The Impact of Digital Storytelling on Fourth Grade Students’ Motivation to Write

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The Impact of Digital Storytelling on Fourth Grade Students’ Motivation to Write

By:
Chelsea LoBello

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A thesis submitted to the Department of Education and Human Development of the College at Brockport, State University of New York, in partial fulfillment of the requirements for the degree of Master of Science in Education
Abstract

Educators often have difficulty motivating upper elementary and adolescent students to write, while still being held accountable for producing high academic achievement to the rigorous standards of today’s society. Educators today are also striving to prepare students for the ever-changing and advancing 21st century world. Although teachers recognize that writing at the fourth grade level has become more rigorous and student motivation towards writing has decreased, they are unaware of the role digital storytelling has on both motivation and writing performance. Using a qualitative research design and case study approach, the current study examined the impact of digital literacy, in the form of digital storytelling, on the motivation levels and writing performance of fourth grade students. Results suggest that digital storytelling has the power to not only improve student motivation towards writing, but also improve student self-perception, creativity, and overall writing performance on a four point grading rubric.
Section One: Introduction

Introduction

This project served as an initial investigation into the use of digital literacy and technology, and the effect these technologies have on motivation levels and literacy learning in fourth grade students. There is an interesting reason to pursue research in this area. Presumably, teachers often have difficulty motivating fourth grade students in literacy, and as today’s rapidly changing world evolves, educators are being held accountable for producing academic achievement, while simultaneously incorporating necessary 21st century skills. Although teachers recognize that writing at the fourth grade level has become more rigorous, while the motivation levels of students have decreased, they are unaware of the effects that digital literacy and technology have on motivating students and improving literacy performance. Turner and Paris (1995) further explain this problem. They investigate the lack of use of student attitude assessments and note, “The increase in writing activities has presented teachers with the challenge of determining their students’ attitudes toward writing because of the link between motivation and literacy learning (Turner & Paris, 1995). For this reason, I aim my research to investigate the improvements in both student writing and motivation with the use of digital literacy. Shank (1990) further stresses this importance. He explains that scholars have identified that digital storytelling is an effective instructional strategy for promoting learning motivations and improving the learning performance of students (Schank, 1990).

Problem Statement

Writing has always been a difficult and low engaging area of study to upper elementary students. Many teachers are unaware of what exactly motivates students to write, and how to
help increase engagement in writing. Teachers are also unaware of the impact motivation has on a child’s overall performance.

**Significance of the Problem**

The 21st century world is constantly changing and evolving with the incorporation of new technologies. While these changes occur, educators are held accountable for producing high academic achievement, while simultaneously incorporating necessary 21st century skills. “The increase in writing activities has presented teachers with the challenge of determining their students’ attitudes toward writing because of the link between motivation and literacy learning (Turner & Paris, 1995). Although teachers recognize that writing at the sixth grade level has become more rigorous, while the motivation levels of students have decreased, they are unaware of the affects that digital literacy and technology have on motivating students and improving literacy performance. With this research, I hope to find out what motivates students to write and how teachers can adjust their instruction to further engage students in writing.

**Purpose**

However, before considering the above hypothesis, there is a more immediate question I aimed to answer. While teachers know that students at the fourth grade level are difficult to motivate when it comes to writing, I aimed to find the change in student motivation levels when interacting with technology and digital literacy to write. Significantly, I aimed to study the difference in motivation and performance between traditional writing and digital storytelling and the implications for instruction to motivate students and improve performance.
Section Two: Literature Review

In reviewing literature surrounding the topics of adolescent writing, there is much to be said about the importance of motivating students and the correlations between motivation and overall performance. Research in the field also investigates the impact digital literacy has on students at the elementary levels.

Motivation

In reviewing literature regarding the topic of my research, motivation is the first aspect to review. While educators constantly bring about the topic of motivation, there are many different thoughts on what exactly motivates adolescents, and what role that motivation plays in the overall growth and academic success of students. The article *How Motivation Affects Learning and Behavior*, by J.E Ormrod, lays groundwork for why motivation is necessary in increasing student performance. Ormrod investigates and explains the effects motivation has on student performance, explaining that motivation directs student behavior toward particular goals. He writes, “individuals set goals for themselves and direct their behavior accordingly. Motivation determines the specific goals toward which learners strive” (Ormrod, 2014). He goes on to explain that motivation leads to increased effort, energy, and persistence in activities. Ormrod believes that motivation is necessary for student success and that students are more likely to begin a task they actually want to do. He goes on to add that motivation and interest adds to student determination and persistence with difficult tasks. He believes that motivated learners are more likely to continue working at a task until they’ve completed it, even if they are occasionally interrupted or frustrated in the process (Ormrod, 2014). Skinner and Belmont support Ormrod’s ideas on motivation. They explain that highly motivated children are easy to identify, describing them as enthusiastic, interested, involved, and curious. Motivated students try hard and persist, actively coping with challenges and setbacks (Skinner and Belmont, 1993).
Adding on to Ormrod’s ideas, Skinner and Belmont take this topic further by bringing about the problem that highly motivated students are becoming harder to find. In a study, Skinner and Belmont measured children's engagement in the classroom measured in both the fall and spring of the same school year. The findings of the study proved not only that motivation was, in fact, a major factor in student performance, but also that there was a correlation between teacher behavior and student motivation and engagement. Teachers were found to respond more positively to highly engaged students; those students also received more contextual supports. In comparison to less motivated students, the students who were less motivated were relatively more neglected and coerced, and treated with less consistency and positivity. From the review of Ormrod and Skinner and Belmont, the importance of motivation in literacy is evident. Educators need to not only recognize the importance of motivation, but also the effect motivation has on a student literacy learning experience.

**Motivation through technology**

While the importance of motivation in student learning is evident, the question often arises of what exactly motivates adolescent students. One of the major proposed factors of motivation in adolescents today is technology. Being the ever changing and rapidly improving 21st century, our students are surrounded by new ways and new technological advancements. Outside of the classroom, these technologies are a major aspect of their lives; for that reason, education should embrace and support this technological world our students live in. Some, however, disagree with the use of technology in the classroom. In his book, *The Shallows*, Nicholas Carr reviews and studies the use of technology in literacy learning. Carr states, Carr (2010) warns that “our ability to engage in meditative thinking might become a victim of the frenzied-ness of technology as dozens of tasks jostle and compete for our attention on the screen,
and both software and hardware are designed to make it easy to hop around” (p. 222). Carr believes that technology forces students to rely on conventional ideas and solutions rather than challenging them. Her adds that digital medial requires a constant shifting of our attention; while some believe this is a positive skill for students to have, Carr disagrees. He believes that improving our ability to multitask actually hampers that ability creatively. He states, “the more you multitask, the less deliberative you become; the less able to think and reason out a problem” (p. 140). Although Carr believes that technology creates downfalls in student learning and thinking, he does agree that technology is a major aspect of our world and isn’t going to slow down. Social media and technology are the norm to students today, and although the distractions they bring are real, they are not going to change. As the world progresses, students are going to be faced with more distractions and more technology. Rather than ignore these aspects of students’ lives, educators should recognize the relevance they have and incorporate them into student learning. Students’ often argue that writing in school is “boring” or “irrelevant”, but if you ask them about technology they will have a much different response. Students understand how relevant technology is to their lives, and are motivated by that.

**Digital Storytelling- What is digital storytelling?**

In bringing technology into the classroom, one form of digital literacy being brought up is digital storytelling. Digital storytelling is the practice of combining still images with a narrated soundtrack, using both voice and music. The process of this practice begins similarly to the traditional writing process; Students first brainstorm, select a topic, and beginning to draft. After the drafting process, however, students then construct a digital storymap, where they are able to visualize how their story will play out. At this point, they are able to chose and plan what media
they will use and how those forms of media will come together to create an engaging and informative story (Bull & Kajder, 2004). Following this step, the students begin the production stage. This stage incorporates the technology, such as computers or tablets, to add voice, music, and images. Students create their stories using free, easy to access software such as Movie Maker with Windows XP, or iMovie with the Macintosh operating system.

**Digital Storytelling: Implications for motivation**

A majority of the research reviewed on this topic revolves around the benefits of digital storytelling and the impact digital storytelling has on students. In his article “Fostering Creativity Through Digital Storytelling”, Peta Gresham investigates the role digital storytelling has on engaging students and motivating students to write. Throughout an eight-week unit, Gresham introduced digital storytelling to students. He used convergent interviewing, a focus group, questionnaires, online blog entries, samples of student products, film recordings, and field notes to study student reactions and motivation levels during the digital storytelling unit. He concluded with an interview where students reflected on their study, the creative process and presentations of their digital stories. According to Gresham’s findings, the study found that students were not only highly motivated, but found more confidence in themselves and their writing. Gresham describes his findings as he writes, “Students’ perceptions of what being creative meant changed. Students experienced immersion or deep-thought in the process of creation and reflected how professional they felt and how proud they were of their work. Students developed confidence in their creative writing through working with digital technologies. What proved interesting and important to note was the creative approaches student took with the next unit of work” (Gresham, 2014). Similar to my own research, Grasham believes technology should be an
accepted aspect of teaching literacy. Gresham ends his article asking, “If students seem to work best collaboratively and with digital technologies to construct creative responses that bolster confidence and pride with their abilities, why is this platform too often denied under formal assessment?” (Gresham, 2014). In agreement with Gresham’s ideas, I intend to further investigate the impact digital literacy has on the classroom and student learning, extending to the effect digital storytelling has on student writing abilities.

The research of Hung, Hwang, and Huang in the article, “A Project-based Digital Storytelling Approach for Improving Students’ Learning Motivation, Problem-Solving Competence and Learning Achievement” relates to that of Peta Gresham. Like Grasham, Hung, Hwang and Huang also investigate the use of digital storytelling and whether or not digital storytelling and technology increase student motivation; however, they extend on Gresham’s research in bringing in the topic of project based learning and the implications that adds to student motivation and literacy learning. The researchers ask the following questions: Will the project-based digital storytelling improve the students’ learning motivation in science courses? Will the project-based digital storytelling improve the students’ problem-solving competence? In the study, 117 Grade 5 students in an elementary school. Half of the students created a digital story of their data collection science experiment, while half of the students used a traditional method or PowerPoint. The teacher then provided feedback on each of the student presentations. A pre-test and post-test of science learning motivation was also given to all students. In describing the results of the post-test, Hung, Hwang, and Huang explain, “The experimental group was obviously superior to the control group, presenting that the project-based learning with digital storytelling could effectively enhance the problem-solving competence of the students” (Hung, Hwang and Huang, 2007). Following the activity, 30 students were selected at
random for interview. The interviews showed students to be more motivated by the digital storytelling approach, and found the activity more interesting than the traditional ways of writing. The project based form of digital storytelling proved to be a more interesting and understandable way of writing. Both Gresham and Hung, Hwang and Huang have investigated the use of digital storytelling in motivating and engaging students. I not only support their beliefs, but I also hope to further the research of digital storytelling and motivation, as well as student performance.

Section Three: Methods and Protocols

Methodology & Design

In completing this study, I used a qualitative research design in the form of a case study. This case study used a variety of methods that Duke and Mallette (2011) describe including collective case study where the researcher “investigates numerous cases to study a phenomenon, group, condition, or event” (p.9). Also supported by Duke and Mallette, I used content analysis. This methodology is used to “determine meaning, purpose or effect of any type of communication” such as analysis of student writing (p.10). In collecting data I used convergent interviewing, questionnaires, samples of student products, observations during classroom work, and field notes.

This study was grounded in the educational and psychological theoretical framework of interaction and motivation. I theorized that students in the fourth grade struggle with writing due to low motivation, and that with an increase in motivation, student writing skills will grow. These ideas originated from constructivism, and are based on the cognitive developmental theory of Piaget (1950) and the social construction theory of Vygotsky (1978). These theorists proposed
that knowledge is actively constructed by individual minds and formed by interaction with the environment.

**Personality as the Researcher**

I earned my Bachelors Degree in English, Childhood Education, and Special Education at The College at Brockport, SUNY. During my undergraduate education I completed a student teaching placement in a sixth grade classroom and have found a passion in working with this age group of students. I am currently working towards my masters degree in Literacy Education B-12 at The College at Brockport, SUNY. I strongly believe that literacy is a crucial part of life and I strive to help students not only increase their literacy skills, but also find joy in literacy throughout the world they live in.

**Research Questions**

1. *Does digital storytelling increase student motivation towards writing?*

2. *Does an increase in motivation towards writing lead to an increase in writing performance?*

3. *Does a child persist longer at a writing task when experiencing high levels of motivation?*

**Participants & Setting**

Participating in this study were three students, two males and one female. The setting for this research was the students’ normal fourth grade classroom at St. Louis School, in Pittsford NY.

**Child One**

Child One is a Caucasian male. He comes from a family of high socioeconomic status. This is his first year attending Saint Louis, as he recently moved from Fort Lauderdale, Florida.
Child One has a very creative mind; he enjoys creating his own mythical creatures and telling stories. He socializes well with his peers, but often chooses to play alone or with one other child. He often says that others don’t share the same interests as him, as he is interested in Pokémon and mythical creatures, such as dragons. Child One is currently reading and writing at grade level. He can easily comprehend texts and ideas, and shows strong oral skills. When asked to write responses; however, these abilities are not easily seen. Child One tends to rush through writing tasks, writes far less than expected, and does not elaborate on ideas and details in his writing.

Child Two

Child Two is a female student. She is Caucasian, and her family is of low socioeconomic status, in comparison to the majority of the Saint Louis School community. She resides in an urban setting, in the city of Rochester. Child Two is a very creative child, enjoys art, and excels at hands on activities. She has difficulty dealing with focus and sensory issues. She often refuses to eat because of the smell of food, and stands far away from her desk, as she does not like the feel of a chair. Child Two is currently reading below grade level; however, her interest level has caused alteration to her assessment scores. When Child Two choses what to read, she reads and comprehends at a higher level, but when presented with an assessment that is unfavorable to her, she often refuses or lacks effort leading to skewed results. In writing, Child Two has difficulty organizing her thoughts and elaborating on details. Another major difficulty Child Two faces is hand writing. Her writing is illegible and she has trouble looking back at her work to edit and revise, as she cannot read her own writing in her drafts. She is constantly frustrated with this during writing time. She often refuses to look back and edit her writing and constantly rushes
through writing tasks. Child Two shows far more interest and stamina when able to word process her writing.

**Child Three**

Child Three is a male, Caucasian student. He comes from a family of high socioeconomic status. He is currently reading above grade level, has strong reading comprehension skills and a strong vocabulary. His writing is often unorganized, and he is constantly rushing through his work. Child Three’s teachers describe him stating that “school is easy for him, but he often rushes though assignments causing him to make careless mistakes”. Despite the lack of effort and rushing through work, Child One still receives decent grades. Had he put forth more time and effort, he would excel far above the other students in his grade. He believe that school is boring and lacks confidence in oral speaking.

**Procedures**

I began gathering research in March of 2015. I began by conducting a baseline interview with the teacher, then met with students.

During our first few meetings, I conducted baseline interview questionnaires and assessments with the students. I had every student complete the Garfield Reading and Writing Attitude Survey, as well as self-made reflection interviews and discussions. I assigned the students a traditional writing assignment where I was able to observe them in the writing process. This was about a one week process, allowing student work time in class. Once complete I analyzed the complete piece recording data and scoring using the grading rubric. I then spent three days to analyzing and organizing this data.

I returned to meeting with the students the following week, where I introduced digital storytelling. We spent 1 week with lessons on learning about digital literacy and how to use the
technology. Following these lessons, I again assigned a writing prompt; however, they now completed the prompt using digital storytelling. Students used an iPad to work on the program Adobe Voice to create digital stories. During this 2 week timeframe, I observed student motivation levels as they worked on the piece. I held daily discussions as well to better understand students’ thoughts and motivation towards digital writing. I also collected all work and scored the digital stories using the same scoring rubric.

Lastly, following the assignment using digital literacy, I administered the same assessment and interview as in the beginning of my study. I then compared not only the motivation and attitudes of students during traditional writing in comparison to digital literacy, but also student writing performance in both forms of writing.

Criteria for Trustworthiness

In conducting my qualitative research study, I used multiple practices to ensure my design was valid. Using prolonged engagement, I collected research over a 4-6 week time frame. In this time I will also used persistent observation as I continuously observed and interviewed my participants. I ensured validity furthermore as I used dependability, through detailing and clearly describing my research process, and conform-ability, as I ensured my outcomes were demonstrably drawn from the data. Using these practices ensured that my study stands valid.

Data Collection

This study required a variety of data collection techniques in order to investigate the research questions proposed in the study. I completed a qualitative study, using purposeful sampling, interviews, observations and student work. I also used constant comparison throughout this data collection.
Interviews

An interview with the classroom teacher was conducted in the beginning of the study. This was meant to provide me with a baseline of the students’ general motivation levels and writing levels, from the teacher’s point of view prior to beginning the study and working with students. This interview was in the form of an oral discussion. I also interviewed students both before and after the introduction of digital storytelling. Students initially provided me with their motivation levels and attitudes toward writing through the use of student survey and self reflection. They then completed such interviews and reflections again after the study.

Writing Attitude Assessment

Students were given the Garfield Writing Attitude Survey both before the initial writing prompt and after the use of digital storytelling. This survey consists of twenty eight survey questions regarding writing. The students then chose one of the four Garfield images that best matches their feelings towards that question. The Very Happy Garfield choice receives 4 points, while the Very Upset Garfield receives 1 point. These points are then totaled to arrive at the child’s raw score. Raw scores are then ranked into percentiles based on grade level to find where the child falls.

Observations

Observations occurred every time I worked with the students. These observations included several areas of focus to explore the effects of technology and digital storytelling on student motivation. This also allowed me to see their motivation levels throughout the study as they encountered digital literacy.
Student Work

I collected and analyzed student work throughout this study. I first collected the initial student writing sample in order to gain a baseline of the students writing without the use of digital literacy. I then collected all student work associated with the digital literacy writing piece as well.

Data Analysis- Child One

Of the three children participating in the study, Child One scored the lowest on the initial Garfield Writing Attitude story, and held strong negative opinions towards writing when given a student interview. When asked if he likes writing, Child One stated, “I hate it totally”. When asked what he dislikes about writing, he stated, “I get scared…it hurts my hand…it is boring”. When asked if he is a good writer, he replied “no, I am not a good writer…because I can’t write a lot like other people in my class and I get bad grades”. Child One also stated that writing at school makes him feel “embarrassed and nervous” and that he wishes he were better at writing.

In assessing Child One using the Garfield Writing Attitude Survey, Child One’s raw score was 48, placing him in the 01 percentile for fourth grade. In analyzing Child One’s answers to this survey, many alarming points were made. When asked “how would you feel if your classmates read something you wrote”, Child One chose the very upset Garfield. He chose this very upset Garfield again when asked “How would you feel if your classmates talked to you about making your writing better”. These responses, along with his initial interview responses lead me to recognize that Child One has strong believes of what others, especially his peers, perceive of him as a writer.
In my work with Child One, I followed these surveys and interviews with the initial writing piece. In observing Child One complete this writing prompt, his visible body language and emotion was noted. Child One was distracted, often putting his pencil down, shaking his hand in the air, and looking around the classroom. Child One only used a quarter of the time given to work on this piece, and showed eagerness to hand the paper in to me. I asked the child if he would like to use the remainder of his time to edit and revise and he replied, “no thank you, I’m all done”. I then graded Child One’s narrative writing piece using the scoring rubric. Child One sat with me, grading his own work on his own copy of the rubric as well. On the four point rubric, he was given a 3 for the rubric point stating I established a situation and introduced a narrator and/or characters; this was a strong point for him. He did, in fact, establish his character and the situation his story would entail; however, he did not elaborate details and descriptions associated with his character and situation. Child one received a 1 on the rubric in the categories of organizing event sequence, using dialog and description to develop experiences, using sensory details to convey events, and providing a conclusion that follows from the events of the story. In Child One’s story he wrote, “Henry Canal was a strong man. He was tall. He had to dig the canal in one day”. Child One never established the setting of his story, nor did he describe his main character with descriptive language. Through this beginning sentence, one can also note that Child One did establish a character and situation, but with no detail, setting, transitional words or descriptive language. This was a major change observed when grading his digital story on the same rubric.

Following the grading of his initial writing piece, Child One was introduced to digital storytelling. He was asked to use the same planning he used for his initial, to create his digital story. During this time, I observed a major change in Child One’s attitude immediately. While he
was observed as distracted and rushing through his initial piece, he was constantly asking for more time to work on his digital story. He was using additional planning pages and adding to his original ideas. Child One was visually relaxed, sitting with the iPad in his lap, lose shoulders and relaxed posture. His facial expressions were far more alert than during his initial writing. When asked to finish for that day, Child One asked to keep working on his digital story and did not want to break for the day; a notable difference from him finishing early and not wanting to edit or revise his initial piece.

In grading Child One’s digital story, using the scoring rubric, noted changes occurred in his score. He scored 3’s and 4’s on the 4 point rubric, as opposed to a majority 1’s and 2’s on his traditional writing piece. He was given a 4 in the category of including lots of dialog and description to develop experiences and events or show the character response in a very creative way. He also scored a 3 in the category, used concrete words and phrases and sensory details to convey experiences and events precisely. While Child One’s traditional writing piece simple stated the beginning line of the story writing, “Henry Canal was a strong man. He was tall. He had to dig the canal in one day”, his digital story spent three slides elaborating this introduction. Using his own voice and images, he said “Have you ever heard of the famous Johnny Canal?! He was a strong, strong man, with legs as thick as a tree bark and as tall as an oak tree. On the day Johnny was born, he ran around his farm 17 times!”. He then transitioned to a new slide and image to portray the setting of his story. This was a major difference noted from his traditional piece that used one simple sentence to describe both his character and setting.

In this second taking of the Garfield Writing Attitude Survey, Child One scored 69 points, putting him in the 25th percentile (as opposed to scoring a 48 on his initial assessment). He did not choose any of the “very upset Garfields” throughout the second assessment, where
that was his majority choice in the initial assessment. Child One was also noted as choosing the “very happy Garfield” for all questions related to story writing. When asked “how would you feel if your classmates read something you wrote”, Child One paused to ask me when he could share his digital story with the other fourth grade class. This is a large change from the initial assessment where Child One was observed as being nervous and uncomfortable sharing his writing with peers. This change was also evident in the students self-reflection.

Table 1

<table>
<thead>
<tr>
<th>Question Asked</th>
<th>Student Initial Response</th>
<th>Student Final Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do you like about writing?</td>
<td>“I hate it totally”</td>
<td>“making characters and making fun parts in my story that people will love”</td>
</tr>
<tr>
<td>What do you dislike about writing?</td>
<td>“I get scared”</td>
<td>“holding my pencil too long that is hurts my fingers”</td>
</tr>
<tr>
<td>Do you think you are good at writing? Why or why not?</td>
<td>“no, I’m not a good writer”</td>
<td>“I’m an ok writer because I’m good at making stories”</td>
</tr>
<tr>
<td>If I told you to write a story how would you feel?</td>
<td>“Scared, and nervous!”</td>
<td>“good!”</td>
</tr>
<tr>
<td><strong>Garfield Writing Attitude Survey: Raw Score</strong></td>
<td>48</td>
<td>69</td>
</tr>
</tbody>
</table>

Data Analysis- Child Two

Child Two scored a raw score of 57 on the Garfield Writing Attitude Survey. This placed her in the 5th percentile. In analyzing Child Two’s choices on the survey, noted points were made. When asked about writing in school (#14,15,16,18,19), she chose the “very upset” Garfield, but when asked “how would you feel keeping a diary?”, she chose the “very happy” Garfield. She also chose the “happy” Garfield when asked “how would you feel about writing a story instead of doing homework?”. On the Student Self Reflection, Child Two stated that she “would feel nervous” if she was asked to write a story. When asked if she thinks she is a good
writer, Child Two said, “no, because I am not good at it. I think no because I always get a bad grade”.

When completing the initial writing prompts, observations were noted of Child Two’s behaviors and abilities. Child Two wrote slowly, and constantly asked “how much more time do I have left?” and “what if I don’t finish?”. Her body language was observed as eager, uncomfortable, and constantly looking around her and at the clock. After a few moments Child Two began drawing on her paper. She stated “there’s no point in writing my story if no one will be able to read it anyway?”. She finished quickly then continued to draw on the back of her paper.

When grading Child Two’s initial writing prompt, her scores in all rubric categories were in the 1 and 2 point range, on the 4 point rubric. Her work was difficult to read, and a visible lack of stamina and continuation was noted, as the letters began to become large and scribbled by the half way mark on the page where she ended her writing. Child Two’s lowest scoring areas on her initial writing prompt grading rubric were in the categories of establish a situation or introduce a narrator and/or characters and organize and event sequence that unfolds naturally. She did not have a conclusion to her story, nor did she introduce any characters. Her story began stating, “one day a dolphin and a girl . . . a net in the net but became her friend. She was stuck”. Child Two did, however, include dialog and showed interest in using dialog. Her dialog was large and spread over her writing reading “aghhhhh help!” and “yayyyyy”; she was given a 2 on the rubric scale for this category titled, I included some dialog and description to develop experiences and events or to show the character response.

When Child Two was introduced to digital storytelling, her interest in the topic was immediately noted. She showed visible excitement and stated that she was going to “get a good
grade since she will have an iPad”. This comment was made with no prompting or guidance and was noted while observing. Child Two was visibly happy and excited before even beginning this use of digital storytelling. In observation, she was noticed to have tremendous background knowledge of the iPad and was very comfortable using one.

On the grading of Child Two’s digital story, on the 4 point rubric, her scores were greatly improved from her initial grading and her writing performance was far different from her initial. While Child Two was unorganized and wrote quickly on her initial, she made her own organizer and was meticulous about organizing her digital story slides. While she refused to write any sentences, phrases, or words while planning, she did use images and was observed speaking through her graphic organizer as if she were reading. Through her digital story, the brief dialog words she used in her initial were used in nearly every slide to show character reaction, along with complete character dialog where she changed her voice for each character. In the category titled Yes, I included LOTS of dialogue and description to develop experiences and events or to show the character response in a very creative way, she was given 4 out of 4 points, as opposed to 2 out of 4 points on her initial writing in this category. In the grading of her digital story, another high point was the category titled used concrete words and phrases and sensory details to convey experiences and events precisely in a very creative way, where she received a 4/4 on the grading rubric. This, again, is noted as a large change from her initial writing piece where she received 1 out of 4 points in this category. In Child Two’s digital story, she explained a scene where a dolphin was trapped in a net and the only one around to save her was a little girl named Izzy. She read, “eeekkk. The dolphin’s cries were as sharp to the ears as a high pitched whistle (*whistle noise). The little girl, Izzy, ran over to the terrified dolphin. But though she was just a little girl, what could she do? No one was around to cry for help! (*silent
slide with image of scared child was shown for 3 seconds). In comparison to her initial explanation of the problem, her digital story portrayed a much higher level of figurative language and sensory details.

In the re-administration of the Garfield Writing Attitude Survey and Student Self Reflection, changes were noted. While the child scored a raw score of 57 on the initial assessment, she now scored a 74, moving her from the 5th percentile to the 38th percentile. Child Two completed this survey directly after presenting her digital story to her peers, and showed obvious signs of high motivation and confidence that were not evident in her initial taking of the assessment. Child Two spent far less time thinking about what to choose for each Garfield and was asking clarifying questions that she did not ask the first time she was given the assessment. She asked, “well, a digital story is technically writing, right”? The observer responded saying “yes” and observed her changing three of her choices from the “happy” Garfield to the “very happy” Garfield. In Child Two’s Self Reflection, she stated that she “loved digital story telling. . . could tell her story better and more people enjoyed her writing making her feel good and a good writer”. When asked what do you like about writing, she immediately answered “sharing my stories and digital stories!”. When asked do you think you are good at writing? why or why not?, she now stated, “yes well I am very good at digital stories I am a good story writer but I am still a bad writer when I write with my pencil. I think this because I made a good story and my friends liked it”. This was a much different response than her initial response of “no, because I am not good at it”.
Table 2

<table>
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<tr>
<td>What do you like about writing?</td>
<td>That if I get a good grade I will get more confident</td>
<td>sharing my stories and digital stories!</td>
</tr>
<tr>
<td>What do you dislike about writing?</td>
<td>It can be hard</td>
<td>It can be hard sometimes</td>
</tr>
<tr>
<td>Do you think you are good at writing? Why or why not?</td>
<td>No, because I am not good at it I think no because I always get a bad grade</td>
<td>yes well I am very good at digital stories I am a good story writer but I am still a bad writer when I write with my pencil. I think this because I made a good story and my friends liked it</td>
</tr>
<tr>
<td>If I told you to write a story how would you feel?</td>
<td>I would feel nervous and scared</td>
<td>Smart and happy</td>
</tr>
</tbody>
</table>

**Garfield Writing Attitude Survey: Raw Score**

- 57
- 74

**Data Analysis- Child Three**

In the Garfield Writing Attitude Survey, Child Three scored a raw score of 51, placing him in the 2nd percentile. When given the survey, Child Three made a comment aloud saying, “this is easy I’m just going to pick all angry faces”. After encouragement to think about his feelings farther before immediately choosing an angry Garfield, Child Three completed the survey. In the child’s completion of this survey, noted observations were made. When asked “how would you feel if you had the job as a writer for a newspaper or magazine”, Child Three chose the “very happy” Garfield, but did not chose the “very happy” Garfield for any other question regarding writing. When asked “how would you feel about becoming an even better writer than you already are”, Child Three chose the “very upset” Garfield, signifying that he would not like to improve as a writer. These results shared similarities with Child Three’s responses on a Student Interest Survey and Self Reflection. When asked “Do you think you are a good writer”, the child answered “I’m an ok writer” and when asked “do you wish you were
better at writing”, he again answered “kind of”. When asked “how does it make you feel when you write at school”, he immediately circled bored. Child Three could not come up with anything he likes about writing, and when asked what he dislikes about writing he stated “how it hurts my hand if I do it for a long time. How it’s so boring and takes so long”. When asked the question “if I told you to write a story, how would you feel?”, he wrote “no….!”.

In completing the initial writing prompt, Child Three’s behaviors were observed. Before beginning writing, Child Three seemed motivated and excited about a topic he had wanted to write about. He seemed joyful over the fact that he can chose anything he wanted to write a story about. Excitedly, he explained his story aloud (he described that he would write about a boy who survives a terrible airplane accident and has to survive on an island that a tsunami has just hit, When describing this story, by choice, excitement was heard in his voice and high level vocabulary and detail were easily heard. This high motivation and excitement, however, was immediately gone when he began writing his actual story. He was visibly rushing to complete the story. He was also observed throwing his pen around and shaking his hand as if he were in pain after writing for only three minutes. He constantly held his paper up asking “is this enough?” and “do I have to add more”. While his handwriting was neat, and writing conventions were advanced, his organization and details were strongly lacking. When grading Child Three’s initial writing prompt, notice was made that his written story was far less elaborate than the story he described orally before he began writing. In reading through Child Three’s written work, his use of high level vocabulary and a naturally unfolding event sequence were noted. Organization and use of detail, however, were strongly lacking. While the story went in sequential order and transition words were used (“then Jimmy knew he was in danger and his life could be taken from
him. It was crucial he find a way to live…shortly after he found a friend in a animal”), he quickly jumped from event to event without providing detail or explanation to follow.

On the 4 point rubric scale, Child Three’s scores were a bit different than the other two children. Child Three’s initial writing prompt was scored much higher than the other two students and his writing was at a higher level. On the 4 point scoring rubric, he received a majority of 2 and 3 points in the categories, with the exception of his lowest scoring category: uses dialog and description to develop experiences and events or to show character response. While his writing did receive 3 out of 4 points in the category establishes a situation and introduced a narrator and/or characters and the category uses concrete words and phrases and sensory details to convey experiences and events precisely, his abilities should be much higher than that. He has the skill and knowledge to reach the highest level on the rubric but his low effort and motivation caused him to score only in the 3 point range. Unlike the other students whose scores improved from the 0 and 1 point range, Child Three began at a high level but was improved to the highest level. In grading Child Three’s digital story, his potential and ability was more easily seen. His story elaborated his story topic that he had stated orally and his stamina and focus were observed as far more improved. He was not visibly rushed, irritated, or uncomfortable as he was during his initial, but rather confident, excited, and eager to continue on his work. He was observed going back to his work, editing, and revising throughout his whole digital story. His phrases that he rushed over in his initial were now drawn out and elaborately explained using character descriptions, dialog, and detail.

Following Child Three’s exposure to digital storytelling, he was re-administered the Garfield Writing Attitude Survey and Self Reflection. Like Child Two, he also asked if digital storytelling counted as writing and was told, “yes”. In this second assessment, Child Three’s
initial confidence and interest in questions relating to having a job as a writer stayed the same, “very happy Garfield”, he now chose “happy Garfield” for questions relating to writing different topics such as science, social studies, and opinion. His raw score improved from a 51 to a 69, moving him to the 25th percentile. On the self reflection, this improvement was also evident. His answer to the question “what do you dislike about writing?” stayed the same; however, his initial answer to the question “what do you like about writing?” of “I don’t know”, was changed to “I like writing when I can be creative. I like writing with the iPad and showing my friends my story”.

Table 3

<table>
<thead>
<tr>
<th>Question Asked</th>
<th>Student Initial Response</th>
<th>Student Final Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do you like about writing?</td>
<td>I don’t know</td>
<td>I like writing when I can be creative. I like writing with the iPad and showing my friends my story</td>
</tr>
<tr>
<td>What do you dislike about writing?</td>
<td>How it hurts my hand. How it is so boring and long.</td>
<td>How it hurts my hand when I use my pencil</td>
</tr>
<tr>
<td>Do you think you are good at writing?</td>
<td>Ok, I don’t like writing but ill do it</td>
<td>Yes. Everyone liked me story I made a good story</td>
</tr>
<tr>
<td>If I told you to write a story how would you feel?</td>
<td>No….!</td>
<td>I would do it again because I like it</td>
</tr>
<tr>
<td><strong>Garfield Writing Attitude Survey: Raw Score</strong></td>
<td><strong>57</strong></td>
<td><strong>74</strong></td>
</tr>
</tbody>
</table>

**Section Four: Findings**

The purpose of this study was to test how students’ motivation levels and creativity change when presented with digital storytelling rather than traditional story writing. I conducted this study with my three students, in a one on one work setting for four consecutive weeks. I collected data throughout the four weeks, conducting both an initial student interview and
reflection in the beginning of the study, and a final student interview and reflection at the end of the study. With each session, I recorded data and observations on each student throughout the session. Through these observations, I was able to see the students’ growth and change in attitude through the writing process, as well as their skills and writing as the sessions went on. Both the students’ initial writing piece, as well as their digital story were grading using the same rubric, allowing me to analyze what specific skills and target areas they met with each. Looking at both the rubrics, student work, and student reflections, I was able to organize and recognize the changes in student motivation, as well as the writing growth and skills the students portrayed. With this, I was also able to construct my own thoughts on the students writing abilities and behaviors, and what future steps I should take for writing instruction.

**When motivated, students exhibit more persistence with writing tasks and positive classroom behavior**

The first theme encountered in this researcher was the impact motivation has on a students persistence and behavior. The article *How Motivation Affects Learning and Behavior*, by J.E Ormrod, explains the effects motivation has on student behavior and writing stamina, explaining that motivation directs student behavior toward particular goals. He writes, “individuals set goals for themselves and direct their behavior accordingly. Motivation determines the specific goals toward which learners strive” (Ormrod, 2014). He goes on to explain that motivation leads to increased effort, energy, and persistence in activities. This was evident through my research as well. My research proved that children not only spend more time, measured in minutes, on the digital story, or the more desired activity, but also held more focus and stamina during writing time. As my initial observations of the students’ traditional writing described students who behaved in an unfocused matter, rushed through tasks, and even
disrupted peers in the classroom, my observations during the digital storytelling aspect showed far more desirable behaviors. Children were working quietly, focusing at the task, and holding a positive attitude in reaching an end goal. Many other researchers have also found evidence that highly motivated children present more desirable qualities and are easily recognizable in the classroom. Skinner and Belmond, for example, explain that highly motivated children are easy to identify, describing them as enthusiastic, interested, involved, and curious. Motivated students try hard and persist, actively coping with challenges and setbacks (Skinner and Belmond, 1993). In my research, Child Three is often pulled out of the classroom for additional reading and writing during morning time, or in this case, during my study with the child. She would often need to abandon her work at random times and need to leave abruptly. While the first time I observed this child, I noted her being confused and frustrated when returning into the classroom and getting back to her task, the later observation showed a much different behavior. She returned to the room happier, and immediately went back to the digital storytelling task, finding where she left off and getting back to work in less than a minute. She easily overcame that obstacle because of her high motivation for the task, further proving that motivation does in fact increase persistence. Overall, this theme showed that students who are motivated exhibit positive behavior, persist at tasks, and show strong drive to work towards goals and remain on task.

**Digital storytelling, and the use of digital literacy, increases student motivation to write**

The next theme came in the use of digital storytelling and the direct impact digital storytelling has on increasing student motivation. Technology is relevant to students today; Rosen (2011) describes what many call the iGeneration mindset. In describing the mindset of these children, Rosen writes, “To [iGeneration kids], the smartphone, the Internet, and everything technological are not ‘tools’ at all – they simply are. Just as we don’t think about the
existence of air, they don’t question the existence of technology and media. They expect
technology to be there, and they expect it to do whatever they want it to do. Their WWW doesn’t
stand for World Wide Web; it stands for Whatever, Whenever, Wherever” (p. 10). Because
students have a strong relationship and knowledge of technology, using these technologies to
write is more relevant and comfortable to them. When presented with digital storytelling, the
students I worked with immediately labeled the iPad as “fun”, and showed interest in using the
iPad. They required little explanation and teaching of how to use the device, as they were
obviously knowledgeable already. My data and findings further proved this theme. While all
three students began as low scorers on the Garfield Writing Attitude Survey, all three students’
scores increased dramatically after presented with digital storytelling. I was able to see this
increase in motivation through the student survey and reflection as well. Hung, Hwang and
Huang found similar results in their own study. Following an activity involving digital
storytelling, they interviewed students. The interviews showed students to be more motivated by
the digital storytelling approach, and found the activity more interesting than the traditional ways
of writing. The students stated that they preferred the digital form of writing over traditional
writing. The students in my study made similar statements. Students who previously stated in
initial interviews that they disliked writing, found it boring, or did not write for pleasure,
answered after digital storytelling stating that digital storytelling was the part of writing they
liked, and that they enjoyed creating digital stories. This change in motivation further proves that
digital storytelling does, in fact, increase student motivation in writing.

**Digital Storytelling leads to higher writing performance and creativity**

Building off the statement that digital storytelling increases student motivation towards
writing, the next theme that arises is the statement that digital storytelling leads to higher student
performance in writing, and an increase in creativity. This improvement in performance was
evident through the rubric grading in my participants work. The students in my study improved
rubric scores in every single category when assessed through their digital stories. Students ability
to develop characters, setting and plot were strongly improved. Rather than simply stating a
situation, students used dialog and description to elaborate on character reactions and
conversations. In the grading of digital stories, all three students received grades of 3 out of 4 or
4 out of 4 points in every category of the rubric. This further proves that students not only gained
creativity, but also improved overall performance through the use of digital storytelling.

Table 4

<table>
<thead>
<tr>
<th></th>
<th>Child One Initial</th>
<th>Child One Final</th>
<th>Child Two Initial</th>
<th>Child Two Final</th>
<th>Child Three Initial</th>
<th>Child Three Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>Established a situation and</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>introduce a narrator and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>characters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organized an event sequence</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>that unfolds naturally</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Used dialog and description</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>to develop experiences and</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>events or to show character</td>
<td></td>
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<tr>
<td>response</td>
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</tr>
<tr>
<td>Used a variety of transitional</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>words and phrases to manage</td>
<td></td>
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<tr>
<td>the sequence of events</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Used concrete words and</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>phrases and sensory details</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>to convey experiences and</td>
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<tr>
<td>events precisely</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Provided a conclusion that</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>follows from the narrated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>experiences or events</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Digital Storytelling and increased motivation levels lead to higher confidence and self-perception

Though my initial research predations and questions did not place as much emphasis on the aspect of confidence, this ended up being a major theme resulting from my research and findings. I had not expected this theme to arise, though later noted the importance as it emerged from my data. In interviewing the participants in my study, many stated that they perceived themselves as “bad writers”. When asked if they think they are good at writing, all three students began the study believing they were not good at writing. In the Garfield Writing Attitude Survey, all students also chose the “unhappy Garfield” when asked their opinion regarding their peers seeing their writing, or their peers helping them with their writing. Following exposure to digital storytelling, the students shared their digital stories with their classmates. The students enjoyed sharing these stories and exhibited excitement while doing so. Following the presentation of their digital stories, students answers to reflection questions showed a higher level of confidence. The students mentioned that what they enjoyed most about writing was sharing their digital stories with their peers. Child Two, for example stated, “I’m an ok writer because I’m good at making stories on the iPad”. Child Three made a similar comment stating, “yes well I am very good at digital stories I am a good story writer . . . I think this because I made a good story and my friends liked it”. From the beginning of the study, all three students placed importance on how they are viewed by their peers as writer, but held negativity with these beliefs. The students felt as if they were not good writers and did not believe others previewed them as good writers. As the study went on and digital storytelling was used, these beliefs changed. By the last three comments of the children, this increase in confidence and positive self perception is seen. This proves that the level of confidence and self perception the students had in themselves increased
with the use of digital storytelling. Other researchers found an increase in confidence in students when presented with digital storytelling as well. Gresham states, “Students’ perceptions of what being creative meant changed. Students experienced immersion or deep-thought in the process of creation and reflected how professional they felt and how proud they were of their work. Students developed confidence in their creative writing through working with digital technologies. What proved interesting and important to note was the creative approaches student took with the next unit of work” (Gresham, 2014).

**Summary**

Working with these three students focusing on digital storytelling and motivation played a major role in improving their writing performance and growth. Although they all have individual needs and strengths as writers, they all show signs of low motivation towards writing. In completing this study with these students, the themes of motivation, confidence, and writing performance are better understood. Students are motivated by technology and digital literacies, and students high motivation leads to higher writing performance and confidence in writing.

**Section Five: Conclusions**

**Summary**

As teachers, we constantly encounter students who seem unmotivated to write. Coinciding with this, we also see that students who are motivated to write, produce higher achievement in writing. When working with fourth grade students, I constantly find myself wondering how student writing would differ if motivation increased.
Another realization I’ve come to while working with fourth grade students is their overwhelming knowledge and use of technology. Being closer in age that some to these students, I feel I can better relate to their relationship with technology in today’s world. Since these students are growing up surrounded with technology, shouldn’t our classrooms embrace and foster such advancements and technologies? I am completing this analysis research because I feel that if we, as teachers, incorporate technology and digital literacy into our instruction, students will find relevance and be more motivated

Relation to Literature Studies

Similarly to the researchers who have studied this topic in the past, I have found many commonalities as a result of the data I have collected. First, I can confirm that motivation does in fact affect student behavior and success. When lowly motivated, my students were off task, lacked focus, and showed avoidance towards tasks. This result was similar that of J.E Ormrod and other researcher have found in their own studies. Ormrod found that when motivated, students spent far more time on a topic, even if that topic was of difficulty to them. When unmotivated, he found that students spent less time on a task and did not persist through challenges and setbacks. As more studies are done to analyze the behavior of motivated students in comparison to the behavior of unmotivated students, researchers like myself are finding that motivated students possess the more desired qualities and behaviors. To further this, many others have also studied the use of digital storytelling to increase student motivation. In working with my students I was able to see their increase in motivation when presented with digital storytelling. Other researchers, like Peta Gresham, have noted similar findings. Gresham noted an increase in confidence and engagement when using digital literacy. Students recognize the relevance technology has to the 21st century and their lives, leading to a connection and
activation of prior knowledge. Once students then perceive they are accomplished and knowledgeable in the area of digital literacy, they become highly motivated and engaged.

**Implications**

In implying this research to practice, there is much to be learned about both the writing process, and digital literacy. In teaching in the 21st century, educators need to prepare students for a world that will be far different than what educators experienced themselves. Students are being prepared for jobs that are not even created yet with technology that will continue to grow and change. With this, students are also losing motivation and engagement in traditional school settings. Students are highly motivated by digital literacy, and because of this motivation, writing performance is improved when students are able to expand and practice their digital literacy capabilities. Educators should be fostering digital literacy skills and creating experiences with technology for their students to partake in. Cambourne (2002) recommends creating these conditions for quality learning, and goes on to state that digital literacies provide opportunities for students to thrive and take charge of their own learning by engaging and bringing about creativity. There are many strategies to be used not only to increase student motivation, but to support digital literacy in the classroom.

**Teacher Preparation**

One of the major reasons teachers hesitate in using digital literacy is their own discomfort and lack of confidence in technology. The key for educators is to focus on a specific area, master what applies to that interest, and find and explore potential connections and applications to use in the classroom. Teachers must maximize their time with digital literacy just as they do with all other content areas. For teachers who feel they are unprepared, behind on society’s
advancements, or are even resistant to technology implementation, research supports that professional development can adequately train and improve teachers’ knowledge and skill in digital literacy, no matter whether a novice or a veteran (Cator, 2011; Atkins et al., 2010; Scherer, 2011). By attending meaningful professional development sessions and trainings, teachers can better prepare for the use of technology in the classroom.

**Digital Storytelling:**

In conducting this study, I found that although my students do not have the luxury of each child having his or her own iPad, digital storytelling is still easily used. In preparing for the study, countless tools and programs were at my disposal for allowing students to experience digital literacy. Adobe Voice, Animoto, Bubblr, Mapskip, and Pixton, to name a few, are all free programs that can be used on iPad or computer to create digital stories. Educators can chose writing prompts and pieces students have already completed and adapt them into digital stories. Students can use digital story telling not only to write narrative pieces, but informational pieces as well. Welcoming digital storytelling into a classroom strongly motivates students and meets the unique needs each individual has.

**Limitations**

In conducting this study, a few limitations occurred. The biggest limitation came in dealing with the ever-changing career hunt as an educator. Accepting a job in a different grade level at the midst of beginning research forced me to go back and edit the age used in the study, as well as restart the research process. While there was great benefit to working with students that I teach everyday, being the participants classroom teacher also brought about difficulties. Having seventeen other students in the room daily made for difficulty in finding time to work
only with the students participating, while ensuring they do not miss instructional time. Controlling the amount of time allocated to the digital storytelling aspect was another limitation I faced. Students wanted to continue working and allocate a great amount of time to their stories, which was a positive; however, because of normal time constraints of a classroom, this was often difficult. Had I expected that the students would want such a great amount of time to edit and revise their digital works, I would have prepared to research in a longer time frame. Lastly, because of the change in my job and the research, students ended up participating in my study very close to state testing time. My low level reader, for example, was often pulled out of my room for additional test preparation during morning work time, which was the time I worked with the participants. This often led to being getting less time to observe him than the other two students. Children also had a visibly higher level of anxiety and stress during this time.

**Future Research Needs**

Although there have been many studies done to examine the benefits of motivated students and the benefits of digital storytelling in the classroom, there is a definite need for research surrounding the role digital storytelling has on writing as a content area. As I found, students achieved higher rubric ratings when using digital storytelling, so had more researchers studied this in depth, more knowledge can be gained to better prepare students and create higher performance. There is also a need for research into why educators often hesitate from using digital storytelling, and digital literacy, in the classroom, and the differences between classrooms that promote digital literacy and those that do not.
Overall Significance

This research was done with the best intentions in mind for all students. While all students learn differently and require different tools to meet their individual needs, educators need a way to engage all students and prepare all students for the future. The opportunity to work with students with technology in literacy has enlightened many researchers on the possibilities of the future, as well as the interest, knowledge and creativity students have surrounding digital literacy. The benefits of fostering and welcoming digital literacy in the classroom is important to educators who are striving to produce highly successful students and future members of society.
References


Appendices

Appendix A:
During my observations, I will look for the following as well as any other notable observations:

- Student motivation (body language, actions, verbal statements)
- Students’ comfort and prior knowledge with technology
- Students’ writing stamina and focus when presented with each task

Appendix B:
Prior to my study, I will ask the classroom teachers the following questions:

- How would you describe this child as a writer?
- Is there anything you believe I should know about this child as a student and writer?
Appendix C:

**Student Interest Survey**

<table>
<thead>
<tr>
<th>1. How does it make you feel when you write at school?</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Emoticons" /></td>
</tr>
<tr>
<td>Excited</td>
</tr>
<tr>
<td><img src="image" alt="Emoticons" /></td>
</tr>
<tr>
<td>Okay</td>
</tr>
<tr>
<td><img src="image" alt="Emoticons" /></td>
</tr>
<tr>
<td>Embarrassed</td>
</tr>
<tr>
<td><img src="image" alt="Emoticons" /></td>
</tr>
<tr>
<td>Yuck</td>
</tr>
<tr>
<td><img src="image" alt="Emoticons" /></td>
</tr>
<tr>
<td>Nervous</td>
</tr>
<tr>
<td><img src="image" alt="Emoticons" /></td>
</tr>
<tr>
<td>Sad</td>
</tr>
<tr>
<td><img src="image" alt="Emoticons" /></td>
</tr>
<tr>
<td>Scared</td>
</tr>
<tr>
<td><img src="image" alt="Emoticons" /></td>
</tr>
<tr>
<td>Bored</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. What do you like to write about?</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Emoticons" /></td>
</tr>
<tr>
<td>sports</td>
</tr>
<tr>
<td><img src="image" alt="Emoticons" /></td>
</tr>
<tr>
<td>Fairy Tales</td>
</tr>
<tr>
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</tr>
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<td>Yourself</td>
</tr>
<tr>
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<tr>
<td>Animals</td>
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<tr>
<td><img src="image" alt="Emoticons" /></td>
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<tr>
<td>Nothing</td>
</tr>
<tr>
<td><img src="image" alt="Emoticons" /></td>
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<td>Friends</td>
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<tr>
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<tr>
<td>Vacation</td>
</tr>
<tr>
<td><img src="image" alt="Emoticons" /></td>
</tr>
<tr>
<td>Anything</td>
</tr>
</tbody>
</table>
Student Self Reflection:

What do you like about writing?

What do you dislike about writing?

Do you think you are good at writing? Why or why not?

If I told you to write a story, how would you feel?
Appendix D:

Elementary Writing Attitude Survey

Name_________________ Grade______ School__________________

Please circle the picture that describes how you feel when you read a book.

1. How would you feel writing a letter to the author of a book you read?

![Image of Garfield characters with different poses]

2. How would you feel if you wrote about something you have heard or seen?

![Image of Garfield characters with different poses]

3. How do you feel writing a letter to a store asking about something you might buy there?

![Image of Garfield characters with different poses]

4. How would you feel telling in writing why something happened?

![Image of Garfield characters with different poses]

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Survey designed by Dennis J. Kear, Wichita State University
Please circle the picture that describes how you feel when you read a book.

5. How do you feel about spending free time reading?

6. How would you feel keeping a diary?

7. How do you feel writing poetry for fun?

8. How would you feel writing a letter stating your opinion about a topic?
Please circle the picture that describes how you feel when you read a book.

9. How do you feel if you were an author who writes books?

10. How do you feel if you had a job as a writer for a newspaper?

11. How do you feel about becoming an even better writer than you already are?

12. How do you feel about writing a story instead of doing homework?
Please circle the picture that describes how you feel when you read a book.

13. How do you feel about writing a story instead of watching TV?
   - Picture A
   - Picture B
   - Picture C

14. How would you feel writing about something you did in science?
   - Picture A
   - Picture B
   - Picture C

15. How would you feel writing about something you did in social studies?
   - Picture A
   - Picture B
   - Picture C

16. How do you feel if you could write more in school?
   - Picture A
   - Picture B
   - Picture C

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Please circle the picture that describes how you feel when you read a book.

17. How do you feel about writing down the important things your teacher says about a new topic?

18. How do you feel writing a long story or report in school?

19. How do you feel writing answers to questions in science or social studies?

20. How do you feel if your teacher asked you to go back and change some of your writing?
Please circle the picture that describes how you feel when you read a book.

21. How do you feel if your classmates talked about making your writing better?

22. How would you feel writing an advertisement for something people can buy?

23. How do you feel keeping a journal for class?

24. How do you feel writing about things that have happened in your life?
Please circle the picture that describes how you feel when you read a book.

25. How do you feel about writing about something from another person’s point of view?

26. How do you feel about checking your writing to make sure the words you have written are spelled correctly?

27. How do you feel if your classmates read something you wrote?

28. How do you feel if you didn’t write as much in school?
Elementary Writing Attitude Survey Scoring Sheet

Student Name ____________________________________________
Teacher ________________________________________________
Grade ___________________________________ Administration Date _______

<table>
<thead>
<tr>
<th>Scoring Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 points  Happiest Garfield</td>
</tr>
<tr>
<td>3 points  Slightly smiling Garfield</td>
</tr>
<tr>
<td>2 points  Mildly upset Garfield</td>
</tr>
<tr>
<td>1 point   Very upset Garfield</td>
</tr>
</tbody>
</table>

Item scores:  Item scores:  
1. ______  15. ______  
2. ______  16. ______  
3. ______  17. ______  
4. ______  18. ______  
5. ______  19. ______  
6. ______  20. ______  
7. ______  21. ______  
8. ______  22. ______  
9. ______  23. ______  
10. ______  24. ______  
11. ______  25. ______  
12. ______  26. ______  
13. ______  27. ______  
14. ______  28. ______  

Full scale raw score __________________________
Percentile rank __________________________

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# Narrative Writing Rubric

**4th Grade**

<table>
<thead>
<tr>
<th>Ask Yourself:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you establish a situation (real or imagined) and introduce a narrator and/or characters?</td>
<td>No, I didn’t establish a situation or introduce a narrator and/or characters.</td>
<td>Well, I somewhat established a situation and introduced a narrator and/or characters.</td>
<td>Yes, I established a situation and introduced a narrator and/or characters.</td>
<td>Yes, I established a situation and introduced a narrator and/or characters in a very creative way.</td>
</tr>
<tr>
<td>Did you organize an event sequence that unfolds naturally?</td>
<td>No, I did not organize an event sequence that unfolds naturally.</td>
<td>Well, I somewhat organized an event sequence that unfolds.</td>
<td>Yes, I organized an event sequence that unfolds naturally.</td>
<td>Yes, I organized an event sequence that unfolds naturally in a very creative way.</td>
</tr>
<tr>
<td>Did you use dialogue and description to develop experiences and events or to show character response?</td>
<td>No, I did not use dialogue and description to develop experiences and events or to show the character response.</td>
<td>Well, I included SOME dialogue and description to develop experiences and events or to show the character response.</td>
<td>Yes, I included dialogue and description to develop experiences and events or to show the character response.</td>
<td>Yes, I included LOTS of dialogue and description to develop experiences and events or to show the character response in a very creative way.</td>
</tr>
<tr>
<td>Did you use a variety of transitional words and phrases to manage the sequence of events?</td>
<td>No, I didn’t use any transitional words or phrases to manage the sequence of events.</td>
<td>Well, I used A FEW transitional words and phrases to manage the sequence of events.</td>
<td>Yes, I used transitional words and phrases to manage the sequence of events.</td>
<td>Yes, I used MANY transitional words and phrases to manage the sequence of events in a very creative way.</td>
</tr>
<tr>
<td>Did you use concrete words and phrases and sensory details to convey experiences and events precisely?</td>
<td>No, I didn’t use concrete words and phrases and sensory details to convey experiences and events precisely.</td>
<td>Well, I used SOME concrete words and phrases and sensory details to convey experiences and events precisely.</td>
<td>Yes, I used concrete words and phrases and sensory details to convey experiences and events precisely.</td>
<td>Yes, I used concrete words and phrases and sensory details to convey experiences and events precisely in a very creative way.</td>
</tr>
<tr>
<td>Did you provide a conclusion that follows from the narrated experiences or events?</td>
<td>No, I didn’t provide a conclusion that follows from the narrated experiences or events.</td>
<td>Well, I SOMEWHAT provided a conclusion that follows from the narrated experiences or events.</td>
<td>Yes, I provided a conclusion that follows from the narrated experiences or events.</td>
<td>Yes, I provided a conclusion that follows from the narrated experiences or events in a very creative way!</td>
</tr>
</tbody>
</table>