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# Writer's workshop: the results when iPads are used by kindergarten students

Ashley Dickol

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**WRITER'S WORKSHOP: THE RESULTS WHEN KINDERGARTEN  
STUDENTS USE IPADS**

by  
Ashley Noel Dickol

A Thesis

Submitted to the  
Department Language, Literacy, and Special Education  
College of Education  
In partial fulfillment of the requirement  
For the degree of  
Master of Arts in Reading Education  
at  
Rowan University  
December 2014

Thesis Chair: Marjorie Madden, Ph.D.



## **Dedication**

I would like to dedicate this manuscript to my family.

## **Acknowledgements**

First I would like to thank my family. If it were not for their constant support and patience, I would not have been able to complete this journey. Mom: Thank you for always encouraging me and reminding me the end is near. Dad: Thank you for your sense of humor and telling me I can do it. Jason and Natalie: The support from you two never went unnoticed. Thank you for always being there.

To Dr. Marjorie Madden: Without your guidance and support, I could not have finished. Thank you for your words of encouragement, knowledge, patience, and guidance. You made me a better writer and teacher researcher. You taught me to preserve and look at the classroom from a different angle. Thank you.

To my kindergarten team: Thank you for the laughs, words of wisdom, and providing a support group at work. I am beyond fortunate to work with a great group of teachers.

To my students: I would not have made it without them. You ignited a fire of questioning more and how to change it. Thank you.

Lastly, to my Masters in Reading Girls: Good luck to everyone in the future!

## **Abstract**

Ashley Dickol  
WRITER'S WORKSHOP: THE RESULTS WHEN IPADS ARE USED BY  
KINDERGARTEN STUDENTS  
2014  
Marjorie Madden, PH.D.  
Master of Arts in Reading Education

The purpose of this research study was to determine what happens when kindergarten students use iPads during writer's workshop. The iPad was used on a daily basis to help determine what students were capable of when using this tool. Additionally, a series of mini lessons were used to teach various writing skill and traits. Qualitative inquiry strategies such as surveys, student interviews, and observations recorded in my teacher research journal were used to collect data. Upon analyzing the data, the factors that most affected data in this study were related to using new technologies, multiple modes of writing, and attitudes about writing. The data analysis suggested that students' skills increased while composing stories on the iPads. Students' positive attitude about writing appeared to be the most significant change throughout writer's workshop.

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## Chapter 1

### 1.1 Scope of the Study

Writer's workshop began like a normal day with a mini lesson. Before students began their writing, I asked Anna, Jason, Keith, Zara, and Rose to sit at my table. As I distributed the iPads to my students, they looked at me dumbfounded as they started playing a game. The students thought they did not have to write and were ecstatic by the fact they could play games. However, I stopped them from driving the bus or guessing the first letter of the picture shown on the screen. I told the students "Today, we are going to write on the iPads." Anna was the first to speak up and said "but Miss Dickol, how do we write with these?"

I started to laugh at myself because a device so common within the classroom in all subject areas has not seen the light of day during writer's workshop. The students did not understand iPads could be used for more than games or digital magnetic boards. I opened the Story Kit application on all of the iPads and the students' faces lit up with excitement. Once they grasped the concept of using something other than paper and pencil to write with, they were naturals. They began taking selfies, drawing images, and asking each other for advice on their stories. Jason kept repeating, "This is awesome" as he inserted images of his classmates into his story while Zara told me "I am really happy I can write with the iPad because I can do more."

This opening vignette may be uncommon in other classrooms since many teachers do not use iPads during writing workshop. Some students question how to apply a taught skill with technology because it is something different, some might dive right in, and others find it "awesome." When assignments and projects are completed using known

ways such as paper and pencil, the teacher may wonder, “What would happen if I used technology instead?”

Some students flourish using technological devices in school. Perhaps they have the right motivation or prefer digital tools. As teachers, we spend time and resources in planning interactive lessons. In the vignette above, the students never imagined using iPads for writer’s workshop. However, there is an opportunity for those who would prefer writing using digital tools. Students are writing in both applications, digital and traditional. Using iPads during writer’s workshop allows one to see how students compose a story changes. Based on the various uses of iPads in other content areas in my kindergarten classroom, I have chosen to focus on the use of iPads in writer’s workshop. I would like to study specifically what would happen when kindergarten students use iPads during writer’s workshop.

## **1.2 Story of the Question**

We live in a world where students prefer playing video games, watching movies, surfing the web, or texting to communicate. Teachers are encountering new problems within in their classrooms on how to incorporate new technology into lessons. I am challenged with these same feelings on a daily basis. I tried a variety of ways to incorporate iPads in all content areas besides playing games.

After completing the course “Educational Technology” as a graduate student, I began to realize there are many ways iPads and other technological devices are beneficial to all students. I understood the different possibilities students could create such as a list of vocabulary words about a topic generated into a shape or retelling their story using an

animated character. I was seeing the value of technology within the classroom. However, I began asking myself “What more could I do with this information?”

With my new knowledge of how effective technology could be even to kindergarten students, I decided to focus on the “what if.” I observed how students used the iPads without prompting and support in reading. I noted some students excelled at using technology in the classroom while others needed more support. I was intrigued at how students enjoyed using the note taking application to type their “sentences.” Would students feel the same about writing if it were writing? How could this impact kindergartener’s literacy skills? How would they engage with one another when using the iPad?

My research question became even clearer when the writer’s workshop model was in place. I would deliver the mini lesson, model my writing while students interacted, and then students would write independently. However, I wanted to know what would happen if students used iPads during writing time to compose and publish their work.

I wondered if using iPads would promote students to write more, thus my own inquisitiveness to research on what happens if kindergarteners use iPads during writer’s workshop. I hope to uncover a connection to how students compose a story using digital tools. There are many questions my study seeks to answer that would not only benefit me, but also my students and the teaching community as well.

### **1.3 Statement of the Problem**

This study hopes to uncover more about what happens when kindergarten students use iPads during the writing workshop model. In the educational setting, teachers will at one point use technology within their lessons.

As schools increase the use of technology within classrooms, there is a need for technology in all subject areas. Early childhood educators have faced the challenge “to find the best way to teach writing in the classroom and to successfully juxtapose developmentally appropriate practice with the latest trends” (Behymer, 2003, p. 85). Incorporating technology during writer’s workshop exposes students to different opportunities within their writing. They are able to be more creative and have a variety of accommodations readily available. Students have the opportunity to use graphics, photographs, and recordings to compose their story. These features could enhance students’ published pieces into something more than the traditional way of writing. The use of digital tools, such as iPads, “has changed mobile learning possibilities for teachers and students” (Hutchinson, Beschorner, Schmidt-Crawford, 2012, p. 15). Teachers can use digital tools in order to guide students’ learning. Students are able to complete more tasks with the use of iPads and similar devices because of the user-friendliness the digital tools offer.

By using iPads during writer’s workshop, students have more possibilities to generate authentic pieces of writing. Andes and Claggett (2011) found “that technology applications that are meaningful and integrated into classroom activities have the most potential to stimulate student enthusiasm and learning” (p. 345). In their study, the project consisted of using digital tools in various writing assignments over a year. They

concluded students who were resistant to printed texts and traditional methods, preferred digital tools because they appealed to their strengths and interests (Andes & Claggett, 2011). Teachers are beginning to use digital tools within their classroom more frequently, and as they do “it will be important to examine how this technology, with its affordances and constraints, can influence student learning” (Hutchinson, Beschorner, Schmidt-Crawford, 2012, p. 16). Digital tools open new doors for students within their learning. More importantly, teachers need to ensure the uses of these tools are the best way to implement the given curriculum.

According to Candreva (2011), “the 21<sup>st</sup> century finds children of all ages, including very young children, eager and competent in the use of technologies that range from computers, cell phones, DVD’s, iTunes, gaming systems such as the Wii or Xbox, YouTube videos, text messaging, etc” (p. 10). Lankshear and Knobel (2003) stated “there is some evidence to suggest that students produce better quality writing when they use word processing rather than pen and paper” (p. 61). Students want to explore new ways to learn, especially when it involves technology.

Implementing a different way to write has been shown to generate better writing; for example, Bangert-Drowns; (1993) concluded students produced higher quality writing when using technology compared to those students who used paper and pencil. Hutchinson, Beschorner, and Schmidt-Crawford (2012) found “that using the iPads for literacy instruction not only supported student learning, but students were also highly engaged and able to demonstrate unique and creative ways” (p. 23). That is, iPads are equally important for teachers to use in early childhood classrooms because students have more opportunities to learn and engage. Wood and Jocius (2014) learned their students

opened up new opportunities in their writing using technology, arguing that “according to developers, Storybook Maker is an interactive app that encourages writing and story creation” (Wood & Jocisu, 2014, p. 130). This tool allowed the students to create a story by illustrating pictures, writing about their ideas, and narrating their story. This research hopes to divulge what happens when a group of kindergarteners use iPads during writer’s workshop.

#### **1.4 Statement of Research Question**

The International Reading Association (2009) advises, “to become fully literate in today’s world, students must become proficient in the new literacies of the 21<sup>st</sup> century technologies. As a result, literacy educators have a responsibility to effectively integrate these new technologies into the curriculum, preparing students for the literacy future they deserve” (n.p.). Many teachers wonder what would happen if they incorporated technology during writer’s workshop.

Based on the research problem at hand, the question I address in this study is as follows: What happens when kindergarteners use digital tools in writer’s workshop?

#### **1.5 Organization of Thesis**

Chapter two presents a review of the literature that is relevant to the topic of kindergarten writing and digital tools. In this chapter, I discuss the importance of building literacy skills as early as kindergarten. I describe the different skills correlated with later literacy achievement. I explain the kindergarten writing workshop model. I clearly define 21<sup>st</sup> century writing and discuss the possibilities digital devices offer students today. The research found in this chapter provides a comprehensive view of the impact digital tools can offer to students.

Chapter three describes the design and context of the study. Chapter four reviews the data and the research, while analyzing my findings. I also discuss any surprises I encountered throughout the study. Chapter five presents the conclusion of this study and the implications for further research regarding digital tools in writer's workshop.

## Chapter 2

### Literature Review

*“Everybody is looking for leadership in revision of courses, in re-examination of methods, in serious consideration of actual outcomes or objectives...It is our business to develop ways of finding and sifting out the hopeful variations, and to build an art of teaching English which will be sure and firm in its major lines and yet leave constant room for growth and change to fit the un-guessable future.”*

*(Leonard, 1927, p. 9).*

Teaching fundamental skills such as reading and writing are critical as early as kindergarten. Incorporating technology into daily writer’s workshop lessons can transform writing lessons and build upon foundational skills. For some students, iPad and computer navigation may be mastered upon entering the school setting. Therefore, teachers should emphasize digital tools. By providing students with the necessary tools, students can build on both foundational and technological knowledge. The topic therefore becomes: what happens when kindergarten students use iPads during writer’s workshop?

Chapter two presents a review of the literature regarding how digital tools influence student writing. The first section focuses on the required literacy skills kindergarten students need to be successful with later literacy achievement. The second section discusses the kindergarten writing workshop more fully and identifies how the Common Core State Standards are utilized in this workshop. The third section examines how technology impacts students today and how it benefits them during writing

workshop. The chapter concludes with an examination of digital tools, namely, iPad usage and the benefits for 21<sup>st</sup> century learners.

## **2.1 Building Literacy Skills as Early as Kindergarten**

Skills acquired in kindergarten provide a foundation for student literacy education impacting all future academic learning. The National Institute for Literacy Executive Summary (2010) included studies that proved kindergarten provided “the launching pad for later literacy learning.” The National Early Literacy Panel (NELP) was established to identify early skills or abilities that are necessary for later literacy achievement. According to the NELP (2010), “conventional reading and writing skills that are developed in the years from birth to age 5 have a clear and consistently strong relationship with later conventional literacy skills” (p.3). Lonigan and Shanahan (2010) found the following six variables correlated with later literacy achievement:

Alphabet knowledge (AK): knowledge of the names and sounds associated with printed letters, phonological awareness (PA): ability to detect, manipulate or analyze the auditory aspects of spoken language, rapid automatic naming (RAN) of letters or digits: the ability to rapidly name a sequence of random letters or digits, RAN of objects or colors: the ability to write letters in isolation on request to write one’s own name, writing or writing name: the ability to write letters in isolation on request or to write one’s own name, and phonological memory: the ability to remember spoken information for a short period of time. (p. 3)

Each of these important variables prove crucial in developing student literacy, especially writing. The implication for writing, then, is that kindergarten students need to know how to develop, understand, and utilize writing skills. There are a variety of skills

kindergarten students have that impact writing such as oral language. Lonigan and Shanahan (2010) argue that “oral language was found to play a bigger role in later literacy achievement when it was measured using more complex measures that included grammar and the ability to define words” (p. 4). Thus, skills in oral language and print knowledge must be taught and implemented in kindergarten writing instruction.

## **2.2 Kindergarten Writing Workshop**

Behymer (2003) advised that a successful component of writing workshop is modeling; “teachers need to model writing for their students” (p. 85). Behymer explained interactive writing to be the most beneficial for kindergarten students because it supported writing workshop and allowed students to independently complete something they normally could not. Williams and Piloniete (2012) reported on a study conducted in a kindergarten classroom. They indicated “interactive writing creates an instructional context that reflects Vygotsky’s principle of the zone of proximal development” (p.145). Vygotsky (1986) regarded learning as a social phenomenon, which occurs while interacting with others. After the teacher used an interactive writing lesson, the teacher worked with students in their instructional zone through scaffolding until they have acquired the skills needed to write. As the teacher shared her thinking aloud, students developed a better understanding of how a writer engages in metacognition when he/she writes.

Calkins (2013) studied of the Common Core State Standards (CCSS) in her model of writing workshop. Calkins (2013) determined that “in the Common Core State Standards, writing is treated as an equal partner to reading, and more than this, writing is assumed to be the vehicle through which a great deal of the critical thinking, reading

work, and reading assessment will occur” (p, 11). The CCSS identified writing as an essential part of a student’s overall education. Calkins (2013) continued the notion of kindergarteners as writers by stating “writing will need to be given its due, starting in kindergarten and continuing throughout the grades. The standards give you a powerful voice in advocating for a writing curriculum and for time in the schedule for children to work on their writing” (p. 19). The conclusion that arose from Calkins’ (2013) research on the Common Core State Standards made writing an essential part of the students’ day.

Kramer-Vida, Levitt, and Kelly (2012) conducted research on the common misconception that kindergartners are unable to write, especially during writer’s workshop. Using a writing workshop approach, that includes mini lessons and direct instruction, Kramer-Vida, Levitt, and Kelly (2012) investigated whether or not kindergarten writers are ready for the CCSS. In their analysis, writing workshop “has a true value in the context of the CCSS” (p. 106). They explained even though the CCSS does not include everything to be taught, writing workshop allows the standards to be implemented to support students, as they become writers.

In another study related to writing workshop, Chapman (2002) examined one student’s writing from kindergarten thru third grade. While observing a kindergarten student, Chapman focused on how learning to write is part of emergent literacy. Chapman argued the main purpose for kindergarten writing is to learn to write. She observed how the teacher conducted writing workshop and how the teacher encouraged the student to use what taught skills into their writing. Based on her findings, Chapman emphasized the importance of providing students time to write in a writing workshop model.

As Candreva (2011) discussed the model used in her study, she explained that “during mini lessons, the teacher may help students decide what topics they would like to write about, share examples of how picture books and other texts work, and model strategies that focus on writing conventions such as word spacing, sound/symbol relationships, spelling, and punctuation” (p. 45). Typically, mini lessons allow the teacher to model how to stretch out words, develop ideas, and use resources. Once the mini lesson is conducted, students begin their writing independently while the teacher confers with students to support their individual needs and initiate teaching points. Conferencing and the one-on-one support allow students to proceed with their writing. This explicit monitoring instruction within writing workshop is essential for students because it is a chance for them to apply and foster their skills.

Candreva’s (2011) study concluded that Donald Graves (1983) and Lucy Calkins (1994) created a useful writing framework for the primary grades. This model is based on teachers working with students while interacting with them to discover their individual story. Teacher’s interaction with students is crucial in order for them to grow as writers. According to Calkins (1994), “young children rehearse for writing by drawing...drawing becomes much more important than the writing...the act of drawing and the picture itself provide a supportive scaffolding within which he can construct his piece of writing” (p. 85). Thus, the idea of students having the opportunity to develop authentic, writing pieces during writer’s workshop was developed in order to communicate their ideas through drawings and words while working collaboratively with the teacher.

### **2.3 21<sup>st</sup> Century Writing**

The 21<sup>st</sup> century finds children increasingly eager and capable to use technologies. Kinzer (2010) asserted, “our school-aged youth spend large amounts of their time consuming and interacting with media and technology” (p. 51). The National Center for Education Statistics (NCES) reported 91% of students in kindergarten through grade 12 who are age 3 or older used computers and 59% used the Internet (2006). Kinzer (2010) reported an increase in the number of students using technology from 2004 to 2009 to at least an additional 2.5 hours of usage per day.

Barack (2005) stated “students encounter technology from kindergarten on.” Students entering school use technology more than students in previous years and are being called “digital natives.” Prensky (2001) described 21<sup>st</sup> century learners, or digital natives, as those that grew up with technology, prefer graphic images instead of text, and function best when networked. Thus, Caruso and Kvavik (2005) stated students tend to use technology for both academic and social purposes.

According to Candreva (2011), “the 21<sup>st</sup> century finds children of all ages, including very young children, eager and competent in the use of technologies that range from computers, cell phones, DVD’s, iTunes, gaming systems such as the Wii or Xbox, YouTube videos, text messaging, etc” (p. 10). Lankshear and Knobel (2003) researched the correlation between technology and early childhood literacy. Lankshear and Knobel (2003) studied one student’s activities with technology. They discovered the student produced a series of narratives based on personal interests and published them on the Internet. The student appealed to others simply from his digital stories. Lankshear and

Knobel concluded there was “some evidence to suggest that students produce better quality writing when they use word processing rather than pen and paper” (p. 61).

Hutchinson and Reinking (2011) investigated how the use of technology in academic environments benefits students. Using digital forms of communication technologies, surveys were administered to determine how literacy teachers integrate technology into instruction. The researchers explained that since limited studies had been previously conducted, their study provided the foundation for future work. Hutchinson and Reinking (2011) determined that students who have technology integrated in their instruction achieve greater success in becoming fully literate.

The International Reading Association (2009) advised, “to become fully literate in today’s world, students must become proficient in the new literacies of the 21<sup>st</sup> century technologies. As a result, literacy educators have a responsibility to effectively integrate these new technologies into the curriculum, preparing students for the literacy future they deserve” (p.1). Instruction using technology is a vital component in developing skilled writers.

Digital devices impact the learning possibilities for students today. As Lankshear and Knobel (2003) justified “groups that were allowed to use word processing facilities produced marginally higher quality writing than groups who were confined to pen and paper” (p. 61). Digital devices other than word processors offer more opportunities for students as well. In their research exploring the use of the iPad for literacy learning, Hutchinson, Beschorner, and Schmidt-Crawford (2012) found “that using the iPads for literacy instruction not only supported student learning, but students were also highly engaged and able to demonstrate unique and creative ways” (p. 23). This finding

suggests that iPads are equally important for teachers to use in early childhood classrooms, providing different experiences and opportunities to learn and engage.

“Students have the opportunity to give voice to the voiceless, situate themselves in alternate perspectives, and challenge the status quo” (Wood & Jocius, 2014, p. 129). Digital tools, such as iPads, provide students the opportunity to redefine their writing. Wood and Jocius (2014) learned technology opened up new opportunities for students in their writing. In one example with two students, they used a Storybook Maker, which is “an interactive app that encourages writing and story creation” (Wood & Jocisu, 2014, p. 130). This allowed the students to create a story by illustrating pictures, writing about their ideas, and narrating their story.

## **2.4 Conclusion**

After reviewing the literature, the importance of digital tools in writing workshop is clearly important as an integral part of learning to enhance students’ writing. The foundational skills that are needed for students to develop later literacy achievement are critical. Students must acquire a plethora of emergent literacy skills such as alphabetic principle, oral language, and letter formation in order to grow as a writer. However, research has demonstrated that these skills can be developed using a variety of digital tools such as an iPad. Kindergarten students are among those who work with digital tools both academically and socially. When students use digital tools, they are more likely to be engaged and successful based on their familiarity with these tools.

Since there is little research involving kindergarteners and the use of digital tools during writing workshop, this study will expand and develop the educational community’s understanding of technology in writing. The next chapter of this thesis

looks at the methodology and design of the proposed research study as well as the context in which the study takes place.

## Chapter 3

### Research Design/Methodology

#### 3.1 Rationale for Research

The framework of this study is qualitative research. When conducting research, quantitative and qualitative are determined based on the needs of the research. Quantitative research views research as “research, data, knowledge, evidence, and effectiveness” (Cochran-Smith & Lytle, 2009, p. 46). This form of research paradigm focuses on evidence, objectivity, and measurement (Cochran-Smith & Lytle, 2009). Under quantitative research, “the notion of scientifically based research and its complement, evidence-based education, reflect renewed confidence in the power of science” (Cochran-Smith & Lytle, 2009, p. 10).

Qualitative research is “tied to fundamental ideas about what counts in the first place as research, data, knowledge, evidence, and effectiveness, and who in the final analysis can legitimately be regarded as a knower about issues related to teaching, learning, and teacher development” (Cochran-Smith & Lytle, 2009, p. 46). Qualitative research emphasizes inquiries stemming from the teachers’ own questions. It frequently allows for a direct connection between the teachers’ learning to student learning.

A kind of qualitative research, teacher research, allows teachers to investigate what they do and their students do in their classrooms. It asserts or places “practitioner knowledge as central to the goal of transforming teaching, learning, leading and schooling” (Cochran-Smith & Lytle, 2009, p. 119). It empowers teachers to follow their interests and needs of students while working collaboratively. The term teacher research is defined as working “in inquiry communities to examine their own assumptions,

develop local knowledge by posing questions and gathering data, and-in many versions of teacher research- work for social justice” (Cochran-Smith & Lytle, 2009, p. 40). Teacher researchers understand their research is not scientifically based research but based on exploring new questions in the classroom. Bean-Folkes (2011) states, “teacher researchers look to their practice and to existing research and theoretical literature for answers and take steps to decide what to do to solve a problem” (p. 359). Thus, teacher research is “a natural extension of good teaching” (Shagoury & Power, 2012, p. 2). Teachers are able to have a connection from student learning to teacher learning throughout their research.

My study embraces the qualitative design of teacher research because the goal is to explore a question through the investigation of teacher practices. My study will help me look closer at what happens when kindergarten students use iPads during writing workshop. The qualitative teacher research method is used for the purpose of this study as I examine students writing within a classroom setting and how their writing evolves over time.

The qualitative inquiry strategies used to conduct this study include parent surveys, observations, student surveys, student artifacts, and my personal teacher-research journal.

### **3.2 Procedure of Study**

Before I began collecting data, I observed the classroom atmosphere during writing workshop. I noted how I approached each writing mini-lesson and how the students responded to the mini-lessons. I observed how the students applied the mini lesson into their writing. I listened closely during conversations with their writing

partners to discover what students were thinking throughout the writing process. I decided on the students I would use in small groups on a daily basis during writing workshop based on the district assessments and observations.

I researched different writing applications used in the past at my school. I read reviews and compared which application would be beneficial for my students. I observed how my students used applications throughout the day in all content areas. After familiarizing myself with my students' strengths using technology and the variety iPad applications, I decided to use the most age appropriate application that would benefit my students. Story Kit was easy to navigate, provided different opportunities to create books, and was available for the iPads. I decided the students would have the same Lucy Calkins mini lessons as the other students in the class, but have the chance to write using an iPad instead of paper and pencil on a daily basis. I would still conference with them and provide necessary mini lessons using the iPads.

The first week of the study involved introducing the iPads and the Story Kit application in a small group, followed by the whole group mini lesson. We discussed planning a book page by page and the students talked about their stories by touching the pages of their books. Afterwards, I modeled the similarities between writing with paper and pencil and writing with an iPad in a small group. I demonstrated the different tools the application had to offer such as painting a picture, taking a picture, and typing. I conducted a review on a daily basis of the application and the students were given the opportunity to explore Story Kit freely. Since this was the first week of the study, I wanted the students to have a chance to be creative and understand the various tools. I explained that when they write on the iPad, it is similar to paper and pencil because you

must illustrate and use your words. I also explained that the reason they were doing this was so we could determine what happens when using iPads later on.

The second week of the study, I continued the Lucy Calkins curriculum in whole group. I asked the students why we must stretch out words to write even more sounds. In addition, students worked with their partner to ask each other different questions as modeled during the mini lessons. Instead of the students telling each other what to add, they will ask questions such as “where did you go” or “what did you see there.” In the small group, students began writing their stories using Story Kit. I presented the students with the iPads and had them discuss what they learned from week one. I also shared my story I wrote on the iPad with the students, including some photographs I took. I began conferencing with the students by continuing the conference log established prior to the study.

The third week of the study, I presented the idea of writing stories with details. I also reviewed planning page by page. Since students had already learned writing page by page, I was able to have them discuss more in-depth with their partners about their individual stories. To accompany these mini lessons, students continued their stories in a small group on the iPads. Since the students were using pictures they took, I uploaded a few images they could insert in their stories. I explained to the students how uploading something already on the iPad was similar to taking a picture. While conferencing with the students, I asked them a variety of interview questions to guide our discussion. At this point, I administered the different writing surveys as well as the parent surveys to analyze students’ and parents’ responses.

The fourth and fifth week of the study I began to analyze the data collected from my students that I had been taking since the beginning of the research. This was where the students had the chance edit their stories in time for our writer's celebration. First, the students completed the self-editing checklist to see what items they had within the story. Next, the students went back and added images and details to their stories. Finally, the students shared their completed pieces with the whole class.

### **3.3 Data Sources**

In order to triangulate data, I used a variety of data sources. To begin the study I gathered data about how students' perceived their writing/drawing experiences by having parents and/or guardians complete a survey, which asked about students' engagement in writing at home. I charted parents' and/or guardians' responses to find similarities and differences regarding how they perceived their students as writers. I then presented the students with three different surveys. The surveys asked students how they felt as a writer, how they perceived themselves as writers, and what type of technology they had at home. This provided me with information about the students' perspectives. Throughout the study, I used interview questions to guide individual discussions as well as students' reactions to writing with an iPad. By interviewing the students once a week, I was able to get students' input on using iPads during writing workshop. Additionally, I recorded my own thoughts and feelings in my teacher research journal daily. Through my teacher research journal, I reflected on my teaching methods as well as my students' behavior. Finally, students' writing pieces were used to gain insight into the study. The stories students created daily were used to help reflect the impact of iPads in writing workshop.

### **3.4 Data Analysis**

The data collected throughout the study was used to draw conclusions regarding what happens when kindergarteners use iPads during writer' workshop. I used the parent surveys to gauge how involved students wrote at home and their attitudes towards technology by asking parents to provide information about their student. Furthermore, the students were given three writing surveys. By inputting the data from those surveys I was able to quantify the information I gathered and make determinations based off the results. I looked at the students' surveys in the beginning of the study and again at the end to compare results and to see if there were any changes. Furthermore, I conducted interviews one-on-one to provide insight on what the students were thinking while composing their stories. My teacher research journal and the interviews allowed me to find trends between the students' writing. I then reflected on my own personal observations that occurred in the small group. By analyzing the various data, I was able to better see the different themes that occurred throughout my study.

### **3.5 Context**

Winslow School #4 is one of four elementary schools in the Winslow Township public school district located in Camden County, New Jersey. According to the 2010 Census, there are 39,499 people, 13,735 households, and 10,178 families residing in Winslow Township. Of the 13,735 households, 35% are with children under the age of 18. Among these households, 52.7% are married couples, 16.15 are female-led households with no husband present, and 25.9% were non-families.

The racial makeup of Winslow Township as taken by the 2010 Census was 4.41% White, 36.17% African American, 8.10% Hispanic or Latino, 0.29% Native American,

3.10% Asian, 0.04% Pacific Islander, 2.97% from other races, and 3.03% from two or more races. The population under the age of 18 consists of 25.7%. The population consists of 71.2% over the age of 18, with a median age of 37.3 for residents of Winslow Township.

The median household income by the 2010 Census was \$68,169 and the median family income was \$78,892. The per capita income in dollars was \$27, 884. There were about 4.1% families and 6.1% of the population below the poverty line.

Winslow School #4 currently has over 500 students ranging in kindergarten through third grade with a staff of 50 individuals. The ethnic makeup of the student population is 62% African American, 27% White, 6% Hispanic, and 5% Asian/Pacific Islander. About 42% of students receive free or reduced lunch due to the high percentage of homeless students. There are at least 72 students classified with a disability and another 20 students as English as a second language learners. As per testing results, 70% of students are considered proficient in Language arts and 70% are considered proficient in math.

My classroom is made up of 18 students in a regular education classroom. Out of the 18 students, 11 are females and 7 are males. The makeup of the class is considered homogenous with 13 African American students, 4 Caucasian students, and 1 Philippian student.

#### Students

The students appear to be well developed academically and socially. Academically, the students are where they need to be and progressing nicely. The students are meeting the district benchmarks goals. They showed improvement on the letter identification assessment from September and are reading texts at their instructional

level. One student has 504 plan for Occupational Therapy once a week. Two students have been referred to Intervention and Referral Services for academics and behaviors.

Students in my class demonstrate compassion for each other but tend to socialize excessively throughout the day. There are no documented instances of bullying but there are some cases of tattling. This usually occurs during reading, math, and science centers when students work with one another.

There is a sense of a learning community in my classroom. For the majority of the day, students work in small groups and partners to create a collaborative environment. Students rotate through centers on a daily basis in math, reading, and science to work together on targeted skills. The classroom is filled with student work, colorful management charts, and labels of classroom items. The majority of information is presented using a Mimeo board, with students interacts throughout the day.

Chapter Four of this thesis discusses the findings of the study and looks at the results of the data collected throughout the study. Chapter Five offers the conclusions and implications of the study and further recommendations for future topics of study.

## **Chapter 4**

### **Data Analysis**

#### **4.1 Introduction**

Chapter Four discusses the findings of my study, focusing on answering the question, “What happens when kindergarteners use digital tools in writer’s workshop?” As I sorted and categorized my various data sources (teacher-research journal, the student surveys on their feelings about using technology and writing, the parent surveys about their students as writers, student samples and interview responses), I identified key data to report. A look across all data sources seems to suggest three main themes that reoccur throughout the research study. These include: using new technologies, composing with multiple modes of meaning, and attitudes about writing.

#### **4.2 Revisiting the Study**

As chapter three explained, I collected my data throughout the study. The first set of data collected I asked both parents and students to complete different surveys. These surveys included “Writing Survey for Kindergarten Parents,” “Writing Survey for Kindergarten Students,” “Technology Survey,” and “Writing Survey.” The surveys asked students how they felt as a writer, how they perceived themselves as writers, and what type of technology they had at home. This provided me with feedback regarding how the students and parents felt about writing and technology. Then I went on to implement the interview questions one-on-one with the students throughout the five weeks. The interview questions guided individual discussions as well as students’ reactions to writing with an iPad. By interviewing the students once a week, I was able to get students’ input on using iPads during writing workshop. Additionally, I used the

students' composed stories to reflect on the impact the iPads had on their writing. Finally, I recorded my own thoughts and observations in my teacher research journal. This helped me reflect on my teaching methods, students' behaviors, and what occurred throughout the study.

To quantify the data I received from the surveys, I tallied the students' responses on the surveys to show overall how respondents as a group replied to the surveys. For the "Writing Survey for Kindergarten Parents" survey, the parents had the option to circle "a lot," "a little," and "not at all." For the "Writing Survey for Kindergarten Students" and "Writing Survey," the students chose between a happy face, an okay face, and a sad face. The "Technology Survey" was out of three yes or no questions.

#### **4.3 Using Charts to Better Understand the Research**

Throughout the study, the students were immersed in using iPads within their writing. While students composed their stories on a daily basis, they were engaged in instruction on how to use the features the Story Kit application had to offer. When I reviewed the "Technology Survey," it showed majority of the students had some type of digital tool at home.

*Table 1: Technology Survey*

<b>Device</b>	<b>Yes</b>	<b>No</b>
Computer	4	1
Internet	3	2
Printer	3	2

When I began the study the first week with the introduction of the iPads, I first provided mini lessons on the technology. Students were very excited to use iPads during writer's workshop and wanted to know immediately how to compose a story on the digital tool. I presented the students with an opportunity to freely create using the Story Kit application. As the students began to write on the iPads, Jason stated, "We don't have to use our writing folders to put our stories in!" Keith commented, "This is good." Additionally, Rose said, "My picture looks good." Anna stated, "It's awesome because I get to draw." Zara commented on how she felt happy "Because this is really fun." While all of the students were able to find a positive with their stories, not a single child commented on using iPads because it was second nature to them. My reflections from my teacher research journal supported this conclusion stating, "They were naturals with taking 'selfies' and adding pictures to their stories." I was surprised that these five-year old students were able to insert images, store photos, type using the digital keyboard, and how to use the microphone to record their stories.

Reflecting back to my teacher research journal through which I charted my observations of students' interaction with new technologies, I had overheard a conversation between Jason and Rose as they used the iPads to compose their stories. Jason was writing about Veteran's Day and how his father was in the army. He wanted Rose's help with taking a picture of himself saluting to insert into his story. Rose was providing Jason with some feedback on how to stand and salute in order for the picture to turn out decent. I reflected in my teacher-research journal stating, "It was nice to observe the students put themselves into their writing," (journal entry November 11, 2014).

To further explore what happens when students use iPads during writer's workshop, I decided to consult the parent and student questionnaires that were distributed at the start of the study. All parents stated their student enjoyed using technology "a lot." The students agreed with their parents in their "Writing Survey" by circling a smiley face for the question "How do you feel if you can write using technology." I found the students made the connections between concepts like spacing, inserting, and recording. Their desire to use a variety of features led them to choose the different options the iPads had to offer. This led to the students' satisfaction of their stories, thereby gaining a sense of pride in their work. They were taught the components and functions the application had to offer and how to navigate it to produce a story.

#### **4.4 Composing with Multiple Modes of Meaning**

In addition to using iPads, the students were able to flourish as they composed a story on the iPad using variety modes of communication such as print, drawings, digital images, and voice narrations. When Jason was interviewed on December 4, 2014 about what he preferred to write with, he answered, "iPads because I can type with the keyboard, hit something to add periods, add symbols, take pictures. If you want to go back, you just click the button while keep writing." The students made use of the different modes such as drawing and taking photographs. The students drew their pictures while inserting their faces into their stories. During the last week of the study, Zara took pictures of herself acting surprised and hiding her face in her story. When conferencing about it, she explained, it was because her mom surprised her with balloons and she wanted to look surprised. After analyzing my notes, I realized I reflected on how

the students were importing pictures of themselves to make their stories “come alive” (journal entry November 5, 2014).

During the end of the study, the students began using the recoding feature within the application. They added voice narration to communicate their intended meaning. One example was when Keith was having difficulty figuring out how to use a voice narration within his story. He asked Jason “Jason, how do we record?” Jason then began explaining to Keith what button to press on the iPad. Once Keith was able to do this independently, he stated, “This is awesome!” (journal entry December 3, 2014). Further explaining this finding of multiple modes of meaning was the interview questions. When Anna was asked “Can you do something to make using the iPad during writer’s workshop more interesting,” she responded with “We can use them by recording our voice to press a button to hear me tell my story.”

It was interesting to observe the impact that creating digital stories had on all of the students. By taking photographs of themselves and inserting them into their stories, the students were able to expand on the ideas they discussed with one another prior to writing. I found that through evidence indicated in the interviews, my research journal, and student samples, the students strived to use multiple modes of meaning. With little guidance from me, the students began to collaborate and work together to use the different features while composing their story

#### **4.5 Positive Change of Attitude about Writing**

Another major theme that I noticed over the course of the study was a positive increase in the students’ attitudes about writing. During the second week of the study, the students were interviewed while writing. All of the students agreed they had to write,

thus causing a negative attitude on why they had to write. This led us into a discussion of what it meant to be a good writer to understand their attitudes about writing. I asked the small group “What does it mean to be a writer?”

Jason answered, “Go to school and practice and get better at writing by having more chances and then you become a writer.”

Rose added: “To be special to write.”

Zara thought: “being a good writer.”

Keith and Anna simply responded with “I don’t know.”

I later reflected in my teacher research journal, “I was not surprised by the limited responses” (journal entry November 14, 2014). I thought about the comments of the students and I realized that they understood very little about writing and what it meant to them. However, the students’ attitudes about what it meant to be a writer changed drastically.

Jason understood “A writer goes to school to learn to write and draw to do everything needed to do to write their feelings.”

Rose explained a writer “Writes on paper, in our journals, on the iPads because writers write their word to tell a story.”

Zara added, “Writers have to write their stories.”

Keith and Anna both had a better grasp on what it meant to be a writer.

Anna thought, “A writer writes pictures and words to tell a story.”

Keith bluntly stated, “They have to write!”

In conjunction with the students’ comments, the surveys noted an inconsistency with the students’ responses. The following table breaks down the results of the survey:

*Table 2: Writing Survey Beginning of Study*

<b>Question</b>	<b>Happy Face</b>	<b>Okay Face</b>	<b>Sad Face</b>
1. How do you like writing what you feel?	3	0	2
2. How do you feel about writing on your free time?	3	2	0
3. How do you feel about writing a book?	4	1	0
4. How do you feel about writing something you did in centers?	2	0	3
5. How do you feel about writing more in school?	2	2	1
6. How do you feel if you can write using technology?	5	0	0
7. How do you feel if someone reads your writing?	5	0	0

When it comes to understanding the students’ feelings about writing, the table demonstrated the students loved using technology to write as well as having someone else read what their stories. Majority of the students felt the same about writing in centers, as something they would prefer not to do. In agreement with the students’ feelings about writing, I noted the students’ reactions to the surveys as “Something they would not put much thought into. However, they provided verbal reasons such as I just want to draw or I don’t like people to know how I feel” (journal entry November 13, 2014).

At the end of the study, we revisited the Writing Survey about their attitudes about writing. The following table breaks down the results of the survey:

*Table 3: Writing Survey End of Study*

<b>Question</b>	<b>Happy Face</b>	<b>Okay Face</b>	<b>Sad Face</b>
1. How do you like writing what you feel?	5	0	0
2. How do you feel about writing on your free time?	5	0	0
3. How do you feel about writing a book?	5	0	0
4. How do you feel about writing something you did in centers?	4	0	1
5. How do you feel about writing more in school?	5	0	0
6. How do you feel if you can write using technology?	5	0	0
7. How do you feel if someone reads your writing?	4	1	0

The students drastically felt different about writing at the end of the study. Rose, Zara, Keith, and Anna all felt “happy” as they completed the survey. Jason changed all of his answers to “happy” as well, except for writing in centers. His feelings about center writing changed to not happy because “I have to write with paper and pencil.” Zara explained her reasoning in changing her response due to “I’m really happy writing a book because I’m the illustrator and write words and all that for a story.” Rose agreed her feelings shifted “Because it will be bucket filling if someone else reads my story. I like writing everyday because I tell about it.”

After connecting my own personal thoughts collected in my journal and comparing them with the students’ interviews as well as the surveys from the start and end of the study, I was able to find that the students were developing strong feelings about writing. Towards the end of the study, I reflected in my teacher research journal

that “with the study coming to an end, the students have mixed feelings with the completion of writing on the iPads. The students want to continue on the iPads but also want others to have a chance because they feel it makes writing better” (journal entry December 2, 2014). The students were able to recognize how they felt changed as a writer because as I later stated in my teacher research journal “The students were reluctant in the beginning of the study stating if they had to write in general. However, the last day they ran to the tale and were disappointed this was the end. The students changed their perceptions about writing because they want to write next week on the iPads” (journal entry December 4, 2014).

#### **4.6 Summary of Data Analysis**

As quoted in chapter two, ““to become fully literate in today’s world, students must become proficient in the new literacies of the 21<sup>st</sup> century technologies. As a result, literacy educators have a responsibility to effectively integrate these new technologies into the curriculum, preparing students for the literacy future they deserve” (International Reading Association, 2009, p.1). After looking across my data sources, I found that students became more comfortable with composing their stories on the iPads. This was something that they initially had questioned but eventually were able to produce a series of stories. Furthermore, students developed an understanding of the multiple modes a digital tool had to offer based on their composed stories and interview questions. Additionally, students changed their attitudes about writing once they composed their stories on the iPads had a positive affect. As Jason stated, “I wish we can do it all day!” (journal entry December 4, 2014). The data suggests that when students use iPads during

writer's workshop, their stories are more meaningful because they are able to use different features.

Chapter Five presents the conclusions and implications of this study as well as recommendations for further research.

## Chapter 5

### Summary, Conclusions, Limitations, and Implications for the Field

#### 5.1 Summary

In concluding my research, I found that students used technology and the multiple modes of meaning not as a device, but as a way to compose stories during writer's workshop. After five weeks presenting kindergarten students with iPads during writer's workshop, I found that this study benefited the students by embedding technology into the writing curriculum which allowed them to draw, take photographs, type, and record their stories.

After five weeks, I found that the students had become increasingly comfortable with writing on the iPads. Through parent surveys, student surveys, one-on-one interviews, samples, and my own personal reflections, I found that the students were not only comfortable with using the iPads, but had a better understanding of new technologies. They learned to express themselves through narration and inserting photographs of themselves into their stories. Engaging the students with iPads during writer's workshop taught them the importance of technology tools such as cameras and microphones.

Additionally, the students demonstrated growth in their ability to communicate in multiples modes like print, image, and sound. The students did so by taking photographs of themselves reacting a specific way or completing a task, drawing backgrounds with the paint feature, typing their sentences and later recording what they typed. After five weeks of using iPads during writer's workshop, the students were able to transform their writing into a digital writer's workshop by practicing multimodal writing.

Furthermore, by the conclusion of the study, the students demonstrated a better attitude about writing. By the end of the study, the students were eager to write using the various features the Story Kit application had to offer. Instead of the traditional method of writing, they proved digital writing was synchronized with the development of the conventions of writing. However, the students' attitudes changed drastically because of the use of the iPads. The students were able to verbally state positive attitudes about writing with comments such as, "I wish we can do it all day!" Essentially, the students communicated they wanted to continue writing on the iPads because they were engaged and actively composed their stories with something they knew and enjoyed how to use.

## **5.2 Conclusions**

After reexamining the literature surrounding kindergarten writing workshop and 21<sup>st</sup> century writing, I found that my study was beneficial to students because it helped expose what kindergarteners could do with iPads during writer's workshop. This is important because writing is needed to help students better prepare them for their future. As previously quoted in chapter two, author Lucy Calkins (2013) states "...in the Common Core State Standards, writing is treated as an equal partner to reading, and more than this, writing is assumed to be the vehicle through which a great deal of the critical thinking, reading work, and reading assessment will occur" (p, 11). Calkins explains the Common Core State Standards (CCSS) stated writing is an essential part of students' education. I found that my research supported this idea as the students composed their stories using mini lessons and interactive writing on a daily basis. It allowed them to become better readers and writers and prepared them for later literacy skills.

In addition, when kindergarteners use iPads during writer's workshop, it can continue to develop their technological skills within their writing in order to be "highly engaged and able to demonstrate unique and creative ways" (Hutchinson, Beschoner, & Schmidt-Crawford, 2012p. 23). This was evident through instances such as students taking pictures of their faces with various emotions, typing their stories, and narrating what they wrote. Additionally, the students were able to "give voice to the voiceless, situate themselves in alternate perspectives, and challenge the status quo" (Wood & Jocius, 2014, p. 129). This consisted of relating their story to an event they normally would not know how to include such as singing a song.

Through this study, I found that even though kindergarten students began writing with traditional tools, digital tools changed their attitudes about writing. As they listened to the mini lesson, they connected it within their writings by stretching out their words or adding details to their illustrations. By using the variety of features Story Kit had to offer, the students wanted to write. The beginning of the study the students were reluctant to write in general. However, as writing was completed on the iPads, the students were eager to write, even asking to "continue to write" when being interviewed.

Essentially, the findings of my research aligned with the current literature supporting the use of digital tools in writer's workshop. The students were able to develop a positive attitude about writing various stories with an iPad. The students established a better attitude compared to the beginning of the study.

### **5.3 Limitations**

The major limitations affecting this study and the findings was the available time to conduct research. This study took place in a kindergarten classroom during months

with a chaotic schedule. The students had numerous days off and half days, so having enough time to conduct a mini lesson and compose a story was difficult. This affected the study because often the conversations were short due to time constraints.

In addition to the time within the study could be conducted, the use of devices were limited. The classroom had five iPads, of which one was unable to be used to do malfunction. This resulted in the classroom teacher's iPad being used instead to allow the students to compose their stories. For the purpose of this study, five students were necessary because of the number of devices. If there were more iPads, the teacher researcher could have chosen more students to participate.

#### **5.4 Implications for the Field**

After analyzing the data I received throughout the study in order to draw conclusions about what happens when kindergarten students use iPads during writer's workshop, I found that there were certain areas that could be further investigated. One area in particular would be how the data results would change if more students used iPads during writer's workshop. Teacher researchers who plan to conduct similar research in their classroom would likely benefit from designing such a study using more participants. This would allow for a more in depth look at different students and the possibility to explore what happens between whole classes.

Another implication for future teacher researchers is to conduct the study over a longer timeframe. While five weeks allowed me to understand what happens when students begin using iPads, it was limited. Teacher researchers would likely benefit from designing a study where iPads are used from the beginning to the end of the school year. This would allow for a closer look at the trends and the students' growth as writers.

This study could also be improved by using digital writing with iPads in the form of play. Students complete numerous activities in play centers and must reflect on the activities by writing with the assigned response sheets. The process of play allows students to make learning more meaningful as they explore and discover new things. By using iPads to write their responses, this would allow the teacher to discover what happens when students use iPads to write in other subject area.

In summary, the use of iPads during writer's workshop in a kindergarten classroom can help students to develop technology and literacy skills. This study supports the previous research when teachers provide students with mini lessons prior to writing, which students can apply, the taught skill or strategy within their own writing. It is the role of the teacher to prepare students for later literacy achievement while working with digital tools. By using iPads to write instead of the traditional ways of writing, teachers can provide students with using technology and the multiple modes of meaning as they continue to learn fundamental literacy skills for their future success.

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