped to understand Cory as a writer as he works through writing challenges and reflects on his personal motivation. Three of Cory's writing pieces and conversations were chosen to represent this thinking.

Figure 52 shows one of Cory's writing entries, "I love Ninja Turtles." Cory was asked about his writing idea and he said, "I make my mind of what I like and what I don't, and this ninja turtle one was pretty cool." Cory was given the freedom to choose his own topic, and he wrote about a topic that interested him, motivating him to write. When asked to tell more about his writing Cory said, "I used my fingers to help me sound out. I sounded out the words to see how many letters were there." Cory is referring to a tapping strategy, where the students use their fingers to "tap" out the number of sounds they hear in the word and then write a phoneme for each sound. When asked what he could do better on next time he was still unsure, answering, "I don't know."



Figure 52. Cory's Ninja Turtles ™ Writing Sample

Figure 53 shows a personal narrative written by Cory about his cousins. The story says, "I have my cousins at my house." Cory was excited to share this story with his friends, as it was very important to him for his cousins to be in from out of town. When asked about his writing Cory said happily, "It is a true story!" As he was reading this story to the researcher, he had trouble matching one-to-one correspondence to the writing. Realizing this difficulty, Cory said, "I need spaces between my words." Cory realized he was being challenged in his reading, and knew what he needed to do to correct this challenge next time. When asked how he could improve for the next writing, Cory also added, "I want to get better at hard words." Cory's awareness of his writing

successes and challenges are helping him become a self-regulated writer. He is motivated to improve in his writing as well as write about topics that are exciting and interesting to him.

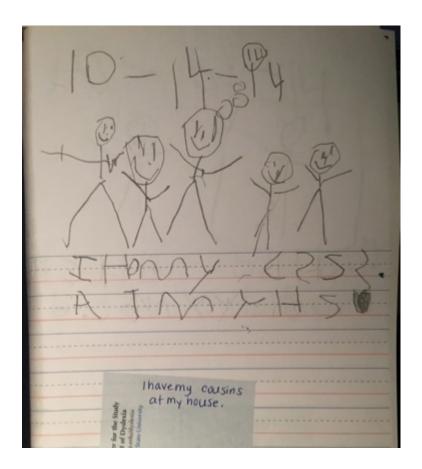


Figure 53. Cory's Cousin Writing Sample

Figure 54 shows Cory's personal narrative writing about building Legos. Again, Cory is writing about topics that are interesting and important to him. Prior to this writing Cory had written three stories in a row that said, "I like _____" or "I love _____" filling in the blank with different topics. During the writing conference, Cory said, "I am getting better at making ideas. Not just things I love." Cory knew it had been a

challenge for him to come up with writing ideas that were different from "I like" or "I love." He recognized this challenge and worked to push through it. When he came up with a new writing idea, he commended himself for his improvement. This motivation to keep persevering through writing challenges is evident through Cory's discussion. When asked if there was anything else he could improve on, he said, "I need to work on distractions. Sometimes I get distracted by my friends." Cory knew that his best writing came when he was not distracted. Just like many professional authors, Cory knew he needed to work on focusing during his writing time and eliminating things that will keep him from writing. This takes commitment to writing and a motivation to keep going, which Cory desires to have. He seems to view writing as important enough to give up distractions from his friends. At the end of the intervention, Cory persevered through five of the nine levels of the Writing Challenge Task post-test.



Figure 54. Cory's Lego[™] Writing Sample

Jacob. Jacob is a five year and six month old male. On his Literacy and Writing Motivation Survey pre-test, he scored a 9/20. During this assessment, Jacob made some telling statements about his self-perceptions as a literate learner. He said, "I don't know how to write. I try and then I realize I can't do it and then I argue with my mom that I can't do it. Writing is really actually hard." Jacob confirmed these statements when he chose to only do the easiest level of the Writing Challenge Task, which consisted of drawing pictures and not writing words. Prior to the intervention, Jacob did not seem to view himself as a reader or writer and did not portray many signs of self-regulation. He said, "Teachers tell me to keep going, and I try to do everything they tell me to," implying he only writes when a teacher tells him. Writing seems to be out of obligation for Jacob.

By the end of the intervention, Jacob had improved his Literacy and Writing Motivation Survey score to a 16/20 and he completed the entire Writing Challenge Task, going through all nine levels. Jacob recognized this change when he said, "I used to be the kid who was really not finishing my work, but I am learning and getting better." During the intervention, Jacob was interviewed about his writing motivation and how to approached difficult writing hurdles. Three pieces of writing were chosen to represent his thinking during these conferences.

Figure 55 shows a personal narrative writing about Jacob's dad. The writing says, "My dad caught a snake." When conferring about this piece of writing Jacob immediately said, "I remembered this idea, and I wanted to remember it." Jacob was already catching on to the idea that authors use writing as a tool to remember. The majority of his writing conference was spent explaining each detail of his picture to the

researcher. He explained that the snake was found on the family trashcan, and that his dad caught it while taking out the trash. He was excited to tell all of his friends how his dad really did touch the snake. When talking to his friends, Jacob would read off of his picture rather than making one to one correspondence and reading his words. When asked to read his words Jacob noticed this and said, "I want to get better at reading my story to someone." Jacob is aware of his need for improvement, but is also excited about his story. He said, "I am really good at my pictures. I can do better at my words." Jacob loves spending time on his drawing, telling a story through the details of his art, but he knows his words are important too. When asked how he was going to do this, Jacob was unsure. The next samples, he became more aware of what he needed to do to improve.

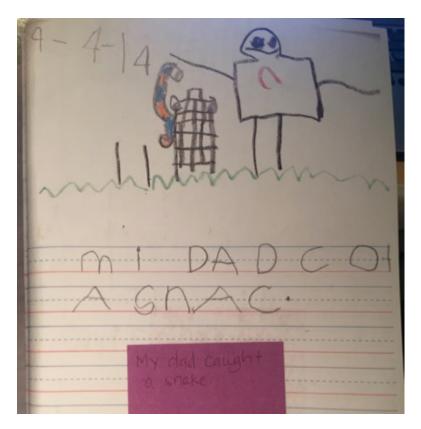


Figure 55. Jacob's Snake Writing Sample

Figure 56 shows Jacob's writing about the movie E.T. He said, "Elliot is happy to find E.T." Jacob got to see the movie E.T. for the first time, and he loved it. He told everyone about the movie and was genuinely excited to write about it. When asked about his writing he said, "Today I stretched my brain and sounded out my words. Elliot was hard to write." Jacob was aware of the writing challenge he was facing (writing a difficult word like Elliot), and he persevered by taking a writing risk and sounding out his words. When asked to tell more about his writing, he said, "I checked my brain and used my tools." Jacob used the sight word wall to write the word "to." He also said, "I used the I tool." Jacob is referring an alphabet chart that matches letters to a picture. The letter "I" is matched with a picture of a monkey "itching" helping the students remember the short I vowel sound. Jacob used this picture to help him write the /i/ sound in the word "Elliot." At the end of his conference, Jacob and the researcher came up with a writing goal together- to try and write all the way from right to left and use spaces between his words in his next writing.

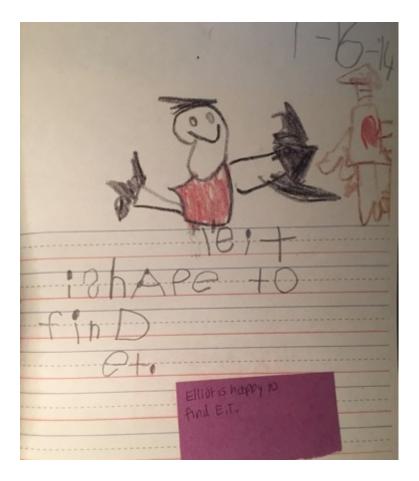


Figure 56. Jacob's E.T. Writing Sample

In figure 57, Jacob tells about a vacation he took to California, saying, "I live in California." When asked about this writing, Jacob said he wanted to tell people about the big house he lived in during his stay in California. He said the house was so big that he had to cover the whole page with his drawing. Jacob was excited about this piece of writing, motivating him to be creative in his drawing and work hard on his words. When asked if he faced any challenges in his writing, he said, "When I spelled live, the "i" used to be an "e", but I fixed the mistake." A faint left over letter e is still visible in Jacob's writing from when he erased and corrected his mistake. When he first was sounding out the word "live" he thought the /i/ sound was represented by the letter e. This ability to

self-assess helped Jacob become a self-regulated writer. As he kept writing his story, he then used the short /i/ sound correctly in the word "California." As the intervention progressed, Jacob became more willing to take risks in his writing, and worked hard to get better at this writing, including using his tools and fixing his own mistakes. When asked to think about himself as a writer Jacob said, "I take my time. I know everyone else is done but I want to learn a lot and do my best."

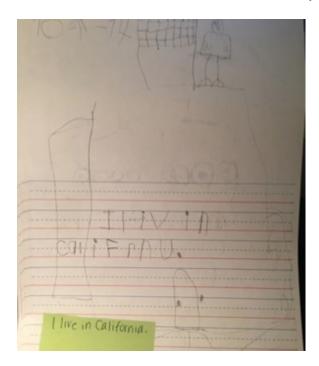


Figure 57. Jacob's California Writing Sample

Chase. Chase is a six year and nine month old male. On his Literacy and Writing Motivation Survey pre-test, he scored a 12/20. Chase was very talkative during this test, revealing a lot about his thinking about writing. "I kinda like challenges," said Chase. "I have a workbook that I work on at home...I don't do it very much but I should start doing that more. I get my mom to help me a lot. My mom tells me which letters." As the test progressed, Chase said, "I don't really like challenges. I don't like to read super hard

words...maybe a little. Sometimes when I have to write words I'm like "UGH!" because I don't like to write them." Chase seems to be torn between liking and disliking literacy challenges. When completing his Writing Challenge Task, he only went two levels out of nine in the test. By the end of the intervention, Chase had taken on all of the challenges in the Writing Challenge Task post-test, scoring a 9/9. He also improved his self-reported Literacy and Writing Motivation Survey to 16/20. During the intervention, Chase was interviewed about his writing. Three writing samples were chosen to show how Chase self-reflected on his writing and motivation.

Figure 58 shows Chase's writing about a fantasy safari trip. He wrote, "Safari car is looking for animals." Chase told the researcher that he loves to "write about the wilderness." He said, "When I get to read and write my grandma will give me books about wild life and I am so excited." Chase is motivated for many reasons to write about the wilderness and his safari. He is passionate about the topic, and his grandmother gives him an incentive to keep working hard so he can read the wild life books she owns. This writing was also special because after struggling through writing challenges for a couple of weeks, Chase said, "Today was the first day I felt like I did it all by myself. I felt kinda happy. I sounded out my letters and I used the /ing/ sound." Chase had a breakthrough moment where he felt like this writing was independently his own. He was becoming a self-regulated writer as he used his strategies and tools to write the words of his story. When asked what he could do better next time Chase said, "Well I really wanted to write more but I think I was just done." Chase implied that he tired out in his writing. He wanted to do more but he did not have enough writing stamina at the time. Future samples will show his increased stamina.

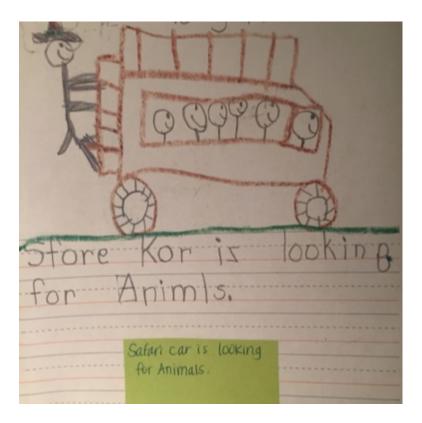


Figure 58. Chase's Safari Writing Sample

Figure 59 shows Chase's writing about *Star Wars*. He said, "Luke is getting shot." Many of the boys wrote about Star Wars throughout the intervention, allowing writing to become a social and collaborative event. Chase said, "We all wrote Star Wars. My picture is really good." When asked about his writing, Chase said, "I did spaces and put a period at the end." Chase was using tools from the self-editing checklist tool to self-check his writing. When asked what he could do better next time, Chase said, "I have to use my brain sometimes to figure out more words." Again, Chase wanted to write more words but was running out of writing stamina. His awareness of this writing

challenge and his willingness to keep trying demonstrates his personal writing motivation and self-awareness.

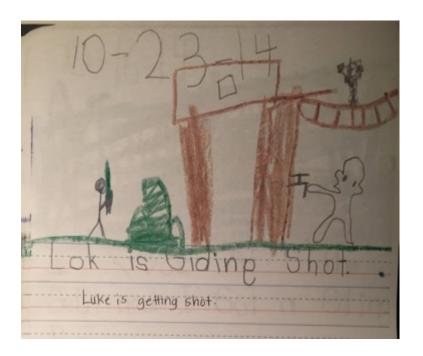


Figure 59. Chase's Star Wars Writing Sample

Figure 60 shows Chase's personal narrative writing about a trip to the beach. Chase wrote, "I was at the beach and I saw a sting ray that got bit by a shark." When asked to reflect on this writing, Chase said, "I said, 'Hey I think I will try a long one today!" Chase became motivated on this day to increase his writing stamina and write the long story he had wanted to write. The researcher noticed two places that Chase had erased in his journal and asked Chase if he had faced any writing challenges and what he did to fix them. The first challenge was writing the sight word "the." Chase started to write a Z at the beginning of this word, but then remembered he could use the sight word wall to help him figure it out. He erased the Z and accurately wrote the word "the."

Chase also erased the word "beach." Originally he had written a "th" instead of a "ch" at the end of the word. Chase said, "I looked at the ABCs and saw the chin." Chase is referring to the picture of a "chin" that helps cue students to the /ch/ digraph sound. Chase realized this was the sound he needed. He was using but misusing the digraphs. He realized he chose the wrong one and corrected his mistake in his writing. Chase was becoming a self-regulated writer who was motivated to make his writing better as well as increase his writing stamina.

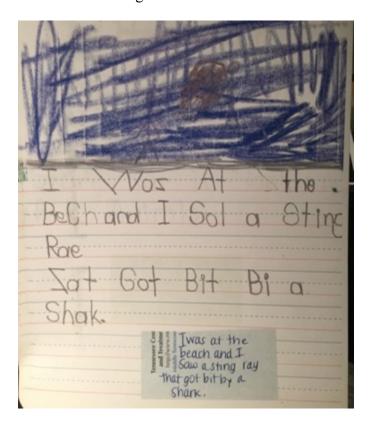


Figure 60. Chase's Vacation Writing Sample

CHAPTER V

Discussion

This study was an attempt to increase the writing achievement and motivation of kindergarten students through the implementation of a writer's workshop plus mindset intervention. This chapter provides an overview of the intervention and results, discusses classroom implications as well as limitations of the study, and provides recommendations for future research in the area of writing motivation and emergent writers.

The design of this intervention was birthed from a review of the literature in writing achievement and motivation. Starting with a foundation supporting process-oriented writing instruction (Graham & Sandmel, 2011), the writer's workshop format underneath this process-oriented writing umbrella was chosen for the intervention. The writer's workshop format of instruction is rooted in social constructivist approach to process writing as students working within this framework become constructors of mediated knowledge as they work cooperatively in social contexts for writing. The culture and the language of students are vital to learning and development, and are encouraged in the writer's workshop approach. Each of these tenets of the writer's workshop were incorporated into the intervention, including student choice, collaboration, and student-inspired instruction.

This was the foundation for the intervention instruction, but the literature revealed more needed to be added to this approach to make it the most effective writing instruction it could be. Although much qualitative research has been done to support the writer's workshop approach to writing instruction, the lack of self-regulation strategy within writer's workshop instruction has shown this approach to be less than effective,

especially for struggling writers (Troia et al., 2009; Graham & Sandmel, 2011; Graham et al., 2012). When self-regulation strategy instruction is added to a process-oriented approach to writing instruction, writing achievement increases (Graham, McKeown, Kiuhara, & Harris, 2012), thus the intervention adopted self-regulation strategy to the process-oriented approach to writing. Some of these strategies included the use of writing tools within the writer's notebooks and anchor charts within the classroom that helped support students in their writing achievement.

Academic achievement cannot always be reduced to simple strategy instruction for cognitive skills, due to the complex nature of learning. Other affective factors, such as motivation, were considered for this intervention (Wentzel & Wigfield, 2009). Specifically, motivation literature involving self-theories that emphasize taking initiative in learning, persisting in the face of obstacles, valuing effort, and seeking challenges (Harris, Santangelo, & Graham, 2008; Dweck & Master, 2009) were considered. Without these growth-seeking self-theories, a child can learn an arsenal of self-regulation strategies but never become a self-regulated learner, because he or she does not believe these strategies are necessary for learning (Dweck & Master, 2012), and therefore, will only use them when required. Thus, instruction for teaching a growth mindset was incorporated into this intervention. A growth mindset student believes that intelligence is malleable and that effort and utilizing strategies create learning. This mindset can be taught and practiced, helping children who lack the ability to sustain the generation of ideas, keep going, and use writing skills and strategies to generate a little more (Flower & Hayes, 1981).

The results of the literature review suggest that a process-oriented writing approach, such as writer's workshop, can be effective on its own for some writers, but could be improved and expanded to more writers by adding more explicit self-regulation strategy instruction and adding motivational techniques such as mindset training. This was the foundation for this intervention and inspired the proposed research questions as the researcher sought to understand if the explicit instruction of self-regulation strategies as well as mindset training would empower children to face academic challenges.

This mixed-methods study addressed four quantitative research questions and four qualitative research questions. Although each question had a specific hypothesis and data analysis plan, these questions were connected and woven together in order to create a complete picture of this multi-faceted study. The quantitative questions were: (1) How does the writer's workshop plus mindset instruction affect the overall writing achievement on a standardized measure?; (2) Is the writer's workshop plus mindset instruction effective on a near measure of writing closely aligned to instruction?; (3) Does the writer's workshop and mindset instruction increase literacy and writing motivation in young children?; and (4) Do children persevere through challenging writing tasks?. The qualitative questions were: (1) Does children's thinking about their writing and motivation change when teachers use the writer's workshop plus mindset intervention?; (2) How are writing and mindset skill strategies evident as children work through difficult writing hurdles?; (3) Does children's writing change qualitatively over time when teachers use the writer's workshop plus mindset intervention?; and (4) How are children verbalizing their thinking when they are working through writing tasks and self-reflecting on their personal motivation?.

By considering these questions together as a whole, the researcher attempts to paint a picture of the effectiveness of the intervention through standardized measures, researcher-created measures, and qualitative measures. Each of these questions were independent from each other but also dependent on one another in order to fulfill the research need established in the literature review. After a review of the literature in the area of writing motivation with emergent writers, there was a gap in the research that could be filled by a mixed-methods study that employed an experimental design.

Furthermore, the assessments and measures used within the mixed-methods studies found in the review lacked the use of a standardized writing test, along with a task-oriented writing assessment that required students to take action in their writing. By adding these tests, along with a motivation survey, the qualitative interviews and writing samples, the researcher gained a deeper understanding of the complexity of kindergarten writing achievement and motivation.

Kindergarten Writing Achievement

Writing achievement can be broken down into two general parts: basic writing skills and contextual writing. Basic writing skills include phonics skills, spelling words, and punctuation and grammar use. Contextual writing skills include the ability to *use* these skills in the framework of writing for a variety of purposes. Although teaching basic writing skills in isolation is important, writing can best be fostered by teaching these skills in the context of their use (Calkins, 1980). Each writing achievement assessment within the study provided a piece of the writing instruction puzzle, implementing both basic writing skills as well as contextual writing instruction. These were an appropriate assessment for the intervention, as the intervention focused on basic

writing skills within the context of their own personal writing in a writer's workshop format. The writing achievement assessments included the TEWL-3 standardized writing assessment, the researcher-created Writing Rubric, student interviews about their writing, and the qualitatively coded journal writing samples.

These assessments helped paint a picture of the kindergarten writers as a whole. Students were able to demonstrate both the basic tenets of writing skills, as well as work with writing in context, contributing to its full meaning. The TEWL-3 test in particular demonstrated this growth. The students in the experimental group grew from the 47th percentile on average to the 87th percentile on average on the Basic Writing subtest in a matter of nine weeks. Although the experimental group had a greater increase, the control group also increased their scores from the 50th percentile to the 79th percentile. Both groups seemed to grow in their basic writing skills at similar levels, but the Contextual Writing subtest of the TEWL-3 is where the two groups seems to stand in significant contrast. The control group only increased their Contextual Writing subtest scores from the 1st percentile to the 3rd percentile on average, while the experimental group increased from the 1st to the 45th percentile. This growth is significant as students in the experimental group were able to apply their isolated skills to the broader picture of authentic writing. The intervention was a stair step for students to become independent writers with a sense of competence. The instruction was scaffolded as students were given tools for basic writing skills to become automatic and independent writers. Then, the students were taught to use these skills in context of their own writing. Basic writing skills and contextual writing skills became interwoven and connected.

The writing rubric also helped capture students' integrated knowledge of skills-

based writing and contextualized writing. Basic writing skills such as capitalization, punctuation, and spacing were considered along with contextual writing skills such as voice and writing stamina. The students in the experimental group wrote more words and used more complex writing conventions than that of the control group. Not only did the students in the experimental group score higher on the writing rubric, but they were also able to talk more in depth about their writing and their thinking, as shown by the interviews. During intervention discussions and post-interviews, the students in the experimental group seemed to be more aware of their own thinking and learning, as they were able to speak about the strengths and weaknesses of their writing as well as set goals for future writing.

The writer's workshop plus mindset intervention used a combination of direct teaching and student discovery within an authentic writer's workshop context. Students were able to choose their own writing topics and were supported within their writing by the use of self-regulated strategy instruction. By giving students more autonomy, encouraging metacognition, and empowering them with the tools to be independent writers, students' writing achievement and motivation increased.

Kindergarten Writing Motivation

Previous literature indicates the complexity and difficulty of accurately measuring the self-perceptions and motivations of young children (Lai, 2011). Often times children's self-reports differ significantly from their willingness to actually complete a literacy task. Much of the previous writing and motivation research uses a self-report style assessment without the use of a task-oriented assessment. Without a task-oriented assessment, it is hard to fully understand if students are just *saying* they are motivated but

do not actually match their words with their actions. This research attempts to create a complete picture of the participants' writing motivation by using a self-report style Literacy and Writing Motivation Survey, a task-oriented Writing Challenge task, as well as interviews and discussions about students' writing motivation. By using a combination of these assessments, students' writing motivation was more thoroughly understood.

Prior to the intervention, students were interviewed and tested on each of these motivation assessments. During these assessments it became evident that many of the students, despite their Motivation Survey scores, did not want to actually take on writing challenges in the Writing Challenge Task. On average, both the experimental group and the control groups did not pass the third level of the Writing Challenge Task. By the end of the intervention, the experimental group increased their willingness to take on a writing challenge by approximately five levels, while the control group only minimally increased from 2.43 to 2.92. The Motivation Survey scores also significantly increased for the experimental group, while there was no change in the control group. Students in the experimental group not only considered themselves motivated writers but also supported their own self-perceptions through action on the Writing Challenge task.

The actions and the self-perceptions of the students spilled over into their language and confidence within the writer's workshop. The experimental kids grew confident in their own abilities they began to give others advice. Students were heard reminding other students to use their tools, as well as suggesting writing topics and spreading new ideas. The students in the experimental group were also confident in giving writing advice to pre-kindergarten students when prompted, saying things like

"practice and practice and concentrate and concentrate." These students have moved from learning to teaching, demonstrating their path toward writing independence. Their confidence was so great they even felt comfortable helping others, as opposed to the control group who gave vague, unsure answers when asked how they might help a younger student learn to write. The students in the experimental group increased in writing motivation and self-regulated writing by the end of the intervention.

Classroom Implications

Collaboration and increased student choice coupled with structured self-regulation strategy instruction and mindset training were important factors in the intervention instruction. Students were allowed and even encouraged to work together on their writing. Students were given the freedom to move about the classroom, share their writing, and pass on their ideas. Students were also given the opportunity each day to write on a topic of their choice. Topics were never assigned to students, allowing them to write about what interested them. Direct and specific strategy instruction and mindset instruction enhanced all of these typical writer's workshop tenets. The instruction contained a balance of direct instruction and student self-discovery. Students were given both freedom and direction within the workshop by adding self-regulation instruction and mindset training to the writer's workshop framework. After this intervention, students showed increased autonomy and motivation, even spilling over into increased writing achievement scores on a standardized test. This is important in today's classroom as many schools move to a "teach to the test" curriculum that stresses memorization and "drill and kill" practice in order to increase test scores. This research suggests that students can still increase standardized test scores within a writer's workshop framework

that allows for student choice and authentic contextual writing in combination with instruction in perseverance and self-regulation, all while increasing writing independence and motivation and feelings of worth and competence.

The writer's workshop plus mindset intervention also plays an important role in differentiating in the classroom. As children become more independent and motivated writers, the teacher can spend much more time attending to the individual needs of each student. The workshop model allows for the teacher to move about the classroom, supporting those who need extra help and challenging the students who need more. The mindset instruction helps the students stay engaged and self-regulated, freeing the teacher to be a support system where he or she is needed most. The writing confidence allows the kids to take writing risks and opens up more choice and autonomy for them as writers. When students are tied solely to teacher direction, students are not able to experiment, collaborate, or increase self-regulation. Starting this model of writing instruction in kindergarten could potentially open up a world of possibilities for students in their future writing. If students were to start seeing themselves as independent and capable writers as young as kindergarten, teachers in future grades could push students to new academic heights, allowing them to move past writing reluctance into motivated, independent writers.

The writer's workshop plus mindset intervention uses a gradual release model, balancing direct instruction with student discovery, and scaffolding students into more complex writing achievements each day. Literacy instruction today constantly emphasizes the importance of growing independent readers, but does not say that about independent writers as often. If classrooms today used a writer's workshop plus mindset

model of writing instruction, students could potentially become motivated, independent writers.

Limitations and Future Research

Teacher effects, small sample size, the Hawthorne effect (Mayo, 1933), and lack of qualitative comparisons are four limitations of the study. This study was a first step in attempting an experimental design using a writer's workshop plus mindset intervention. The control group was a business-as-usual model, which included writer's workshop, but the content of the instruction was left up to the classroom teachers. Indicated in this model is the possibility of the instruction of each group may vary, leaving room for teacher effects to be the reason for the effectiveness of the intervention. At times, the amount of writing time varied between groups depending on the choice of instruction of the teacher for the control group- sometimes participating in writer's workshop for only 20 minutes, while the experimental group would be in the workshop for closer to 40 minutes. Future research would benefit from using the same model with scripted instruction for the control group's writer's workshop, allowing each group to have the same amount of writing time and writing instruction.

In this study the use of statistical tests, such as ANCOVA, helped increase statistical power by using the pre-test as a covariate, but ANCOVA was found to be not appropriate for some of the data, resulting in the use of *t*-tests as a second analysis. The small numbers in this study pose an issue with external validity. With only 27 participants, there are not many children from which to generalize the findings, implying these results could be particular to the students in the study. Future research with a large, varied population would strengthen the findings. The participants in this sample came

from a low to middle socioeconomic population. Therefore, future research would also benefit from a study using a population that includes a middle to upper socioeconomic population. Also, students in kindergarten are just learning to write. Research with students in older grades would help researchers know if the intervention would be effective in improving the ability to write for those students who have already possess it.

The Hawthorne effect (Mayo, 1933) is the tendency for some participants to perform better and work harder simply because they have been chosen as participants for an experiment. Students may feel special or singled out to perform and will do so because they are being observed. The Hawthorne effect can be minimized with a long-term approach to the study. Over the course of 10 weeks, students were able to show changes, but future research could benefit from a longer study that allows researchers to see if growth is maintained over the course of a school year. A follow-up measure of writing motivation and writing skill would also help to see if the gains are maintained past the intervention phase.

Although this study contained an experimental and control group, these groups were mostly used for quantitative comparison purposes. Future research would benefit from more qualitative comparisons between groups, including the analysis of the control group's writer's notebooks.

Another question of interest would be if a reading achievement measure would be helpful in understanding if the writing achievement and motivation of the students transferred to reading achievement and motivation.

Conclusion

In conclusion, this study was able to create a research-based writing plus mindset intervention for emergent kindergarten writers. This method could be useful for teachers who are attempting to scaffold students into becoming motivated, self-regulated writers. This intervention could help provide authentic writing and motivation instruction that not only helps students become independent, inspired writers within a classroom context, but also increases their achievement on standardized test scores, as well as fostering a sense of competence and a jumpstart in socialization development. Growing driven, autonomous writers could be a key factor in a child's academic success.

REFERENCES

- Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, Mass.: MIT Press.
- Applebee, A. N., Auten, A., & Lehr, F. (1981). Writing in the secondary school: English and the content areas. Urbana, Ill.: National Council of Teachers of English.
- Atwell, N. (1987). *In the middle: Writing, reading, and learning with adolescents*. Upper Montclair, N.J.: Boynton/Cook.
- Britton, J. (1970). Language and learning. London: Penguin Books.
- Broach, E., & Egielski, R. (2010). *Gumption!* New York: Atheneum Books for Young Readers.
- Burhans, K. K., & Dweck, C. S. (1995). Helplessness in early childhood: The role of contingent worth. *Child development*, *66*, 1791-1738.
- Calkins, L. M. (1980). When children want to punctuate: Basic skills belong in context.

 Language Arts, 57, 567-73.
- Calkins, L. M. (1986). The art of teaching writing. Portsmouth, N.H.: Heinemann.

pdf

- Campbell, T. (2009). Storytelling and Story Writing "Using a Different Kind of Pencil"

 Retrieved from

 http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/ww_storytelling.
- Chomsky, C. (1971). Write first, read later. *Childhood Education*, 47(6), 296-299.
- Chomsky, C. (1979). Approaching reading through invented spelling. In L. Resnick & P. Weaver (Eds.), *Theory and practice of early reading* (Vol. 2, pp. 43-64). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

- Clay, M. M. (1975). What did I write?. Portsmouth, NH: Heinemann.
- Clay, M. M. (2005). An observation survey of early literacy development. Aukland, NZ: Heinemann.
- Creswell, J. W., & Clark, V. L. (2011). *Designing and conducting mixed methods* research (2nd ed.). Thousand Oaks, Calif.: SAGE Publications.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests.

 *Psychometrika. 16, 297-334.
- Cutler, L., & Graham, S. (2008). Primary grade writing instruction: A national survey. *Journal of Educational Psychology*, 100(4), 907-919.
- Dahl, L. (2013, 11 14). Interview by M. Norris. Roald Dahl wanted his magical 'Matilda' to keep books alive., Retrieved from http://www.npr.org/2013/11/14/245222230/roald-dahl-wanted-his-magical-matilda-to-keep-books-alive
- Diener, C., & Dweck, C. (1978). An analysis of learned helplessness: Continuous changes in performance, strategy, and achievement cognitions following failure. *Journal of Personality and Social Psychology*, 36, 451-462.
- Dignath, C., Buettner, G., & Langfeldt, H. (2008). How can primary school students learn self-regulated learning strategies most effectively? A meta-analysis on self-regulation training programmes. *Educational Research Review*, 3(2), 101–129.
- Dweck, C. S. (1975). The role of expectations and attributions in the alleviation of learned helplessness. *Journal of Personality and Social Psychology*, *31*, 674-685.
- Dweck, C. S. (2007). *Mindset: The new psychology of success*. New York, NY: Ballantine Books.

- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, *95*(2), 256-273.
- Dweck, C. S., & Master, A. (2009). Self-theories motivate self-regulated learning. In D.H. Schunk & B. J. Zimmerman (Eds.), *Motivation and self-regulated learning:Theory, research, and applications* (pp. 31-51). New York, NY: Routledge.
- Dweck, C. S., & Master, A. (2012). Self-theories and motivation: Students. In K. Wentzel & A. Wigfield (Eds.), *Handbook of motivation at school* (pp. 123-140). New York, NY: Routledge.
- Dweck, C. S., & Reppucci, N. D. (1973). Learned helplessness and reinforcement responsibility in children. *Journal of Personality and Social Psychology*, 25(1), 109-116.
- Edwards, L. (2003). Writing instruction in kindergarten: Examining an emerging area of research for children with writing and reading difficulties. *Journal of Learning Disabilities*, *36*(2), 136-148.
- Ehmann, S., & Gayer, K. (2009). I can write like that! A guide to mentor texts and craft studies for writers' workshop, K-6. Newark, DE: International Reading Association.
- Ehri, L. C. (2005). Learning to read words: Theory, findings, and issues. *Scientific Studies of Reading*, 9(2), 167–188.
- Ferreiro, E., & Teberosky, A. (1982). *Literacy before schooling*. Exeter, N.H.: Heinemann Educational Books.
- Fletcher, R. (2001). Writing workshop: The essential guide. Portsmouth, NH: Heinemann.

- Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College Composition and Communication*, 32(4), 365-387.
- Fulmer, S., & Frijters, J. (2009). A review of self-report and alternative approaches in the measurement of student motivation. *Educational Psychology Review*, 21, 219-276. Retrieved December 14, 2014, from http://www.academia.edu/2911788/A_Review_of_Self-Report_and_Alternative_Approaches_in_the_Measurement_of_Student_Motivation
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). Educational research: An introduction. (8ed.). Boston, MA: Pearson
- Gambrell, L., Hughes, E., Calvert, L., Malloy, J., & Igo, B. (2011). Authentic reading, writing, and discussion: An exploratory study of a pen pal project. *The Elementary School Journal*, 112, 234-258.
- Gee, J. P. (2011). How to do discourse analysis: A toolkit. New York: Routledge.
- Gentry, J. R. (2000). A retrospective on invented spelling and a look forward. *The Reading Teacher*, *54*(3), 318-332.
- Glaser, B. & Strauss, A., (1967). The discovery of grounded theory. Chicago: Aldine.
- Graham, S., Harris, K. R., Frink-Chorzempa, B., & MacArthur, C. (2003). Primary grade teachers' instructional adaptations for struggling writers: A national survey.

 **Journal of Educational Psychology, 95, 279-292.
- Graham, S., Harris, K. R., & Mason, L. (2005). Improving the writing performance, knowledge, and self-efficacy of struggling young writers: The effects of self-regulated strategy development. *Educational Psychology*, *30*, 207-241.

- Graham, S., and Hebert, M. A. (2010). Writing to read: Evidence for how writing can improve reading. A Carnegie Corporation Time to Act Report. Washington, DC: Alliance for Excellent Education.
- Graham, S., McKeown, D., Kiuhara, S., & Harris, K. R. (2012). A meta-analysis of writing instruction for students in the elementary grades. *Journal of Educational Psychology*, *104*(4), 879-896.
- Graham, S., & Perin, D. (2007). Writing next: Effective strategies to improve writing of adolescents in middle and high schools. Washington, DC: Alliance for Excellent Education.
- Graham, S., & Sandmel, K. R. (2011). The process writing approach: A meta-analysis. *The Journal of Educational Research*, 104, 396-407.
- Graves, D. H. (1983). Writing: Teachers and children at work. Exeter, N.H.: Heinemann Educational Books.
- Graves, D. H. (1994). A fresh look at writing. Portsmouth, N.H.: Heinemann.
- Graves, D. H., & Kittle, P. (2005). My quick writes: For inside writing. Portsmouth, NH: Heinemann.
- Greene, J. C. (2007). Mixed methods in social inquiry. San Francisco: Jossey-Bass.
- Gutman, L. M., & Sulzby, E. (2000). The role of autonomy-support versus control in the emergent writing behaviors of African-American kindergarten children. *Reading Research and Instruction*, *39*(2), 170-184.
- Hammill, D., & Larsen, S. (2009). *Test of written language* (4th ed.). Austin, TX: Pro-Ed.

- Harris, K. R., Graham, S., & Mason, L. H. (2006). Improving the writing, knowledge, and motivation of struggling young writers: Effects of self-regulated strategy development with and without peer support. *American Educational Research Journal*, 43(2), 295-340.
- Harris, K. R., Santangelo, T., & Graham, S. (2008). Self regulated strategy development in writing: Going beyond NIE's to a more balanced approach. *Instructional Science*, *36*, 395-408.
- Hayes, J. R. (1996). A new framework for understanding cognition and affect in writing.

 In C. M. Levy & S. Ransdell (Eds.), *The science of writing: Theories, methods, individual differences, and applications* (pp. 1-27). Mahwah, NJ: Erlbaum.
- Hayes, J. R. (2006). New directions in writing theory. In C. MacArthur, S. Graham & J. Fitzgerald (Eds.), *Handbook of writing research* New York, NY: The Guilford press.
- Hayes, J.R., & Flower, L.S. (1980). Identifying the organization of writing processes. In
 L. Gregg & E. Steinberg (Eds.), *Cognitive processes in writing: An*interdisciplinary approach (pp. 3-30). Hillsdale, NJ: Erlbaum.
- Hecht, S. A., & Close, L. (2002). Emergent literacy skills and training time uniquely predict variability in responses to phonemic awareness training in disadvantaged kindergartners. *Journal of Experimental Child Psychology*, 82(2), 93-115.
- Hobbs, C.L., & Berlin, J.A. (2001). A century of writing instruction in school and college English. In J. Murphy (Ed.), *A short history of writing instruction: From ancient Greece to modern America* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

- Hresko, W. P., Herron, S. R., Peak, P. R., & Hicks, D. L. (2012). *Test of early written language* (3rd ed.). Austin, TX: Pro-Ed.
- Jasmine, J., & Weiner, W. (2007). The effects of writing workshop on abilities of first grade students to become confident and independent writers. *Early Childhood Education Journal*, 35, 131-139.
- Kolb, S. (2012). Grounded theory and the constant comparative method: Valid research strategies for educators. *Journal of Emerging Trends in Educational Research and Policy Studies*, 3, 83-86.
- Lai, E. (2011, April 1). Motivation: A literature review. Retrieved January 13, 2015, from
 - http://images.pearsonassessments.com/images/tmrs/Motivation_Review_final.pdf
- Lipsey, M., & Hurley, S. (2009). Design sensitivity: Statistical power for applied experimental research. In L. Bickman & D. Rog (Ed.), *The SAGE handbook of applied social research methods* (2nd ed.) (pp. 44-76). Thousand Oaks, CA: SAGE Publications.
- Mason, L., Meadan, H., Hedin, L., & Cramer, A. (2012). Avoiding the struggle:

 Instruction that supports students' motivation in reading and writing about content material. *Reading & Writing Quarterly*, 28, 70-96.
- Mata, L. (2011). Motivation for reading and writing in kindergarten children. *Reading Psychology*, *32*, 272-299.
- Mavrogenes, N. A., & Bezruczko, N. (1993). Influences on writing development. *Journal of Educational Research*, 86(4), 237-245.

- Mayer, K. (2007). Emerging knowledge about emergent writing. *Young Children*, 62(1), 34-40.
- Mayo, E. (1933). *The human problems of an industrial civilization*. New York: MacMillan.
- McTigue, E. M., Beckman, A. R., & Kaderavek, J. N. (2007). Assessing literacy motivation and orientation. In Pence, K. L. (Eds.) *Assessment in emergent and early literacy*. (pp. 481-518) San Diego, CA: Plural Publishing.
- Mermelstein, L. (2013). Self-directed writers: The third essential element in the writing workshop. Portsmoth, NH: Heinemann.
- Miller, S. D., & Meece, J. L. (1997). Enhancing elementary students' motivation to read and writing: A classroom intervention study. *Journal of Educational Research*, 90(5), 286-299.
- Miller, S. D., & Meece, J. L. (1999). Third graders' motivational preferences for reading and writing tasks. *The Elementary School Journal*, 100(1), 20-35.
- Moyer, A., Schneider, S., Knapp-Oliver, S., & Sohl, S. (2010). Published versus unpublished dissertations in psycho-oncology intervention research.

 Psychooncology, 19, 313-317.
- National Institute of Child Health and Human Development, (2000). National reading panel: Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction:

 Reports of the subgroups. National Institute of Health, Washington, D.C..

- National Center for Education Statistics (2011). *The Nation's report card: Reading*2011 (NCES 2012–457). Institute of Education Sciences, U.S. Department of Education, Washington, D.C.
- Neumann, M., Hood, M., & Ford, R. (2013). Using environmental print to enhance emergent literacy and print motivation. *Reading & Writing*, 26(5), 771-793.
- Nolen, S. (2007). Young children's motivation to read and write: Development in social contexts. *Cognition and Instruction*, 25(2), 219-270.
- Nunnally, J. C., & Berstein, I. H. (1994). Psychometric theory. New York: McGraw-Hill.
- Olinghouse, N. G., & Graham, S. (2009). The relationship between the discourse knowledge and the writing performance of elementary grade students. *Journal of Educational Psychology*, 101(1), 37-50.
- Perry, N. E., Nordby, C. J., & VandeKamp, K. O. (2003). Promoting self-regulated reading and writing at home and school. *The Elementary School Journal*, *103*(4), 317-338.
- Perry, N. E., VandeKamp, K. O., Mercer, L. K., & Nordby, C. J. (2002). Investigating teacher-student interactions that foster self-regulated learning. *Educational Psychologist*, *37*(1), 5-15.
- Ricci, M. C. (2013a). Mindsets in the classroom building a culture of success and student achievement in schools. Waco, TX: Prufrock Press, Inc.
- Ricci, M. (2013b). ThinkFun's Junior Game Bundle. *Thinkfun*. Retrieved July 8, 2014, from http://www.thinkfun.com/mindsetsjrbundle
- Richgels, D. J. (1987). Experimental reading with invented spelling (eris): A preschool and kindergarten method. *The Reading Teacher*, 40(6), 522-529.

- Rogers, R. (2011). Critical approaches to discourse analysis in Rogers, R. (Ed.), *An introduction to critical discourse analysis in education* (pp.1-19). New York: Routledge.
- Saldaña, J. (2009). The coding manual for qualitative researchers. London: Sage.
- Schuck, D. H., & Zimmerman, B. J. (2007). Influencing children's self-efficacy and self-regulation of reading and writing through modeling. *Reading and Writing Quarterly*, 23, 7-25.
- Snyders, C. S. B. (2013). "I wish we could make books all day:" An observational study of kindergarten children during writer's workshop. *Early Childhood Education Journal*, 42, 405-414.
- Strauss, A., & Corbin, J. (1990). Basic of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA: Sage.
- Tangel, D. M., & Blachman, B. A. (1992). Effect of phoneme awareness instruction on kindergarten children's invented spelling. *Journal of Literacy Research*, 24(2), 233-261.
- Troia, G. A., Lin, S. C., Monroe, B. W., & Cohen, S. (2009). The effects of writing workshop instruction on the performance and motivation of good and poor writers.

 In G. Troia (Ed.), *Instruction and assessment for struggling writers: Evidence-based practices* (pp. 77-104). New York, NY: The Guilford Press.
- Troia, G. A., Harbaugh, A. G., Shankland, R. K., Wolbers, K. A., & Lawrence, A. M. (2013). Relationships between writing motivation, writing activity, and writing performance: Effects of grade, sex, and ability. *Reading and Writing: An Interdisciplinary Journal*, 26, 17-44.

- Troia, G. A., Shankland, R. K., & Wolbers, K. A. (2012). Motivation research in writing:

 Theoretical and empirical considerations. *Reading and Writing Quarterly*, 28, 528.
- Schiefele, U. (2009). Situational and individual interest. In K. Wentzel & A. Wigfield (Eds.), *Handbook of motivation at school* New York, NY: Routledge.
- Vasquez, V. (2004). *Negotiating critical literacies with young children*. Mahwah, NJ: Lawrence Erlbaum.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological*processes. Cambridge, MA: Harvard University Press. Published originally in Russian in 1930.
- Wentzel, K. R., & Wigfield, A. (2009). Introduction. In K. Wentzel & A. Wigfield (Eds.), Handbook of motivation at school (pp. 1-8). New York, NY: Routledge.
- Wilson, K. M., & Trainin, G. (2007). The first grade students' motivation and achievement for reading, writing, and spelling. *Reading Psychology*, 28, 257-282.
- Wilson Language Training. (2011). *Fundations Wilson Language Basics for K-3* (2nd ed.). Millbury, Mass.: Wilson Language Training.
- Wyatt-Brown, A. (Director) (1992, March 19). From the clinic to the classroom: D.W.

 Winnicott, James Britton, and the revolution in writing theory. *43rd Annual Meeting of the Conference on College Composition and Communication*. Lecture conducted from, Cincinnati.
- Yates, C. M., Berninger, V. W., & Abbott, R. D. (1995). Specific writing disabilities in intellectually gifted children. *Journal for the Education of the Gifted*, 18(2), 131-155.

- Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American Educational Research Journal*, *45*(1), 166-183.
- Zimmerman, B. J. (2011). Motivational sources and outcomes of self-regulated learning and performance. In B. J. Zimmerman & D. Schunk (Eds.), *Handbook of self-regulation of learning and performance* (pp. 49-64). New York, NY: Routledge.
- Zimmerman, B. J., & Risemberg, R. (1997). Becoming a self-regulated writer: A social cognitive perspective. *Contemporary Educational Psychology*, *22*, 73-101.

APPENDICES

APPENDIX A: INTERVENTION LESSON PLANS FALL 2014

Lesson One August 26, 2014

Materials needed: Ziggy and Nash books, Mindset PowerPoint, Chart Paper, Blank prin

printer paper
 Start with introduction and expectations. (3 minutes) Community Building Activity: Jump in, Jump Out, Introduce yourself. My name is, I like to Alright, Alright, Alright. (10 minutes) Read Growth vs. Fixed Mindset PowerPoint with reference Ziggy and Nash books. (10 minutes) Drawing Example: use the easel to draw a picture of a personal story. You do no have to write the words, but tell the story while drawing the picture. Example: Last week I was with my Dad in Texas. We were outside on the porch when a tiny garden snake slithered by! It scared me, but I knew it would not hurt me. Tell the children that each of them has a story to tell as well. Assign partners to each student and have them each tell a story to each other. Teacher walks around and listens to the stories, recording a few interesting ones. Chart the story ideas. Come back together and discuss some of the story ideas (i.e., I heard a story today about a dog who is sick. I heard a story today about singing in a microphone, and eating spaghetti!) Give each child a blank piece of paper. Ask them to draw their story. If time, help them write one word for their story. Take this up at the end of the lesson for a pre-assessment.
Lesson Two August 28, 2014
Materials needed: Fantastic Elastic Brain book, trifold board with Brain audit trail rubber band ball, chart paper
 Community Building Activity: Everyone stands in a circle. Each person says, "My name is and I like to "Each person should have a motion to go with what they like to do. The teacher starts the game and then proceeds around the circle. Each person says the names and motion of the person before them before saying their own. (7 minutes) Read aloud <i>My Fantastic Elastic Brain</i> by Dr. JoAnn Deak (20 minutes) Most of the time will be spent on page where the author talks about
 Most of the time will be spent on page where the author talks about

stretching our brains and making connections.

o Present students with a grapefruit-sized ball of rubber bands. Explain that the rubber band ball is similar to the brain in both size and consistency.

The brain is made up of rubber band-like structures, both large and small. Each of us was born with large and small rubber bands, corresponding to areas in which we are skillful and areas where we can grow. Model how rubber bands can stretch, and explain that this stretching is symbolic of brain growth. Provide students with a set of large and small rubber bands and allow them to practice stretching them as they visualize their brains growing. Which type of rubber band is easier to stretch? Which requires more effort? Reiterate the idea that our brains can grow and stretch with practice.

- To further reinforce the concept of brain malleability and plasticity, provide each student with a ball of clay and encourage them to stretch and mold it into the shape of their own brain.
- Teach the students the brain motions and words, "When you TRY HARD to learn something new CONNECTIONS grow and your brain keeps STRETCHING." As you say this sentence, add the hand motions for each capitalized word:
 - TRY HARD: make muscle arms
 - CONNECTIONS: place each of your ten fingers together at the fingertips
 - STRETECHING: stretch your arms as wide as you can
- Repeat the sentence and motions chorally and add the audit trail picture below to the trifold.
- Writing Mini-Lesson: One thing we are going to do over the next few weeks that is really going to stretch our brains is writing. We are ALL writers in this classroom. It may be kind of tricky at first but writer's work really hard to keep learning! (15 minutes)
 - o Mini-lesson: What is writer's workshop? What is writing? Who are writers? What do writer's do?
 - Everybody is a writer. Writers write and draw about things they know and love and stories they want to tell. Writers are not perfect but they work hard. Writers make mistakes.
 - o Everyone signs his or her name to the "I AM A WRITER" chart.
- Writing/Drawing Example: use the easel to draw a picture of a personal story. Tell the story while drawing the picture, and then add at least two sentences to describe the picture. Example: Last week I was with my Dad in Texas. We were outside on the porch when a tiny garden snake slithered by! It scared me, but I knew it would not hurt me.
- Tell the children to turn and talk to a partner about a time they got hurt.
- Give each child a blank piece of paper. Ask them to draw their story. They can choose to draw a time they got hurt or another story. Reference the "What can I write about?" chart to remind the students what they can write about. If time, help them write one word for their story.

Lesson Three August 29, 2014

Materials Needed: ball or stuffed animal, chart paper, trifold, Mindset games

- Community Building: Introduce Michelle. Throw the stuffed animal and say your name and a nickname. My name is Katie but some people call me Katie Cat. (5 minutes)
- Writing can be challenging. Sometimes we don't know our what letters we should write, and we have to use what we know to help us work hard. One hard thing is writing words. It can be challenging. Sometimes we might want to give up and say "I don't know how to write these words!" But we are going to say, "Bring it on! We can do it!" Today we are going to practice writing some words on our white boards. Every time we write a challenge word, we will put a sticker on our chart. One way to figure out these hard words is to use the letter sounds we know.
- Mini-lesson (10 minutes): Writers tell lots of stories. We have lots of things that happen to us everyday, beauty around us that we can notice, and new things we learn and love that we can share. Part of being a writer is telling stories. We ALL have stories to share. I am going to tell you about a story. Example: I went to the doctor with Mr. Schrodt to check and make sure my baby was healthy. When we got there, the doctor told us, "Guess what? There are TWO babies! And now we will be having a little boy and a little girl in January."
- Model the Writing: Model the writing. "I am going to have twins! They are a boy and a girl."
- Give each child a blank piece of paper. Ask them to draw their story. They can choose to draw a time they got hurt or another story. Reference the "What can I write about?" chart to remind the students what they can write about. If time, help them write one word for their story.
- Mindset Games Challenge (5 minutes): We are going to play some games starting next week. I will introduce a new game each day I am here. Today we will learn about the first mindset game. Introduce the rules of the game.

Lesson Four September 2, 2014

Materials Needed: yarn, audit trail, blank paper, crayons, whiteboards and markers, editing checklist

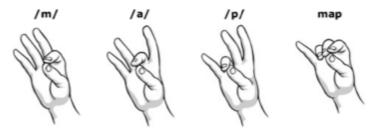
• Do a brief review of mindset by referring to the Audit Trail *My Fantastic Elastic Brain* book. Emphasize connections of the brain by doing a yarn toss. Ask the children to think of something that is really hard for them that they are still working on and toss the yarn holding a piece of it. Emphasize that when we do something difficult and practice we are stretching our brains and making more connections. (10 minutes)

- Sometimes writers write words that they don't know how to spell. Introduce and practice letter sounds and white board words. Students stretch out the sounds in the words and write them on the white board. (10 minutes)
- Oral storytelling: Last week we told lots of stories. We are going to write one of those stories today. Students will choose a story and the teacher will model a shared writing. Introduce the self-editing checklist. Begin using the language from the checklist and modeling each piece. (10 minutes)
- Show students their writer's notebooks. Talk to them about the rules of the notebook (use crayon, the pictures stays at the top and the words go at the bottom) Today your picture is going to go into your writer's notebook. I want to see if anyone can write more than one word about their picture. (10 minutes)
- Share a few of the notebooks.

Lesson Five September 4, 2014

Materials Needed: chart paper, self-talk checklist, blank paper, crayons, whiteboards and markers

- Mindset talk chart. Introduce the self-talk checklist. Make a chart of what we could be saying instead of words like "I can't." (7 minutes)
- Introduce the new mindset game. Review old mindset game. (5 minutes)
- Sometimes writers write words that they don't know how to spell. One way to do this is to tap out the sounds in the words. Also go over the sounds for SH, TH, ING (15 min)
 - . As he says the /m/ sound, he taps his index finger to his thumb.
 - · As he says the /a/ sound, he taps his middle finger to his thumb.
 - . As he says the /p/ sound, he taps his ring finger to his thumb.
 - He then says the sounds as he drags his thumb across the three fingers starting with his index finger and ending with his ring finger.



• Again today your picture is going to go into your writer's notebook. I want to see if anyone can write more than one word about their picture. While writing, the teacher needs to emphasize what to do when we get stuck (use the letter sound

strip). Also emphasize that we all have our own stories to tell and we don't need to tell someone else's story (i.e., copy). Teacher walks around to give support to students. (25 minutes)

• Share notebooks (5 minutes)

Lesson Six September 5, 2014

Materials Needed: writer's notebooks, center writing word cards, whiteboards and markers, ThinkFun games, chart paper

- Letter and sound practice with sign language. The first five minutes students will go over letter sounds using sign language. (5 minutes)
- Mini-Lesson (5 minutes): starting in the notebook. Today we will start writing in our notebooks! We are going to write about whatever we want. Let's go through our writing checklist and make sure we remember what we need to do first. First we write our short cut date, then we move to drawing our picture, lastly we will write our words. What if you come to a word you don't know how to spell? What can you do?
- Model one short writing example. (5 minutes)
- Students will start writing in their own notebooks again today. Go over the checklist (short cut date, picture, think and say, etc) (20 minutes)
- Share- how did you come up with your ideas? Did you come to a time when you were stuck? What did you do? Did you learn anything else? (5 minutes)
- Mindset: Introduce Rush Hour Jr., Swish, and writing center. Divide the students into small groups to play the games. In the writing center, students will be with a teacher and will draw picture cards and write as many words as they can in 15 minutes. Track the progress with a chart. (15 minutes)
- How did you feel playing these games? Were any of them hard? Do you still have room to improve? In the writing center, were some of the words hard to write? What did you do when you came to a hard word? How many words did you write? Do you think we could add more words next time?

Lesson Seven September 9, 2014

Materials: children's book, audit trail picture and trifold, chart paper, notebooks

- Conduct an interactive read aloud with the book, *The Most Magnificent Thing* by Ashley Spires.
- Read the title and the author, look at the front of the book, "What do you think this book will be about?" After a few predictions, begin reading the story.

- Stop at page 8 before the last sentence, where the little girl says, "It is all WRONG!" Ask, "What do you think the girl should do? Should she keep trying or quit?"
- On page 10, comment on how she is still trying yet again. "Who does this seem like? Ziggy or Nash?" (answer: Ziggy)
- On page 16, "Turn and talk to your neighbor, have you ever gotten really mad when you could not get something right or do something as good as someone else? Talk about that time."
- On page 21, "Who does this sound like? Ziggy or Nash?" (answer: Nash)
- After the last page, "What did the girl end up doing? What helped her?"
- As a class, create an audit trail (Vasquez, 2004) artifact using the picture of the book cover below. An audit trail is a visible articulation of learning over time. We will document the "mindset" books we read and add them to a trifold poster throughout the intervention. These will be pulled out every lesson and serve as a reminder of the characters we have met that keep persevering and trying!
- Write on the printed paper below what the students say about the little girl in the book. "What was she like? What was most important about her in the book?" If answers are not mindset related, remind the students that she kept trying, even when she kept failing. Talk about persistence, effort, and not giving up! (15 minutes)
- Model Writing: Model a story on chart paper using the writing checklist. Model an example of something that might be more challenging for you to draw or write. For example, "Today I wanted to write about my niece Naomi learning how to crawl, but I thought it would be too hard to draw a picture of a baby crawling, so I thought about changing what I was going to write about. But then I remembered that the only way I am going to get better is if I TRY! And it is ok if my baby does not turn out perfectly." Then draw the picture and write the words "Naomi learned how to crawl." (7 minutes)
- Students write: Students will write their short cut date, draw a picture, and write words for the picture (20 minutes)
- Share: Did anyone get stuck? How did you keep going? What helped you?

Lesson Eight September 11, 2014

Materials Needed: children's book, audit trail picture and trifold, notebooks, chart paper

- Read Mia Hamm, Winners Never Quit.
- Sometimes it seems like it is better to quit than to not succeed. How was Mia like Nash in this story? How was she like Ziggy? We may think it is better than making a mistake. Why do we need to fail? How do mistakes help us?

- Create audit trail chart for the book. Review the self-talk list. (20 minutes)
- Phonics Practice: Practice letter sounds with the sign language alphabet for visual cues. (7 minutes)
- Introduce students to being able to find a place around the room to write. They can write anywhere as long as they are not closer to someone else within arms distance. Practice moving to a place and writing appropriately. Limit talking. (5 minutes)
- Students write: Students will write their short cut date, draw a picture, and write words for the picture (23 minutes)
- Share: one favorite line from a story. (5 minutes)

Lesson Nine September 12, 2014

Materials needed: notebooks, chart paper, ThinkFun games, writing center cards

- Mini-lesson: You can add onto a story you did before. For example, when I wrote about Naomi learning how to crawl. I have heard more stories about her crawling since then, so I want to add on to this story. "Naomi learned how to crawl. She left a poopy trail. YUCK!"
- Students write: Students will write their short cut date, draw a picture, and write words for the picture (20 minutes)
- Share: what did you do that was challenging this week? How did you overcome it?
 (5)
- Mindset: Introduce Zingo and Shape by Shape and continue with Rush Hour Jr., Swish, and writing center. Divide the students into small groups to play the games. In the writing center, students will be with a teacher and will draw picture cards and write as many words as they can in 15 minutes. Track the progress with a chart. (20 minutes)
- Did anyone come across a challenge? How did you work through it? How many words did the writing center get this time?
- Close by reading *Ralph Tells a Story*. What did Ralph think he could not do? Was he right?

Lesson Ten September 16, 2014

Materials Needed: chart paper, notebooks, checklists

• Tell the story of my own fixed mindset. When I was little I watched my sister play the piano and she was so good and I wanted to do it. So I started piano lessons, but guess what? I did not know how to play right away. I needed practice. The practice

was long and hard and I got frustrated. I wanted to be just like Kendall, but I did not want to put in any hard work. I was being like Nash. I was not up for a challenge. I wanted to keep doing things that were easy. What is hard about writing? Do you feel like giving up like I did? I really wish I could have never given up, because now I do not know how to play the piano and I wish I did! (5 minutes)

- Review: What do you do when you don't know what to do? Chart- use the word wall, look at our ideas list, think about ideas your friends are writing about, observe around you, stretch your words, use your checklist (5 minutes)
- Mini-lesson: Listening for sounds in words. One of the hard parts of writing is making sure to listen to ALL of the sounds in a word. The beginning sound is the easiest, but when we keep stretching the word we find out there are lots of sounds in some words
- White board practice: The students will be given a white board and expo markers to write with. They will be given the option to write the letter sound, word or sentence and the option to move to a more challenging word after each try. Use these words and sounds:
 - o g sound
 - o x sound
 - o sh sound
 - o cat
 - o dig
 - o limp
 - o spit
 - o apple
 - o I see a rug.
- (20 minutes)
- Students write: Students will write their short cut date, draw a picture, and write words for the picture (20 minutes)
- Share a few of the unique stories you see. (5 minutes)

Lesson Eleven September 18, 2014

Materials Needed: *Rosie Revere, Engineer* book, audit trail printout and trifold, white boards, white board markers, notebooks

- Read Rosie Revere, Engineer
- Does Rosie have a Fixed or Growth Mindset? How do you know? Use evidence from the text.
- Create audit trail chart for the text. (20 minutes)
- Writing Mini-lesson: The word wall is a place we can go to help us spell our sight words. What are some of the words you see on the word wall? Today I am going to use some words to help me write a story. Mr. Schrodt went on an airplane to California yesterday. I am going to write about that. I am going to say, "He was on

- the airplane." Model how you can use the words on the word wall to write them in your journal (he, was, on, the).
- Students write: Students will write their short cut date, draw a picture, and write words for the picture (20 minutes)
- Share a few of the unique stories you see. How did you use the word wall today? (5 minutes)

Lesson Twelve September 19, 2014

Materials Needed: mindset games, editing checklist, notebooks

- Mindset: Introduce Zingo and Shape by Shape and continue with Rush Hour Jr., Swish, and writing center. Divide the students into small groups to play the games. In the writing center, students will be with a teacher and will draw picture cards and write as many words as they can in 15 minutes. Track the progress with a chart. (20 minutes)
- Did anyone come across a challenge? How did you work through it? How many words did the writing center get this time?
- Mini-lesson: self-editing checklist. We have been talking about the editing checklist and today we are going to paste them into your journals so you have them to reference every time. Let's go over each of the things that we need to remember. (5 minutes)
- Students write: Students will write their short cut date, draw a picture, and write words for the picture (20 minutes)
- Share- what did you do that was challenging this week? How did you overcome it? (5 minutes)

Lesson Thirteen September 23, 2014

Materials Needed: The Little Engine that Could Book, audit trail chart and trifold, chart paper, notebooks

- Read *The Little Engine that Could*
- Introduce "self-talk" checklist and how the engine used self-talk
- Create audit trail chart for the book (20 minutes)
- Mini-lesson: Self-Talk. Review the self-talk checklist. Model an example using the "think aloud" method. For example: Draw a motorcycle. Say aloud, I really wanted to write about my brother and a motorcycle but I was afraid that word was too big. So I said to myself, "I can do this! I just have to use all of my sounds." Write the words, "My brother really wants to buy a motorcycle." (10 minutes)

- Students write: Students will write their short cut date, draw a picture, and write words for the picture (20 minutes)
- Share- what do you use to help you? (5 minutes)

Lesson Fourteen September 25, 2014

Materials Needed: Scaredy Squirrel book, audit trail paper, chart paper, notebooks

- Read *Scaredy Squirrel*. Create audit trail for Scaredy Squirrel.
- Why is it important for people to try things that seem hard or scary?
- Mini-lesson: Hand Map whole group. As a group come up with things that our hands touch in the school and at home. (for example: toys, football, garden, Mom, Dad, shoes) Write these on a large piece of chart paper whole group. The students can write stories from this hand map. (15 minutes)
- Students write: Students will write their short cut date, draw a picture, and write words for the picture (20 minutes)
- Share: What do you do when you can't think of anything to write about? (10 minutes)

Lesson Fifteen September 30, 2014

Materials Needed: Nash and Ziggy, chart paper, notebooks, large and small rubber bands

- Go over mindsets again. What is Nash like? What is Ziggy like? Who do we want to be like?
- Chart how you think we have gotten better as writers and mindset thinkers. What do we still need to work on? Example: large rubber bands that need less stretching and areas for development small rubber bands that require greater stretching. Where do we need to keep stretching when it comes to writing? (10 minutes)
- Today we are going to do more than just white board words, but we are going to do some sentences on the white boards! That means you have to write more than one word, using lots of strategies. For example, if the sentence is "I play soccer." (model the sentence on your white board, demonstrating how to remember spaces, capital and period, also stretching the sounds in the words) As a group practice writing simple sentences (examples: The dog is nice. My candy is red. I like pumpkins. I hurt my foot. Books are interesting.)
- Students write: Students will write their short cut date, draw a picture, and write words for the picture (25 minutes)
- Share what you are writing about (15 minutes)

Lesson Sixteen October 2, 2014

Materials Needed: Gumption book, audit trail and trifold, mini word walls

- Read *Gumption!* What do you think the word "gumption" means? Good! It means courage, confidence, guts, spunk. Do you have to have gumption to be a writer?
- Create audit trail chart of the *Gumption!* book. (15 minutes)
- Mini-Lesson: Introduce mini-word walls. These will be put in their notebooks and the teacher can add words to the word wall that are specific to the child's writing. (For example, if a child likes to write about football, the teacher may place the word "football" under the F box on the word wall.) (10 minutes)
- Model writing: Pick out approximately five journals to show to the students. Show the parts that are "original" or "unique" writing ideas. Encourage them to be creative. (10 minutes)
- Students write: Students will write their short cut date, draw a picture, and write words for the picture (20 minutes)
- Share what you are writing about (5 minutes)

Lesson Seventeen October 3, 2014

Materials: video player device with internet, Notebooks, chart paper, mindset games

- Mini-Lesson: Reasons we write. Make a chart for some reasons we would write. Examples include, to remember, to reflect, to communicate, to tell someone something, to make a change, etc. (7 minutes)
- Model writing: Model writing a list to remember. (5 minutes)
- Students write: Students will write their short cut date, draw a picture, and write words for the picture (25 minutes)
- Mindset Centers: Zingo and Shape by Shape and continue with Rush Hour Jr., Swish, and writing center. Divide the students into small groups to play the games. In the writing center, students will be with a teacher and will draw picture cards and write as many words as they can in 15 minutes. Track the progress with a chart. (20 minutes)
- Watch Michael Jordan video at https://www.youtube.com/watch?v=45mMioJ5szc
- Why is it important for people to keep going even when they make mistakes or fail? (5 minutes)

Lesson Eighteen October 7, 2014

Materials Needed: I can do it! Book, audit trail, notebooks, chart paper, print out of egg to butterfly, and notebook printout of egg to caterpillar

- Read I can do it!
- Create audit trail chart
- What is hard about writing? What have you done to help yourself get better? (15 minutes)
- Model Writing Mini-lesson: Writing from a sequence of pictures. Using pictures of a caterpillar turning into a butterfly, model how you can write about what is happening in each picture by using transition words like first, then, next, last. For example, First there was an egg. Next the egg cracked and there was a caterpillar. Then the caterpillar spun a cocoon. Last, he became a butterfly. (10 minutes)
- Write in notebook: Show the students sequenced pictures of the egg to the chicken. Place the scaffolded sheet in their notebooks. The students will write what is happening next in each picture. For example, First there was an egg. Next the chicken grew in the egg. Then there was a baby chick. Last, he became a chicken. (30 minutes)
- Share notebooks (5 minutes)

Lesson Nineteen October 14, 2014

Materials Needed: Chart paper, notebooks, 3 little pigs sequencing page

- Shared Writing: Write a letter to our parents or a new student about what it means to keep going strong even when things get hard. Students will come up with the ideas and the teacher writes them in a shared writing letter. (15 minutes)
- Mini-lesson: Writing from a picture. Place the three little pigs sequencing page into the children's notebooks. Have the students orally tell what is happening in each picture, while the teacher writes down the words for a shared writing model. (First, the pig built a house out of sticks. Next, the big bad wolf came and blew it down. Last the house was destroyed. (10 minutes)
- Write in notebook: Students will write in their notebooks on a topic of their choice (30 minutes)
- Share notebooks. (10 minutes) Ask the students to identify a compliment for the person who is sharing. What are they doing well?

Lesson Twenty October 16, 2014

Materials: *Amazing Grace* book, audit trail picture, notebooks, Humpty Dumpty pictures

- Read *Amazing Grace*
- Create audit trail chart
- What did Grace's classmates say she could not do? She did not let anyone tell her what she could and could not do! Was she like Ziggy or Nash? How do you know?
- Mini-lesson: Challenge words on white board. Model going around the room and writing a word of an object in the room. Each student should write as many words in the 5 minutes as they can on their white board.
- Write in notebook: Students will write in their notebooks on a topic of their choice (30 minutes)
- Share notebooks. (10 minutes) Ask the students to give compliments based on what they know good writers do.

Lesson Twenty-One October 17, 2014

Materials Needed: chart paper, notebooks, checklists, mindset center games

- Mini-lesson: Personal narrative modeling. "Today I get to fly to Dallas for my first baby shower! Matilda and Monroe will get some new clothes and diapers!" As you are writing model mindset self-talk, and go through the writing checklist. (10 minutes)
- Write in notebook: Students will write their short cut date, draw a picture of whatever they want to write about, say the sentence in their head, and then write the sentence. (25 minutes)
- Share- what did you do that was challenging this week? How did you overcome it?
- Mindset Centers: Zingo and Shape by Shape and continue with Rush Hour Jr., Swish, and writing center. Divide the students into small groups to play the games. In the writing center, students will be with a teacher and will draw picture cards and write as many words as they can in 15 minutes. Track the progress with a chart. (20 minutes)
- Did anyone come across a challenge? How did you work through it? How many words did the writing center get this time? (5 minutes)

Lesson Twenty-Two October 21, 2014

Materials Needed: Sally Jean Bicycle Queen Book, audit trail chart, notebooks, chart paper

- Read Sally Jean Bicycle Queen
- Create audit trail chart (15 minutes)
- Mini-lesson: Self assessing writing. Today I am going to pull each of you and ask you to look at your favorite piece of writing. What do you think you did well on? What do you think you could improve? What are your goals to make it better? (5 minutes)
- Mini-lesson: Personal narrative modeling. "Mr. Schrodt plays the drums. He has drums that are red and sparkly!" As you are writing model mindset self-talk, and go through the writing checklist. (10 minutes)
- Write in notebook: Students will write their short cut date, draw a picture of whatever they want to write about, say the sentence in their head, and then write the sentence. (25 minutes)
- Conference: While students are writing, ask each student to come to you and talk to you about his or her writing. What do they think they did well? What do they need to do better? Write down their answers.
- Share notebooks (5 minutes)

Lesson Twenty-Three October 23, 2014

Materials: notebooks, chart paper, printable final copy page

- Shared writing: As a group, write about how have we changed as writers. The students tell the teacher what to write. How have we gotten better? What did we used to do and now what do we do better? What is hard about writing? (10 minutes)
- Mini-lesson: Celebrating writing. Next week we are going to celebrate being writers! You have chosen one piece of writing that you like the best. You are going to recopy this writing and make the drawing beautiful today. (5 minutes)
- Writing: Students make a final copy of their writing and drawing. (30 minutes)
- If time, students can practice white board challenge words.

Lesson Twenty-Four October 24, 2014

Materials: Notebooks, final copies, author pages, chart paper

- Mini-lesson: Author's Page. Today you are going to make an authors page. You will draw a picture of yourself and write about yourself. Model an author's page of yourself for them on the chart paper. (5 minutes)
- Author Page: Students create their own author page. (20 minutes)
- Mindset Centers: Zingo and Shape by Shape and continue with Rush Hour Jr., Swish, and writing center. Divide the students into small groups to play the games. Students can rotate through each of the centers. While students are playing the games, the teacher will make sure everyone is finished with the final draft. (30 minutes)

Lesson Twenty-Five October 28, 2014

Writing Celebration/ Writer's share time

• Teachers and upper grade classes are invited to come and listen to the students read their writing. Each student will be given a "compliments" sheet that the guests can write on to encourage the children.

APPENDIX B: MINDSET LESSON PLANS

- Conduct an interactive read aloud with the book, *The Most Magnificent Thing* by Ashley Spires.
- Read the title and the author, look at the front of the book, "What do you think this book will be about?" After a few predictions, begin reading the story.
- Stop at page 8 before the last sentence, where the little girl says, "It is all WRONG!" Ask, "What do you think the girl should do? Should she keep trying or quit?"
- On page 10, comment on how she is still trying yet again. "Who does this seem like? Ziggy, Dot, or Nash?" (answer: Ziggy)
- On page 16, "Turn and talk to your neighbor, have you ever gotten really mad when you could not get something right or do something as good as someone else? Talk about that time."
- On page 21, "Who does this sound like? Ziggy, Dot, or Nash?" (answer: Nash)
- After the last page, "What did the girl end up doing? What helped her?"
- As a class, create an audit trail (Vasquez, 2004) artifact using the picture of the book cover below. An audit trail is a visible articulation of learning over time. We will document the "mindset" books we read and add them to a trifold poster throughout the intervention. These will be pulled out every lesson and serve as a reminder of the characters we have met that keep persevering and trying!
- Write on the printed paper below what the students say about the little girl in the book. "What was she like? What was most important about her in the book?" If answers are not mindset related, remind the students that she kept trying, even when she kept failing. Talk about persistence, effort, and not giving up!

The Most Magnificent Thing by Ashley Spires

[INSERT BOOK COVER PICTURE HERE]

Mindset Lesson Plan

- Read aloud Amazing Grace by Mary Hoffman
- During reading, stop three to five times to model your thinking. Your think-alouds should be brief so as not to interrupt the flow of the story. In addition, they should encourage critical thinking and discussion of the themes within the text. Here are two ideas for think-alouds for the book *Amazing Grace*:
 - The text says, "Grace kept her hand up." *Teacher think-aloud*: "Wow. It seems like Grace doesn't let other people change her mind. She is very determined. She must have a lot of self-confidence."
 - At the end of the book, Natalie tells Grace she was fantastic as Peter Pan.
 Teacher think-aloud: "I'm glad that Grace didn't listen to Natalie at the
 beginning of the story. I think that Natalie learned an important lesson by
 watching Grace."
- Has anyone ever told you that you couldn't do something because you were too little? A boy or a girl? Not smart enough?
- When Grace's classmates told her she could not play the part of Peter Pan because she was black and because she was a girl, Grace didn't seem bothered by their words and she still tried out for the part. But, once she was home, she told her family how upset she was. What does this tell us about the kind of girl Grace is?
- Write on the printed paper below what the students say about Grace in the book. "What was she like? What was most important about her in the book?" If answers are not mindset related, remind the students that she kept trying, even when she kept failing. Talk about how she kept on going even when people told her should couldn't do it!

Amazing Grace by Mary Hoffman

[INSERT BOOK COVER PICTURE HERE]

Mindset Lesson Plan

- Read aloud My Fantastic Elastic Brain by Dr. JoAnn Deak
- Most of the time will be spent on pages 14-24 where the author talks about stretching our brains and making connections.
- Present students with a grapefruit-sized ball of rubber bands. Explain that the rubber band ball is similar to the brain in both size and consistency. The brain is made up of rubber band-like structures, both large and small. Each of us was born with large and small rubber bands, corresponding to areas in which we are skillful and areas where we can grow. Model how rubber bands can stretch, and explain that this stretching is symbolic of brain growth. Provide students with a set of large and small rubber bands and allow them to practice stretching them as they visualize their brains growing. Which type of rubber band is easier to stretch? Which requires more effort? Reiterate the idea that our brains can grow and stretch with practice.
- To further reinforce the concept of brain malleability and plasticity, provide each student with a ball of clay and encourage them to stretch and mold it into the shape of their own brain.
- Teach the students the brain motions and words, "When you TRY HARD to learn something new CONNECTIONS grow and your brain keeps STRETCHING." As you say this sentence, add the hand motions for each capitalized word:
 - o TRY HARD: make muscle arms
 - o CONNECTIONS: place each of your ten fingers together at the fingertips
 - o STRETECHING: stretch your arms as wide as you can
- Repeat the sentence and motions chorally and add the audit trail picture below to the trifold.

My Fantastic Elastic Brain by Dr. JoAnn Deak

[insert pictures that match the capitalized words]

"When you TRY HARD

to learn something new CONNECTIONS

grow and your brain keeps STRETCHING."

MENTOR TEXTS FOR MINDSETS

■ The Most Magnificent Thing by Ashley
■ Amazing Grace by Mary Hoffman I can do it: A first look at not giving up ■ The Girl Who Never Made a Mistake by Pat Thomas by Mark Pett ■ Luke Goes to Bat by Rachel Isadora Scaredy Squirrel by Melanie Watt All the Way to Lhasa by Barbara Ralph Tells A Story by Abby Hanlon Berger Your Fantastic Elastic Brain by JoAnn
Sally Jean Bicycle Queen by Cari Best Deak Gumption! By Elise Broach ■ Mia Hamm: Winners Never Quit by Mia Hamm Brave Irene by William Steig ■ Wilma Unlimited: How Wilma Rudolph ■ The Little Engine That Could by Watty Became the World's Fastest Woman Piper by Kathleen Krull Rosie Revere Engineer by Andrea Beaty

APPENDIX C: WRITING MINI-LESSONS

Stretching Out Tricky Words: Anchor Chart/ Mini-Lesson

Have students seated on the carpet in front of you, with your work on an easel.

- Sometimes writers come to words they do not know how to spell. When this happens, they have to STRREETTCCCHH out the word like a rubber band. Writers say the word slowly, stretching the word out, and writing all the sounds we can hear. I'll teach you how to do this.
- I drew this story I want to share with you (hold up picture and orally tell story of that picture. Decide to label one picture with a word and stretch out the word to hear the sounds.) Watch how I do it. I'm going to listen to the sound at the beginning of the word. Now I am going to say it slowly again and write a letter that makes the sound I hear. (Figure out first letter and then continue for rest of word, rereading each sound as I go.) Wow! It really helped me to say the word slowly, stretch out the sounds, and write what I hear.
- Now I want to write another word I need your help. Write the word on your whiteboards as we do it together. First we say the word. Watch me say it slowly. Now you say the word slowly. What sound do you hear at the beginning? Listen and tell your partner what you hear write the letter that makes that sound. Put your finger under what you've written and let's read it together. Now let's say the next sound write what you hear. (Then reread) Will someone tell me what you wrote so I can label my picture? (Accept incorrect spelling as long as letters represent the sounds in the word, like "bik" instead of "bike".)
- Remember the strategy we just used while you are writing. Say the word, then stretch it out by saying it slowly, write one sound, then reread what you've written so far and say the word again slowly, listening for the next sound. When you are writing in your notebook today, use this strategy so that people can read your words. This chart will help us remember to stretch out our words. (Point to the chart while saying the words. Hang the chart on a trifold for writing)
- Now go to your seats and open up to the next clean page in your writer's notebook. Remember to write your short cut date at the top. You may find a place around the room to write.
- Give the students 15-25 minutes to write depending on time.
- Sharing: Did anyone stretch out a word in their writing today? Can you tell us about it? Was it hard? How did you do it?

STRETCH YOUR WORDS

- Say it slowly
- Listen to the sounds you hear
- Keep saying the words slowly
- Write down the letters

[insert pictures to match the words]

Writing Mini-Lesson Using the Word Wall

- I started writing it last night but it was starting to be such a long story and I didn't finish it. I figured we could write some of it together today. I want to teach you a trick for how to make your writing go faster.
- There are some words, as readers, that you guys just know. Well, when we write, we also need some words that we just know. This helps writing go faster. The words up on our word wall are words that you guys just know, or almost know, in a snap. If there's a word you're writing in your story that is on the word wall, but you can't spell it, you can just look for it there. Then you can say the letters to remind yourself. Once it is in your brain, you can write it down. Now we need to add on to our story. (Read students what I've written so far, stopping at a few word wall words tell students what the next words will be then demo process of thinking of what the word starts with to find it on the word wall then "fix the spelling into my brain.")
- As a group, practice going over a few sight words on the word wall. When spelling create a movement, rhythm, or dance to go with the words.
- Today and every day when you write, you'll come to words you just know. Write these fast. Don't stretch them out just think, "I know that word!" and write it. Or if you almost know it, check the word wall, and then you can write it like a snap! As we learn more of these words in Kindergarten, you will have more and more words you know like a snap.
- Now go to your seats and open up to the next clean page in your writer's notebook. Remember to write your short cut date at the top. You may find a place around the room to write.
- Give the students 15-25 minutes to write depending on time.
- Share success story of student who used the word wall. Point out that the smartest way to use the word wall is not to copy from it, but to put the words in your mind to learn them and then try to write it without looking.

Writing Mini-Lesson

Oral Storytelling and Writing Ideas

- There is another reason why you guys are so lucky to be Kindergarteners this year! This year you will learn to become great readers, and you will also learn to become terrific writers! Writers, did anyone notice all of the books we have in our classroom? (hold up a few books) All of these books were written by authors, and this year you will all be authors too. Authors have lots of great stories to tell. You have many stories to tell too! If we can tell a story, we can draw the story. If we can draw the story, we can write it. If we can write a story, we can read it.
- Demo developing a story telling idea. I think I will tell you about a time when I was reading outside and I realized I couldn't go back in my house because the doors were locked! I am going to draw that time. (Sketch picture) Now I will write the words. (label pictures, then write 2 short sentences, sounding out each word as I write). Writers, did you notice what I just did? I thought about something that happened to me and I got it in my head. I told the story and then I drew a picture of it and wrote my words. Today and every day you can do the same thing. You can think about things in your life and you can write about them. Today we are just going to practice telling those stories. You can tell a story about your family, about playing soccer, about your favorite things to eat, about a funny video you saw, or even a made up story!
- Close your eyes and think of a story you could tell. Now turn to your neighbor and sit eye-to-eye and knee-to-knee. I am going to tell you who is going to tell their story first. (Make sure all of the students have a partner and are facing eye-to-eye and knee-to-knee, if there is an odd number of students, put three in a group. Tap the student on the left of each group and tell them they are going first.) Remember when your partner is talking your job is to be a good listener.
- You may start telling your stories. You have two minutes! (Students may be nervous to talk the first time. Encourage them to think of some stories. While they are talking, jot down some of the story ideas you have heard the students talking about. After two minutes, refocus the children and tell them it is the other child's turn to tell a story. (repeat the process)
- I heard so many wonderful stories today. Let's make a chart of some of the story ideas we heard. Did anyone hear anything interesting today? (chart the ideas) Tomorrow when we do oral storytelling again, maybe some of these stories will help you think of some more of your own for tomorrow.

APPENDIX D: STUDENT SELF-CHECKLISTS

I can do it!
A mistake? GREAT! Mistakes help me learn better!
I will train my brain and keep trying!
I will use my strategies to help me!
Bring it on! I like a good challenge!
This may take some time and effort, but it will be worth it!
[INSERT PICTURES TO MATCH THE WORDS]

(checklist adapted from http://jessicameacham.com) Name Short Cut Date Picture matches words Think, then say Capital Finger spaces Stretch words Sentence stopper

APPENDIX E: CLASSROOM OBSERVATION PROTOCOL AND FIDELITY CHECKLIST

Adapted from (Perry et al, 2002)

Teacher:	Date:
Observer:	
Mindset Activity:	Writing Activity:
Running Record: Record "wha and students' speech.	at is going on" including verbatim samples of teachers'
_	

Check all that apply to this lesson:

O Students are given time to share

0	Students are given choice
0	Mindset language is used by teacher
0	Mindset language is used by children
0	Children are given opportunities for self-evaluation
0	Students receive support from teachers
0	Students receive support from peers
0	Mindset and motivation are addressed through a mini-lesson
0	Writing is addressed through a mini-lesson
0	Students are given time to write independently
0	Students use tools for self-regulation

Field Notes and Reflection

Teacher:	Date:
Mindset Activity:	Writing Activity:
Notes:	Reflection:
Photos:	

APPENDIX F: LITERACY AND WRITING MOTIVATION SURVEY MATERIALS



Growth Mindset

Ziggy is the kind of kid that really likes to learn new things. Ziggy knows that learning new things can be hard sometimes. Ziggy thinks that working hard and making mistakes is a part of learning. He thinks it is ok to make mistakes!





When Ziggy reads, he does not mind when he comes to words he does not know how to read. Instead he tries to think about all of the thinks he knows about letters and sounds and tries to figure out the word on his own.

Sometimes Ziggy will look at the alphabet for help or the word wall. He tries really hard to figure it out first before he asks someone for help. If Ziggy cannot figure out a word after trying really hard, he knows he needs to keep practicing and working on his reading.





He is not afraid to make mistakes because he knows he is always learning new things, and sometimes you need to make mistakes before you can keep learning. Ziggy likes puzzles and challenges. He likes to try challenging things and get better at them.

Ziggy loves to read and write, even if he doesn't know all of the words. He knows that if he always tries his best, he will eventually learn them.



Bring it on! I can do it!





Nash is the kind of kid that likes to feel smart. Nash likes to stick with easy things he knows how to do…like singing his ABCS and playing with blocks. He does not really like to read and write because he is afraid he won't know the words.





When Nash realizes his book has hard words, he usually quits or asks someone to read it for him. Nash does not like to make mistakes and does not want anyone to know if he doesn't know how to do something.

When he sees other people doing something he cannot do, he is discouraged and wishes he could do it just as good as them without any of the hard work and practice.



Nash does not like challenges, because that means he might not very good at the activity.



Nash does not like to make mistakes. When Nash makes mistakes he is very frustrated and usually wants to quit or ask for help.



If I do easy things, then I will feel smart. Don't give me any challenges.



Literacy and Writing Motivation Scale Based on Wilson & Trainin, 2007 ELMS

Student Name	Student Number
Start by introducing the two characters, Zigg character sketches and showing the students ask the students to choose who they are most	the characters. Using the scenarios below,
Ziggy: growth mindset, motivated, determin Nash: fixed mindset, unmotivated	ed
ATTRIBUTIONS	
Reading	
I am going to show you some words I would Kindergarten sight word cards. Have the stu more difficult words until they get to one the	idents read two "easy" words and then go to
Some of my friends Ziggy and Nash (point to too. Do you ever have trouble readi additional answer:	each) have trouble reading words like ing words at school or at home?" yes
1. When Ziggy tries to read a hard word When Nash tries to read a hard word Who are you most like?	d, he thinks he needs to keep practicing. he asks someone else to read it for him.
Ziggy (1) Nash (0)	
2. If Ziggy can't read a word, he tries to can't read a word he thinks the word you most like?	o stretch his brain to learn it. When Nash is too hard and does not want to try. Who are
Ziggy (1) Nash (0)	
Think about the time you read word each) read easily too. Do you ever new yes no additional answ	read words correctly at school or at home?"

3.	practiced har	d. When	Nash reads a word easily he thinks it is because he got ped him. Who are you most like?
	Ziggy (1)	Nash	(0)
4.	Ziggy likes t you most like		allenging words. Nash likes to read easy words. Who are
	Ziggy (1)	Nash	(0)
Writin	ng		
"me."	Good. Now sect. If both we	spell "tick ords are s	words for me with these letter tiles. Okay? Spell the word kle" No it's spelled like this. (Build the word for the child if spelled correctly, ask the child to spell "surprise." You want id one incorrectly spelled word.
	_too. Do you	ever hav	d Nash (point to each) have trouble writing words like we trouble writing words at school or at home? yes tional answer:
5.		. When N	ell a word, he tries harder and learns some new things to help Nash can't spell a word he asks someone to spell it for him. e?
	Ziggy (1)	Nash	(0)
6.	keeps practic	eing. Wh	enow how to spell a word, he tries his best to spell it and en Nash can't spell a word, he thinks the word is too hard ell it. Who are you most like?
	Ziggy (1)	Nash	(0)
Think (point home?	to each) read		lled the word easily. My friends Ziggy and Nash easily too. Do you ever spell words correctly at school or at no additional answer:
7.	learn his lette	ers and so	word easily, he thinks it is because he tried really hard to bunds. When Nash spells a word easily he thinks it is and someone helped him. Who are you most like?

Ziggy (1) Nash (0)

8. Ziggy likes to spell challenging words. Nash likes to spell easy words. Who are you most like?

Ziggy(1) Nash (0)

COMPETENCE AND DIFFICULTY

I want to tell you more about Ziggy and Nash and see if you are like any of them.

9. Ziggy thinks writing is sometimes difficult, but he if he tries really hard and learns some things to help him he can figure it out by himself. Nash thinks writing is hard and he doesn't think he can do it on his own. Who are you most like?

Ziggy(1) Nash (0)

10. Ziggy thinks he is a good reader. Nash does not think he is a good reader. Who are you most like?

Ziggy(1) Nash (0)

11. Ziggy thinks he is a good writer. Nash does not think he is a good writer. Who are you most like?

Ziggy(1) Nash (0)

12. Ziggy can figure out sounds in hard words on his own. Nash does not try to figure out the sounds in hard words. Who are you most like?

Ziggy(1) Nash (0)

SELF-EFFICACY

13. When Ziggy wants to spell a hard word like airplane, he thinks he can get most of the letters right. When Nash wants to spell a hard word like airplane, he does not think he can get any letters right. Who are you most like?

Ziggy(1) Nash (0)

14	. When Ziggy's teacher asked him to write a story about playing with his friends,
	he knew he could write lots of words about recess. When Nash's teacher asked
	him to write a story about playing with his friends, he did not think he could do it.
	Who are you most like?

Ziggy (1) Nash (0)

VALUE/ ENJOYMENT

15. Ziggy thinks it is important to write stories. Nash does not think it is important to write stories. Who are you most like?

Ziggy(1) Nash (0)

16. Ziggy enjoys writing stories on his own. Nash does not enjoy writing stories on his own because he thinks it is hard and he does not know what to say. Who are you most like?

Ziggy(1) Nash (0)

17. Ziggy thinks it is important to read stories. Nash does not think it is important to read stories. Who are you most like?

Ziggy (1) Nash (0)

18. Ziggy enjoys reading stories on his own. Nash does not enjoy reading stories on his own because he thinks it is hard. Who are you most like?

Ziggy(1) Nash (0)

MINDSET

19. Ziggy doesn't mind making mistakes, because he can learn from them. Nash hates making mistakes, because he wants to do it right the first time. Who are you most like?

Ziggy(1) Nash (0)

20. Ziggy is always trying to improve and learn new things. Nash likes to stick with what he already knows because it is easy. Who are you most like?

Ziggy(1) Nash (0)

APPENDIX G: WRITING CHALLENGE TASK

Writing Challenge Task – Examiner Copy (Schrodt, 2014)

you are ready, draw finished ask, What el	a picture of (insert chil se do you need to draw	e going to do some drawind's name) in the box. What else can you add aminer will record comm	hen the student is to the picture of
D • G		644	I
Drawing Score:	Quantify the number including head, neck, eyelashes, pupil, nose	e, mouth, hair, ears,	/17
	fingers, hands, arms, and clothing.	legs, feet, trunk/body,	
Requests for help:	0 = no requests	1 = low requests (1-2xs)	2 = high requests (3+)
Observations/ Stude	ent Comments:		

write or would you like something just challenging task, then move onto Task task 1.1. Task 1.1- Draw a picture of an animal Drawing Score: Quantify the numincluding head, in hair, ears, legs, f	nt, would you like a more challenging thing to as easy? If the student asks for the more 2.0. If the student asks for the easy task, move to d in the box.
including head, including head	
including head, in hair, ears, legs, for defining animal in the second s	
including head, in hair, ears, legs, for defining animal in the second s	
including head, in hair, ears, legs, for defining animal in the second s	
including head, in hair, ears, legs, for defining animal in the second s	
including head, in hair, ears, legs, for defining animal in the second s	
including head, in hair, ears, legs, for defining animal in the second s	1 66 42
defining animal	neck, eyes, nose, mouth, feet, trunk/body, and other /
	feature where applicable
Requests for help: $0 = \text{no requests}$	1 = low requests (1 - 2 = high requests)
Observations/ Student Comments:	$ 2xs\rangle$ $ (3+)$

Choose the Challenge: Ask the student, *would you like a more challenging thing to write or would you like something just as easy?* If the student asks for the more challenging task, then move onto Task 2.0. If the student asks for the easy task, move to task 1.2.

Task 1.2- Draw a picture of a tree in the box.			
Drawing Score:	Quantify the number		T
	including trunk, brand	ches, leaves, and roots.	/ 4
Decreases for halm	0 - no roquests	1 - low romests (1_	2 - high requests
Requests for help:	0 = no requests	1 = low requests (1- 2xs)	2 = high requests (3+)
Observations/ Student Comments:			
-	-	ould you like a more chal usy? If the student asks for	0 0
challenging task, ther	n move onto Task 2.0.	If the student asks for th	e easy task, tell them
they are finished with the test.			
Task 2.0- Write Name: Now write your name in the box.			
Write Name here:	_		
Write Name note.	_	_	

Letter Orientation	0 = unconventional	1 = unconventional and conventional	2 = all conventional
Completeness	0 = few than half letters present	1 = more than half, but not all	2 = all present
Capitalization	0 = unconventional	1 = unconventional and conventional	2 = all conventional
Correctness	0 = not spelled correctly	1 = spelled correctly	TOTAL NAME SCORE:
Requests for help:	0 = no requests	1 = low requests (1-2xs)	2 = high requests (3+)
Observations/ Stude	nt Comments:		

Choose the Challenge: Ask the student, would you like a more challenging thing to write or would you like something just as easy? If the student asks for the more challenging task, then move onto Task 3.0, if the student asks for something easy, then move to task 2.1.

Task 2.1- Write the name of someone you know in the box. If the child needs a prompt: You can write mom, dad, or any of your brothers' or sisters' names.

Write Name here: 0 = unconventional**Letter Orientation** 1 = unconventional2 = all conventionaland conventional Completeness 2 = all present0 = few than half1 = more than half,letters present but not all 0 = unconventional1 = unconventional2 = all conventionalCapitalization

		and conventional	
Correctness	0 = not spelled correctly	1 = spelled correctly	TOTAL NAME SCORE:
			/7
Requests for help:	0 = no requests	1 = low requests (1-2xs)	2 = high requests (3+)
Observations/ Stude	ent Comments.		
Obsci vacions/ Stude	ent Comments.		

Task 2.2- Write the name of another person you know in the box. If the child needs a prompt: You can write mom, dad, or any of your brothers' or sisters' names.

Write Name here:		

Letter Orientation	0 = unconventional	1 = unconventional	2 = all conventional
		and conventional	
Completeness	0 = few than half	1 = more than half,	2 = all present
	letters present	but not all	
Capitalization	0 = unconventional	1 = unconventional	2 = all conventional
		and conventional	
Correctness	0 = not spelled	1 = spelled correctly	TOTAL NAME
	correctly		SCORE:
			/7

Requests for help:	0 = no requests	1 = low requests (1-	2 = high requests
		2xs)	(3+)
Observations/ Stude	nt Comments:		

Choose the Challenge: Ask the student, *would you like a more challenging thing to write or would you like something just as easy?* If the student asks for the more challenging task, then move onto Task 3.0, if the student asks for something easy, then tell them they are finished with the test.

Task 3.0- Write given CVC picture: Show the student the first CVC picture of a **cat**. Make sure the rest of the pictures are covered with a blank piece of paper. *This is a picture of a cat, can you spell the word cat in the box?* If the student needs help, say *just try your best, you are doing great.* Do not sound out or spell the word for the student.

Task 3.0	
[insert cat picture]	

Choose the Challenge: Ask the student, would you like a more challenging thing to write or would you like something just as easy? If the student asks for the more challenging task, then move onto Task 4.0, if the student asks for something easy, then have them move on to spell the picture of the **pig** in 3.1.

This is a picture of a pig. Can you spell the word pig in the box? If the student needs help, say just try your best, you are doing great. Do not sound out or spell the word for the student.

Task 3.1	
[insert pig picture]	
[msert pig picture]	

Choose the Challenge: Ask the student if they would like a more challenging thing to write or would you like something just as easy? If the student asks for the more challenging task, then move onto Task 4.0, if the student asks for something easy, then have them move on to spell the picture of the **hat** in 3.2.

This is a picture of a hat. Can you spell the word hat in the box? If the student needs help, say just try your best, you are doing great. Do not sound out or spell the word for the student.

Task 3.2	
[insert hat picture]	

Choose the Challenge: Ask the student, would you like a more challenging thing to write or would you like something just as easy? If the student asks for the more challenging task, then move onto Task 4.0, if the student asks for something easy, then tell them they are finished with the test.

CVC word Score:

Cat	0 = spelled incorrectly	1 = spelled correctly
Pig	0 = spelled incorrectly	1 = spelled correctly
Hat	0 = spelled incorrectly	1 = spelled correctly

/3				
Requests for help 3.0:	0 = no requests	1 = low requests (1-2xs)	2 = high requests (3+)	
Requests for help 3.1:	0 = no requests	1 = low requests (1-2xs)	2 = high requests (3+)	
Requests for help 3.2:	0 = no requests	1 = low requests (1-2xs)	2 = high requests (3+)	
Observations/ Stude	nt Comments:	·	•	

Total CVC word Score:

Task 4.0- Write given CCVC/ CVCC words: Show the student the first CCVC/CVCC word picture of a **crab**. Make sure all of the other pictures are covered with a blank piece of paper. *This is a picture of a crab, can you write the word crab in the box?* If the student needs help, say *just try your best, you are doing great*. Do not sound out or spell the word for the student.

Task. 4.0	
[insert crab picture]	

Choose the Challenge: Ask the student, would you like a more challenging thing to write or would you like something just as easy? If the student asks for the more challenging task, then move onto Task 5.0, if the student asks for something easy, then have them move on to spell the picture of the **wind** in 4.1.

This is a picture of the wind, can you write the word wind in the box? If the student needs help, say just try your best, you are doing great. Do not sound out or spell the word for the student.

Task 4.1	
[insert wind picture]	

Choose the Challenge: Ask the student, would you like a more challenging thing to write or would you like something just as easy? If the student asks for the more challenging task, then move onto Task 5.0, if the student asks for something easy, then have them move on to spell the picture of the **frog** in 4.2.

This is a picture of a frog, can you write the word frog in the box? If the student needs help, say just try your best, you are doing great. Do not sound out or spell the word for the student.

Task 4.2	
[insert frog piotoure]	
[insert frog pictgure]	

crab 0 = spelled incorrectly		1 = spelled correctly		
wind $0 = \text{spelled incorrectly}$		1 = spelled correctly		
Frog	0 = spelled incorrectly	1 = spelled correctly		
Total CCVC/CVCC word Score:				
/3				

Requests for help 4.0:	0 = no requests	1 = low requests (1-2xs)	2 = high requests (3+)
Requests for help 4.1:	0 = no requests	1 = low requests (1-2xs)	2 = high requests (3+)
Requests for help 4.2:	0 = no requests	1 = low requests (1-2xs)	2 = high requests (3+)
Observations/ Student Comments:			

Task 5.0- Write words with blends and digraphs: Show the student the first CCVC/CVCC with blends and digraphs picture of **spots**. This is a picture of spots, can you spell the word spots in the box? If the student needs help, say just try your best, you are doing great. Do not sound out or spell the word for the student.

Task 5.0	
[insert spots picture]	

Choose the Challenge: Ask the student, would you like a more challenging thing to write or would you like something just as easy? If the student asks for the more challenging task, then move onto Task 6.0, if the student asks for something easy, then have them move on to spell the picture of the **church** in 5.1.

This is a picture of church, spell the word church in the box. If the student needs help, say just try your best, you are doing great. Do not sound out or spell the word for the student.

Task 5.1	

[insert church picture]				
Choose the Challenge: Ask the student, would you like a more challenging thing to write or would you like something just as easy? If the student asks for the more challenging task, then move onto Task 6.0, if the student asks for something easy, then have them move on to spell the picture of ships in 5.2.				
This is a picture of ships, spe just try your best, you are do student.				
Task 5.2				
[insert ships picture]				
[ooreompo protates]				
Choose the Challenge: Ask the student, would you like a more challenging thing to write or would you like something just as easy? If the student asks for the more challenging task, then move onto Task 6.0, if the student asks for something easy, then tell the student they are finished with the test.				
spots	0 = spelled incorrectly		1 = spelled correctly	
church	0 = spelled incorrectly		1 = spelled correctly	
ships	<u> </u>		1 = spelled correctly	
Total CCVC/CVCC with digraph/ blends word Score:				
/3				

Requests for help 5.0:	0 = no requests	1 = low requests (1-2xs)	2 = high requests (3+)
Requests for help 5.1:	0 = no requests	1 = low requests (1-2xs)	2 = high requests (3+)
Requests for help 5.2:	0 = no requests	1 = low requests (1-2xs)	2 = high requests (3+)

Observations/ Student Comments:

Task 6.0- Multi-syllable words: Show the student the first multi-syllable word of **birthday**. Make sure the rest of the pictures are covered with a blank piece of paper. *This is a picture of a birthday, spell the word birthday in the box.* If the student needs help, say *just try your best, you are doing great.* Do not sound out or spell the word for the student.

Task 6.0	
[insert birthday picture]	

Choose the Challenge: Ask the student, would you like a more challenging thing to write or would you like something just as easy? If the student asks for the more challenging task, then move onto Task 7.0, if the student asks for something easy, then have them move on to spell the picture of the **caterpillar** in 6.1.

This is a picture of a caterpillar, spell the word caterpillar in the box. If the student needs help, say just try your best, you are doing great. Do not sound out or spell the word for the student.

Task 6.1	

[insert caterpillar picture]			
Choose the Challenge: Ask write or would you like somet challenging task, then move thave them move on to spell the	thing just as eas onto Task 7.0, if	y? If the studer the student ask	nt asks for the more cs for something easy, then
This is a picture of a playgrous student needs help, say just to the word for the student.	•	-	• •
Task. 6.2			
[incort playarayad pietura]			
[insert playground picture]			
Choose the Challenge: Ask write or would you like some challenging task, then move tell the student they are finish	thing just as eas onto Task 7.0, if	y? If the studer the student ask	nt asks for the more
birthday	0 = spelled incorrectly		1 = spelled correctly
caterpillar	0 = spelled incorrectly		1 = spelled correctly
playground	0 = spelled inc	correctly	1 = spelled correctly
Т	otal multi-sylla	ble word Scor	re:
		/3	

	1		1
Requests for help 6.0:	0 = no requests	1 = low requests (1-2xs)	2 = high requests (3+)
Requests for help 6.1:	0 = no requests	1 = low requests (1-2xs)	2 = high requests (3+)
Requests for help 6.2:	0 = no requests	1 = low requests (1-2xs)	2 = high requests (3+)
word SING in the bosomething you like to or video games? Do they like, say, Write	Words: I like to sing. S x. What are some thing o do in the box. If child you play dress up or ri the word in th	Since I like to sing I am g s you like to do? Write I needs prompting: Do y ide your bike? Once the se box. ard SING while saying y	one word of you like to play soccer child chooses what
<mark>Task 7.0</mark> Student wri	tes Word one:		
Spelling Word One	0 = unconventional	1 = unconventional and conventional	2 = all conventional
	TOTAL PERSON	AL WORD SCORE:	
		/ 2	

Requests for help:	0 = no requests	1 = low requests (1-2xs)	2 = high requests (3+)		
Observations/ Stude	ent Comments:	2.10)			
	ge: Ask the student, wo	•	0 0		
	ike something just as ea. n move onto Task 8.0, i				
move to task 7.1.	ii move onto rask 6.0, i	i the student asks for so	memmig easy, then		
	ther word of something				
prompting: Do you lethey like, say, Write	like to swing? Do you li the word		hild chooses what		
Task 7.1 Student wri	Task 7.1 Student writes Word two:				
Spelling Word Two	0 = unconventional	1 = unconventional and conventional	2 = all conventional		
1 WO		l	<u> </u>		
	TOTAL PERSONA	AL WORD SCORE:			
		/2			
Requests for help:	0 = no requests	1 = low requests (1-	2 = high requests		
	1	2xs)	(3+)		
Observations/ Stude	ent Comments:				

Choose the Challenge: Ask the student, would you like a more challenging thing to write or would you like something just as easy? If the student asks for the more challenging task, then move onto Task 8.0, if the student asks for something easy, then move to task 7.2.

prompting: Do you like to play blocks? Do you like to listen to music? Once the child chooses what they like, say, Write the word in the box.			
Student writes Word	Three:		
Spelling Word Three	0 = unconventional	1 = unconventional and conventional	2 = all conventional
	TOTAL PERSON.	AL WORD SCORE:	
		/ 2	
Requests for help:	0 = no requests	1 = low requests (1-2xs)	2 = high requests (3+)
Observations/ Stude	ent Comments:		

Choose the Challenge: Ask the student, *would you like a more challenging thing to write or would you like something just as easy?* If the student asks for the more challenging task, then move onto Task 8.0, if the student asks for something easy, then tell them they are done with the test.

Message	0 = unrelated		1 = related	
Spelling	0 = unconventional	1 = unconventional and conventional	2 = all conventional	
Number of Words:	Number of Lette		Number of Sentences:	
		_/3		
Requests for help:	0 = no requests	1 = low requests $(1-2xs)$	2 = high requests (3+)	
Observations/ Stude	ent Comments:			

Choose the Challenge: Ask the student, would you like a more challenging thing to write or would you like to be finished with the test? If the student asks for the more challenging task, then move onto Task 9.0, if the student asks to be finished, then allow them to finish the test.

Task 9.0- Write a story using the words swimming, summer, and su	n.

Message	0 = no required words used	1 = 1-2 required words used	2 = 3 required words used
Spelling	0 = unconventional	1 = unconventional and conventional	2 = all conventional
Number of Words:	Number of Letters:		Number of Sentences:
	Total Sco	ore: _/3	
Requests for help: Observations/ Stu	0 = no requests dent Comments:	1 = low requests (1-2xs)	2 = high requests (3+)

Writing Challenge Task – Student Copy (Schrodt, 2014)

Task 1.0 - Draw self: Draw a picture of yourself in the box.

Task 1.0 - Draw self: Draw a picture of yourself in the box.
Task 1.1- Draw a picture of an animal in the box.

Task 1.2- Draw a picture of a tree in the box.	

Task 2.0- Write Name: Students will write their name in the box.
Write Name here:
Task 2.1- Write the name of someone you know. (prompt: mom, dad, sister, brother)
Write Name here:
Task 2.2- Write the name of someone you know. (prompt: mom, dad, sister, brother)
Write Name here:

Task 3.0- Write given CVC picture: Student will be shown the first CVC picture of a **cat**. Ask the student to spell the word in the box. In each task, you may supply the word if the student does not know the picture, but do not sound out or spell the word for the student. If the child says "kitten" then tell them the correct word to spell.

Task 3.0	
[insert cat picture]	
Task 3.1	
[insert pig picture]	
Task 3.2	T
1 48K 3.2	
[insert hat picture]	

Task 4.0- Write given CCVC/ CVCC words: Student will be shown the first CCVC/CVCC word picture of a crab. Ask the student to spell the word in the box. You may supply the word if the student does not know the picture, but do not sound out or spell the word for the student.

Task. 4.0	
[insert crab picture]	
Task 4.1	
[insert wind picture]	
Task 4.2	
[insert frog picture]	

Task 5.0- Write words with blends and digraphs: Student will be shown the first CCVC/CVCC with blends and digraphs picture of **spots**. Ask the student to spell the word in the box. You may supply the word if the student does not know the picture, but do not sound out or spell the word for the student.

Task 5.0	
[insert spots picture]	
Task 5.1	
[insert church picture]	
Task 5.2	
[insert ship picture]	

Task 6.0- Multi-syllable words: Student will be shown the first multi-syllable word of **birthday**. Ask the student to spell the word in the box. You may supply the word if the student does not know the picture, but do not sound out or spell the word for the student.

Task 6.0	
[insert birthday picture]	
Task 6.1	
[insert caterpillar picture]	
Task. 6.2	
[insert playground picture]	

Task 7.0- Personal Words: I like to sing. What are some things you like to do? Can you write one word of something you like to do? (i.e., soccer, play, video games)
you write one word of something you like to do? (i.e., soccer, play, video games)
Examiner example: Examiner writes the word SING while saying you like to sing:
Student writes Word one:
Student Wiles Word one.
Took 7.1. Can you write another word of comething you like to do in the how?
Task 7.1: Can you write another word of something you like to do in the box?
Student writes Word two:
Task 7.2: Can you write another word of something you like to do in the box?
Student writes Word Three:
Student writes word Timee.

Task 8.0- Write a about their family.	sentence about the picture: Ask the student to write a sentence If the student can write one sentence, ask them if they can write more.

Task 9.0- Write a story using the words swimming, summer, and sun.					

APPENDIX H: KINDERGARTEN WRITER'S WORKSHOP PRE AND POST RUBRIC

RUBRIC					
	1	2	3	4	Scor
	Skills are	Moving toward	Meet the end-	Exceeds the	e
	limited,	end-of-grade	of-grade level	end-of-grade	
	frequent	level	standard	level standard.	
	support is	expectations	independently.		
	needed.	with			
		assistance.	I can do this on	I can do this on	
	This is difficult		my own.	my own, and	
	for me, and I	I can do this		can do more	
	need help.	with help.		challenging	
				things like it.	
				9	
Drawing	1	2	3	4	
	The drawing	The child draws	The picture	The picture	
	consists of	picture to	contains	contains	
	various shapes	represent ideas	important	important	
	and marks.	and then	details that	details that	
	Child identifies	identifies what	match the	match the	
	what picture is	it is. Picture	child's idea.	child's idea.	
	after drawing.	may not contain	The picture is	The child can	
	The child's	important detail	mostly	use the picture	
	work is	that matches the	recognizable	to tell the story.	
	recognizable	child's idea for	independent	The picture is	
	only when the	the picture.	from the child's	recognizable	
	child talks		explanation.	independent	
	about it.			from the child's	
				explanation.	
Word Form	1	2	3	4	
	Records some	Records	Records every	Records every	
	correct initial	multiple correct	phoneme,	phoneme,	
	phonemes, and	phonemes	including	including	
	includes	within the word,	blends. Words	blends. Most	
	phonetically	but may include	are represented	phonemes are	
	incorrect letters.	phonetically	with a mix of	recorded with	
	Or only draws a	incorrect letter	phonetically	the correct letter	
	picture with no	intrusions or	related and	representation.	
	words or letters.	deletions.	conventional	Writer uses the	
			letters. May	correct short	
			include	vowel and	
			intrusions or	attempts to	
			deletions.	mark long	
				vowels.	
				Intrusions and	
				deletions are	
				limited.	
Organizatio	1	2	3	4	
n	The illustration	The illustration	The illustration	The illustration	

	does not match	supports the	gunnaria tha	gunnarta tha	
			supports the	supports the	
	the writing. There is no	writing. There is one	writing. There	writing. There	
			are two	is a sequence of events with	
	organization of	meaningful	meaningful		
	events.	statement.	statements.	three or more	
				meaningful	
				statements.	
Voice/	1	2	3	4	
Word	One of the	Two of the	Three of the	Four of the	
Choice	following:	following:	following:	following:	
	0 Uses	0 Uses	0 Uses	0 Uses	
	vocabulary	vocabulary	vocabulary	vocabulary	
	from oral	from oral	from oral	from oral	
	language	language	language	language	
	when	when	when	when	
	writing.	writing.	writing.	writing.	
	O Uses some	O Uses some	Uses some	O Uses some	
	descriptive	descriptive	descriptive	descriptive	
	language.	language.	language.	language.	
	O Expresses	O Expresses	Expresses	O Expresses	
	feelings.	feelings.	feelings.	feelings.	
	O Demonstrat	O Demonstrat	Demonstrat	O Demonstrat	
	es	es	es	es	
			awareness	awareness	
	awareness	awareness			
	that	that	that	that	
	someone	someone	someone	someone	
	else will	else will	else will	else will	
	read his/her	read his/her	read his/her	read his/her	
~	writing.	writing.	writing.	writing.	
Sentences	1	2	3	4	
	Random strings	Words are	1-2 full	3 or more	
	of letters or no	present, but no	sentences are	sentences are	
	letters.	full sentence.	present.	present.	
Convention					
S					
	1	2	3	4	
	Capitalized no	Capitalized	Capitalized	Capitalized all	
	beginnings of	some	most beginnings	beginnings of	
	sentences and	beginnings of	of sentences	sentences and	
	proper nouns.	sentences and	and proper	proper nouns.	
		proper nouns.	nouns.		
	1	2	3	4	
	Provides ending	Provides ending	Provides ending	Provides ending	
	punctuation for	punctuation for	punctuation for	punctuation for	
	no sentences	some sentences	most sentences	all sentences.	
	1	2	3	4	
	Puts spaces	Puts spaces	Puts spaces	Puts spaces	
	between no	between some	between most	between all	
	words.	words.	words.	words.	
	worus.	worus.	worus.	worus.	

	1	2	3	4	
	Spells no high	Spells 1-3 high	Spells 4-6 high	Spells 7 or more	
	frequency	frequency	frequency	high frequency	
	words correctly.	words correctly.	words correctly.	words correctly.	
	1			4	
	Does not write			Writes left to	
	left to right.			right.	
Quantity	1	2	3	4	
Number of	Student	Student	Student	Student	
Letters	produced 0-4	produced 5-15	produced 15-25	produced more	
	letters	letters	letters	than 25 letters	
Quantity	1	2	3	4	
Number of	Student	Student	Student	Student	
Words	produced 0-2	produced 3-5	produced 5-7	produced more	
, , , , , , ,	words	words	words	than 7 words	
			2		
Quantity		2	3	4	
Number of	Student	Student	Student	Student	
Sentences	produced 0	produced 1	produced 2	produced more	
	sentences	sentence	sentences	than 2 sentences	

APPENDIX I: INTERVIEW QUESTIONS

- Pretend there is a new girl/boy in your class. This new girl/boy always gets answers wrong and is having a hard time with reading and writing. Will she/he always be like this?
- Think about some kids who know how to read and write really well. Why do you think they know how to read and write well?
- Think about some kids who do not know how to read and write very well. Why do you think they do not know how to read and write well?
- Do you think you are a good writer? Are you good at writing hard words? What kind of things do you like to write about?
- Do you write at home? Do you write on your own or do you need help from your parents? Do you write words or draw pictures?
- What is the hardest thing about writing? What do you do when you get stuck? What tools do you use?
- What do you think when you make a mistake? Are mistakes good or bad for your learning?
- How do you think people learn to write? If you were going to tell a pre-k student how to write, what would you tell them they need to know?
- Do you think you can become/have become a better writer this year?

APPENDIX J: MINDSET LANGUAGE CHECKLISTS

adapted from Self-Directed Writers by Leah Mermelstein

Say this	Instead of this
Why don't you take a quiet moment to think? I'm sure you will come up with something.	You went to your grandmother's house this weekend. Why don't you write about that?
How could you help yourself? (You might say this while pointing to a chart)	When you are finished, come show me what you've done. Or When you are finished, reread you piece. Or When you are finished, start a new piece.
How could you figure out how to spell this word? (You might point to your mouth to give the hint of stretching it out.) Or	Let me write that word down for you. Or Listen to me say the sounds. Look at my mouth. Or
Where could you look for help? (You could point to the word wall.) Or Let's say the sounds together.	Ask a friend.
These are certainly things you can try in your own writing today and every day, but keep in mind you may very well discover other ways to describe your topic while working today. If you do, let us know during the share.	So today and everyday while writing, it's important to describe your topic using color or shape words.
I can tell you worked really hard. You put in a lot of effort!	You're really smart. You're talented. You are really good at this.
Did you make a mistake? That is great! What can we learn from it?	You made some mistakes.
Are you stuck? What can you do to keep going? (You may point to the anchor charts.)	Use the anchor charts. Or Let me help you keep going.
Let's make even better mistakes tomorrow!	
Mistakes are always welcome here!	
Persevere!	
You CAN grow your brain!	
I can get smarter!	
I take on challenges! I work hard!	
I work nard! I use good strategies!	
I don't give up!	
I don't give up:	

APPENDIX K: IRB APPROVAL LETTER



8/5/2014

Investigator(s): Katie Schrodt, Michelle Hasty, Amy Elleman

Department: Literacy Studies

Investigator(s) Email: katie.schrodt@mtsu.edu, amy.elleman@mtsu.edu

Protocol Title: "The Relationship Between Affective Instructional Factors and Kindergarteners'

Performance and Motivation in Writer's Workshop'

Protocol Number: 15-019

Dear Investigator(s),

The MTSU Institutional Review Board, or a representative of the IRB, has reviewed the research proposal identified above. The MTSU IRB or its representative has determined that the study poses minimal risk to participants and qualifies for an expedited review under 45 CFR 46.110 and 21 CFR 56.110, and you have satisfactorily addressed all of the points brought up during the review.

Approval is granted for one (1) year from the date of this letter for 30 participants.

Please note that any unanticipated harms to participants or adverse events must be reported to the Office of Compliance at (615) 494-8918. Any change to the protocol must be submitted to the IRB before implementing this change.

You will need to submit an end-of-project form to the Office of Compliance upon completion of your research located on the IRB website. Complete research means that you have finished collecting and analyzing data. Should you not finish your research within the one (1) year period, you must submit a Progress Report and request a continuation prior to the expiration date. Please allow time for review and requested revisions. Failure to submit a Progress Report and request for continuation will automatically result in cancellation of your research study. Therefore, you will not be able to use any data and/or collect any data. Your study expires 8/5/2015.

According to MTSU Policy, a researcher is defined as anyone who works with data or has contact with participants. Anyone meeting this definition needs to be listed on the protocol and needs to complete the required training. If you add researchers to an approved project, please forward an updated list of researchers to the Office of Compliance before they begin to work on the project.

All research materials must be retained by the PI or faculty advisor (if the PI is a student) for at least three (3) years after study completion and then destroyed in a manner that maintains confidentiality and anonymity.

Sincerely,

Kellie Hilker

Compliance Officer/ MTSU Institutional Review Board Member