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Integrating technology into the 2nd grade writing curriculum

Jessica Mallon
Rowan University

INTEGRATING TECHNOLOGY INTO THE 2ND GRADE

WRITING CURRICULUM

Jessica Mallon

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ABSTRACT

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This action research study was conducted to examine the effects of integrating
technology into the second-grade writing curriculum. The second grade class was in a
middle class suburban town and consisted of 23 children. Students composed a type
written fairy tale, created *I Am* poems on the computer, wrote while listening to classical
music, and wrote a story using a video prompt. Data collection included observations,
student interviews, questionnaires, collections of student work, and informal interviews
with staff and faculty. Students reported a preference to typing their stories, rather than
hand writing. Students also said that listening to classical music while writing helped
them to write better. Students responded positively to writing after viewing a video
prompt. The majority of students preferred lessons taught using technology.

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help or advice was immeasurable, but the friendships I will take from this

experience are unsurpassed.

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Introduction

The Story Behind My Study

Since I began studying education, technology has been a major topic. While studying the history of American education we learned about all of the changes in the educational system due to technology. I also attended seminars about technology in the classroom and read articles about the topic. As with many other issues in education technology can be controversial. There are differing opinions about how much is enough, how much is too much, where will we get the money for technology, and many other issues. In this paper I will discuss what happens when I integrate technology into the writing curriculum.

While completing my first internship in a fourth grade classroom, I began to observe that my students were reluctant to write. I also was fascinated by the amount of technology my students used on a daily basis. I observed students using cell phones, computer software, and easily navigating through the Internet. Students frequently talked about video and computer games. During my next internship, in a second grade classroom, I began to notice the same things while at the same time reading and studying more about technology in the classroom.

I began to think about how much I rely on technology for my schoolwork. I noted that I no longer write "rough drafts" of my work on paper and type the final. I just start typing away and go back and edit my work. I also listen to classical music while writing, something I read in an article once. I wanted to know if this and the integration of other technological advances would help my students with their writing.

I realize the importance of writing in the curriculum. It is important to me that students are interested in the work they are doing. I want my students to like to learn and enjoy the success of their work. After hearing students say things like "how much do we have to write," and " Do we have to write today," I had to do something.

I also thought about the latest buzz about technology. Some are wondering if in our future schools will be entirely technology-based. If children are playing video games with bright colors and fast streaming scenes, surfing the internet, playing games on computers, working DVD players and cell phones, how can we expect them to come to school sit down and do their work, particularly writing without any of that amazing technology? Isn't that just positively boring for them?

I wanted to do research and find out what happens when I integrate technology into my second-grade writing curriculum. Specifically, what happens when I use video clips as writing prompts for creative writing? I also wanted to find out what happens when I allow students to listen to classical music while writing. Lastly I wanted to take a look at what happens when I allow my students to type their writing assignments.

Action Used

To carry out my research project I decided I would have to make changes to the teaching methods my cooperating teacher was using. I began to use technology in writing instruction. I wanted to use technology and media in a few different ways to see what impact technology in general would have, rather than one type of technology. I used power points with colors, graphics, and other visuals. I also used story-telling websites to allow students to hear stories used for instruction from a storyteller other than myself. I played classical music while students were writing. I also used a video clip as writing

prompt, as opposed to other methods of introducing creative writing such as showing a picture or describing a scene. I also began to have students use the computer to write stories. For some stories, students brainstormed and wrote first drafts using the paper and pencil method. For other assignments students got right on the computer and started typing their ideas.

Context for the Research

I conducted my Clinical Internship II at Apple Elementary School in Haddon Township, NJ. This school is located in a middle class neighborhood. There are no school buses at Apple Elementary. Apple school serves Pre K- 5th grade. This school is relatively small there is one class for each grade. There are three other elementary schools in Haddon Twp. According to Haddontwp.com (2007) "the population of Haddon Township is 14,651 people, the median income for a household in Haddon Township is $ 51,076" and the median age is 41 years. Haddon Township was founded in February 1865. According to HaddonTwp.com Haddon Township was settled by Native American tribes Arowman and Erinwoneck Indian tribes before the European settlers came (Haddon Township, 2007). The community also boasts a historical location on the Underground Railroad. There are community sports such as wrestling, baseball, soccer, and football for students to participate it.

According to the school report card there are no English Language Learner students at Apple (NJ Department of Education, 2007). According to the school report Apple also made adequate yearly progress (NJ Department of Education, 2007). The school participates in the school safety program and has an extended day program set up. In the extended day program students receive extra help with a teacher after school. The

school takes part in the Character Counts program in every grade. The school report card states that 70 % of teachers at Edison have the Bachelors Degree and 30% have their Masters Degree (NJ Department of Education, 2007).

In my second grade class there were 23 students. Of these students there are 13 males and 10 females. Two of my students have Individualized Education Plans; 1 has a 504 plan and 4 more are awaiting Intervention and Referral Service meetings. The students in my class came from a variety of family structures. There were students in my class who live with one parent, one parent and a stepparent, and some who live with parents and grandparents. Almost all of the children in my class have siblings. The students in my class were a relatively close group. Of the 23 students there were only 2 students new to school this year. The rest of the students have been in the same class for years and are well acquainted. When students had birthday parties all of the students in the class were invited. The community seems to be a close knit community judging by what I have seen while dismissing the students and from talking to parents.

The students received several special classes including art, music, and foreign language. The foreign language students studied was French. The students did not have a computers class; however there are computers in the library the students could use. According to the school report card there are fewer computers per student at Edison than the state average (NJ. Department of Education, 2007). There is no school librarian instead the school has parent volunteers who are in charge of checking books in and out for students.

For my study I chose to use the entire class for my participants. Since I was conducting my research in a second grade class I made sure that all of students' parents

signed consent forms before beginning my research. In the attached consent form (see Appendix ?), I explained my study and my background and asked for permission for students to participate in my research project.

Literature Review

I found many common themes throughout the existing research on using technology in the writing curriculum. Generally researchers found that incorporating technology into the elementary writing curriculum improved writing skills. Researchers found that students were better at editing, composed longer works, and were more motivated to write. Researchers also found that using technology such as story writing software or a word processor especially benefited less skilled writers (Beck and Fetherston, 2003). Bangert-Drowns (1993) discovered in their overview of 28 studies that "access to word processing during writing instruction improved the quality of students writing" (p.77)

Better Editing

Researchers found that incorporating technology into the writing curriculum can improve students editing skills in a number of ways. According to Beck and Fetherston (2003) when using a word processor "students were keener to proof read and edit their stories" (p.199). Beck and Fetherston (2003) also found that students were more adept at going through each page and changing words they like as well as using spell check to correct spelling mistakes. Cavelry and MacDonald (1998) found that students who use Word as a word processor can benefit from an annotated tool which allows students or teachers to quickly add a comment within a writing piece. These comments are in

different colors than the original text and are easily identified by students. Treadwell (1999) found that teachers could customize standard software to teach students editing. Treadwell (1999) found that using a word processor teachers could have students correct a paragraph or essay with errors such as parts of speech or punctuation, students than look for these errors in their own work. According to Yang, Ko, and Chung (2005) "a web-based writing environment provides a good editing environment for students" (p.215). According to Ross, Hogaboan-Gray, and Hannay (2001) students found revising text easier when using a computer.

Longer Compositions

Researchers found that when students used a computer to type their writing rather than using the traditional pencil and paper method they produced longer works. Treadwell (1999) found her students' writing assignments increased significantly in length when using a word processor. Treadwell (1999) states "My students know that they do not have to consider the constant labor of copying that comes when the writing process is done with paper and pencil. They are free to consider content, without fear of 'copy boredom,' when they are writing" These findings are similar to those of Beck and Fetherston (2003) who found that word processing can help students produce longer texts. Beck and Fetherston (2003) found that "using word processing relieves students from the tedium of recopying their final copies by hand" (p.141) Beck and Fetherston (2003) found that students no longer had to concentrate on neatness and could focus on content. Students also felt they "could type faster than they could write so they were able to formulate their ideas more easily while using the word processor" (p. 148) Bangert-

Drowns(1993) reports that "word processing students produced longer documents" (p.69).

Motivation

Much of the literature I have reviewed suggests that students who use technology in their writing are more motivated to write. According to Van Leeuwen and Gabriel (2007) teachers in the study found that students who used computers in their writing were "very motivated when involved in writing" (p.423). Van Leeuwen and Gabriel (2007) report that students who used computers to write were eager to work on writing and share it with the class. According to Roberts, Killingsworth, and Schmidt (2002), using technology for prewriting such as preformed webs found on websites designed for kids "are motivating and also enhance and support the way students think about poetry" (p. 218) Roberts et al. (2002) also reports that other technologies such as slide show presentations can be used to motivate students. The authors suggest using major headings such as "Wishes, Lies, and Dreams" with empty text boxes to generate ideas (p.218). Verhoef and Tomic (1996) found that "students have more positive attitudes towards writing with a computer because it is easy to insert graphics, revise text, and produce a professional looking produce" (as cited in Ross et al. 2001, p. 220).

Ross et al. (2001) argues that using interactive literacy programs will lead to increased self-efficacy. According to MacIver, Stipek, and Daniels (1999) "Changes in ability perceptions lead to changes in student effort and motivation" (as cited in Ross et al. 2001, p. 221). Ross et al. (2001) says that as students become more successful at writing using a computer their confidence will go up which will lead to positive attitudes

toward writing. Beck and Fetherston (2003) found that "word processing can promote students' motivation to write" (p. 141).

Benefits Less Skilled Writers

Throughout my research I found that researchers believed that using technology is especially helpful to less skilled writers. Researchers found that students could use programs that help with their grammar and spelling so they concentrate more on their writing. Verhoef and Tomic (1996) found that "less able writers benefit from software supports such as a database to write from and word processing programs' grammar and spelling functions" (as cited in Ross et al, 2001, p.220). Caverly and MacDonald (1998) found that writing circle videos found in software and on the web are helpful to "developmental writing students who need help in getting started or a boost through the writing process" (p. 2).

Conclusion

Researchers believe that incorporating technology into the writing curriculum in beneficial to students. Studies found that technology leads to better writing. Also, technology can be more stimulating and motivating to students. Research also shows that students write more when they use computers.

Russel (1991) noted, "whatever increases in the quality of writing may very well be due to social interaction within computer labs rather than the actual word processing technology" (as cited in Roberts, et al, 2002, p.220). This contradicts the vast majority of the research I have read. Russel claims that it may be the social interaction that occurs in the computer lab setting rather than the actual use of computers that is improving students writing skills will be interesting to investigate.

I believe that integrating technology into the writing curriculum will greatly benefit students. In the 21st century we have moved more towards a technological society every day. One way to help prepare our students for their future is to integrate technology into the curriculum as much as possible. Likewise technology can be interactive and will provide ample opportunities to differentiate writing instruction in a fashion that all learners can be stimulated. Technology also provides an opportunity to use multi cultural instruction in writing. Roberts et al. (2003) says that there are interactive compact discs that include "great poetry written and read by people of color" (p. 223)

There are some issues in integrating technology into the writing curriculum that are underrepresented mainly the issues of funding and teacher participation. Papert and Solomon (1971) found that "it is not technology's lack of relevancy, but our own prejudices and shortsightedness, which cause difficulty in seeing its many applications" (as cited in Roberts et al. 2003, p.224). Ozel (2007) found that teachers with less than 5 years of experience were more likely to use technology than teachers with more experience. Patterson (2007) argues that integrating technology into instruction is difficult. She states that many teachers were reluctant to change and had the attitude "why fix something that isn't broken" (p. 23). Patterson (2007) also points out that additional funding will be needed to purchase technology and train teachers to use the new technology. This research helps me to see the benefits or drawbacks that could occur when integrating technology into my second-grade writing curriculum.

Research Methods

What is Action Research?

This question is much harder to answer than it looks. According to Phillips and Carr (2006) "action research is practitioner based, in other words it is done by teachers in their own classrooms with the goal of improving simultaneously pedagogy and student learning" (p.10). Next I must say that this unfortunately does not tell us exactly what action research really is. Phillips and Carr (2006) also quote a student who describes action research as "everything a good teacher does only documented. As a teacher it is my job to identify a problem, make a plan of action, and watch carefully to see how my action influences the initial problem" (p.14). McNiff states, "Action research is systematic, it involves a self-reflective spiral of planning, acting, observing, reflecting and re-planning. It requires teachers to be acutely aware of a sense of process, and to refine their perceptions to account for that process. Action research raises to a conscious level much of what is already being done by good teachers on an intuitive level" (1992, as cited in Phillips & Carr, 2006, p.14).

Phillips and Carr go on to define action research for a preservice teacher. This definition is perhaps the most relevant to this study and myself since I am a preservice teacher, or a person studying to become a teacher.

> Action research for preservice teachers is a process of learning with community to think and act critically, to recognize and negotiate political systems, and to focus passion growing in one's identity as a teacher. Such a process evolves out of a desire to become a caring, intelligent, transformative educator and includes honing the art and science of planning, assessment, and a critical reflective

practice that includes the interrogation of one's own paradigm while in active exploration of ways of thinking and acting beyond those said boundaries. The result of action research for preservice teachers is the beginning of a journey in becoming a teacher living the teaching/research life to simultaneously improve teaching practice, student outcomes, and systems of schooling to be more just and equitable for all children and adolescents. (Phillips & Carr, 2006, p. 15)

Now that I have attempted to define action research it is important to note a few other characteristics of it. According to Phillips and Carr "the goal of action research is not to prove something, but to find insight and meaning in our practice that results in positive changes for ourselves, our students, and the school and communities in which we teach" (Phillips & Carr, 2006, p.102). We must know that our personal paradigms influence the way we approach research, as do our beliefs, values, and previous experiences. In addition, "action research is often categorized as a qualitative methodology, even though gathering data may be included as a data collection method" (Phillips& Carr, 2006, p.28).

Data Collected

Information was collected from classroom observations, informal conversations with my mentor teacher, student surveys, audio taped interviews with students, and student writing samples.

Students were first observed during 5 50-minute writing class lessons prior to my teaching writing class. During these observations my mentor teacher was not using technology in the writing curriculum. I also performed observations during my lessons which I taught using various modes of technology. I kept these observations in a journal, rereading and making notes in my journal periodically.

I collected writing samples of students work from before and after integrating technology. There were not as many samples of student work from before integrating technology so I took only a few samples from students who the cooperating teacher deemed to be low, medium, and high level writers. I also looked over each student's poem books and work they had left in their writing folders to get an idea of their writing levels. I did collect one writing sample from each students writing before integrating technology. For work samples collected after integrating technology I did collect a sample from every student in the class. I wanted to be able to look at each student's work. I did not use every piece I reviewed or collected as data for this study. I did not want to put a big emphasis on grades for this study because it is second grade writing and because I am not at liberty to say that a certain writing would have been better or worse if I had not used technology. Writing assignments are so different and there was not much time so it was nearly impossible to compare grades.

Students were given two surveys to complete in order to pre-asses their views on using different types of technology in the classroom as well as to get an overall idea about their feelings on writing. Surveys were typed and sent home for students to complete. For both surveys students were told they did not have to write their name on the survey, that no one would know what they answered and to be honest. The first survey asked students if they liked to write when it was quiet or when there was noise. I also asked students if they preferred using a computer or writing with pencil and paper. A copy of this survey is included in appendix A.

The second survey was given after all of the lessons using technology were completed and before interviews. This survey had 11 questions and was also sent home

with students. Like the first survey students were told to be honest and that the survey was not a test they could answer how they feel. Students were asked how they felt about the various lessons using technology and what they liked or did not like about using the computer or other technology. This survey is also included in appendix D.

I conducted interviews with every student in the class near the end of my time at the school. I conducted the interviews with each student one on one. The interviews were conducted on May 7, 8, and 9th. We sat in a hallway on steps leading to an empty office. Before conducting any interviews I told the class that I would be sitting down with each student to ask them questions about our writing classes. I told students that I would record our interviews so I did not have to spend a lot of time writing down everything we say. I explained to students that they did not have to sit down and talk if they did not feel comfortable, however every student wanted to participate. Some of the questions I asked during interviews I had already asked using the questionnaires; however, I wanted students to be able to explain themselves or ask questions. I thought this would give me a more clear perception of their thoughts and opinions that a survey would. A copy of the interview questions is included in Appendix C.

Analysis

After all of my observations, interviews, surveys, and hours spent copying student work samples; I was left with piles of papers and a little bit of anxiety. I had taught all of the relevant lessons successfully and gathered all of the data I needed but I still had to figure out what all of this meant.

I used the coding approach described by Mills (2007). As I read over my observations throughout the course of this study I started to notice a few themes or common occurrences. Right away I noticed that during writing class before integrating technology, students were often talkative and disruptive. As soon as I we started typing stories, I noticed that students had difficulties using the computer but appeared more interested in the activity. I also noticed that students were asking when the next time we would go to the computer lab or when we could do writing. I found it hard to manage the classroom in the first few lessons in the computer lab. A few students were talking, especially when I was working with another student. I kept notes about these themes in my journal and when it came time to create questions for the interview sessions, I used the themes as a basis for some questions. I also looked for themes in the students' work samples and in the conversations I had with my mentor teacher. While making transcripts of the interviews I also noticed themes and made markings to remind myself of these themes. I made a chart to keep myself organized and put blocks of text onto 3x5 inch index cards. This made the data more manageable.

Trustworthiness

> Qualitative research is generally considered trustworthy if it attends to (1) multiple viewpoints as represented in data sets from multiple sources (referred to as triangulation); (2) thick description or research narrative rich with contextual and situational details based upon well documented raw data; (3) being deliberate and systematic in data collection and interpretation; (4) making one's own biases or position clear; and (5) practicing critical reflection or reflectivity. (Phillips & Carr, 2006, p. 26)

In order to ensure that my research was trustworthy, I was careful to meet all of the above standards. My data sets were from multiple sources including myself as an observer, my mentor teacher's observations, and my students in interviews. I also made sure I had different types of data namely observation, interview, and artifacts. Stating the context of the study, the participants, and myself as the researcher also adds to the level of trustworthiness. As a researcher I realize that I have my own values, biases, beliefs and preconceived notions being conscious of this helps to make my research more trustworthy and using triangulation or multiple sources will also help combat this issue.

Validity

As a teacher and a researcher I am constantly questioning the validity of things. According to Pelto and Pelto, "Validity refers to the degree to which scientific observations actually measure or record what they purport to measure" (as cited in Mills, 2007, p. 84). To ensure that my research was not only trustworthy but also valid I used Maxwell's (1992) criteria as cited in Mills (2007). I was careful to ensure that my facts were accurate. This meant going back and checking where I got the data from and making sure that if I quoted someone, it was the correct quote. I also took interpretive validity into consideration and paid attention to the participant's perspective. Maxwell describes interpretive validity as "the concern researchers have with the meaning attributed to behaviors by the people who have been studies, that is concern for what is commonly called the participants perspective" (as cited in Mills, 2007, p. 88). I made sure that my research met the theoretical validity that Maxwell describes by ensuring that my report explains my study. This meant making sure my report "explains the phenomenon that has been studied and described" (Mills, 2007, p. 89). The evaluative

validity ensures that the researcher reports the data in as unbiased a way as possible. I did this by being careful not to make judgments on the data or perspectives of others. It is hard to determine an action research paper's validity. I can be sure however that I did the best job I could to find the answers to my critical question.

Potential for bias

As I have mentioned I realize that as the student teacher and the researcher there is a potential for bias on my part. Going into this study I thought that using technology in the classroom could have positive effects. I also thought that using technology could help gain student's interest, since I listen to classical music when writing I thought that some of my students might benefit from doing the same. I realized these potential biases and tried not to let them affect my study. I did this by getting the perspective of students and other teachers. Going into the study I realized that there were many professionals who would disagree with my predictions. This kept me grounded and prevented my prediction that integrating technology into the classroom would benefit students from interfering with my study and my data. I didn't want my study to be affected by my biases or those of anyone else. After all, my study would be useless to myself and to others if I had let my personal beliefs affect the outcome or actions in my study.

Limitations

My study was conducted during a semester long internship. Time was a huge limitation during this study. I had about 6 weeks to conduct my study. I feel that if there was more time to teach additional lessons and make more observations

of writing lessons both before and after integrating technology into the curriculum my study could have been more thorough.

Time for writing class was also a limitation. In my second grade class at Apple elementary there were only 4 hours each week for writing class. Often times there would wind up being less time since my cooperating teacher based more emphasis on other classes and if we went over in other subjects or there were assemblies writing class time was cut. Writing class times were also cut out due to field trips and days when school was closed.

Since I was a student teacher during this study I had a lot of other responsibilities. If I didn't have all of the responsibilities that come along with being a student teacher such as writing units and fulfilling responsibilities for course work I could have spent more time on this study. Also being a student teacher contributed to my limitation on time since my cooperating teacher ultimately controlled how much time was spent on each subject. At times constructing lessons is difficult for student teachers, as we are still learning. The level of difficulty was raised when I had to make my lessons fit my study.

There were many limitations that pertained to my study due to the involvement of technology. The computer lab is on the bottom level of Apple Elementary School. My second grade class was on the third floor, therefore getting the class to the computer lab and back would cost me an extra 10-15 minutes each lesson. Also since there are only 20 computers in the lab and I had 23 students in my class I had to spend extra time figuring out where the extra 3 students would go and when they would do their work. Coordinating this was very tedious and frustrating. I did not want the 3 students without available computers to be wasting time so I had to work hard to coordinate computer time

for each student. Getting time in the computer lab was also a difficult task. The computer lab is in the library so I was competing with the other classes as well as library time for my time in the computer lab. There were a few occasions when I had to change my lessons because the computer lab wasn't available. This added to my level of frustration because I knew I was on a time deadline. I had to have all of my lessons taught and my data collected by the end of my student teaching internship. There were also a few times when computers were not working and students were unable to log in under their name. In one incident a student lost an entire assignment he had typed. There was also an incident when the printer was not working. This caused difficulties for students as well as a bit of a commotion since students were upset that their stories were not printing and did not know why.

Students at Apple Elementary do not have a computer class where they learn how to use the computer and word processing programs. Many times while students were completing a writing assignment on the computer I would have to help them make a capital letter, open a saved program, use the spell checker, save, or print a document, etc. This added to the level of frustration for myself as well as the students. This also made classroom management difficult since there were 23 students and I was the only teacher in the computer lab. There were many times when a number of students would need help with using the computer at the same time. Students would stop writing and wait for me to come assist them. Students who were waiting would often begin to talk, which was a distraction to the other students. Some students lacked the basic understanding of how to use a computer, which made teaching the lessons involving computer use more difficult.

Findings and Interpretation

Findings from the Questionnaire

In an initial questionnaire about writing, students were asked if they write better when it is quiet or when there is music or other noise. In response, 14 students (70%) said they write better when it is quiet, 4 students (20%) said when there is music or other noise, and 2 students (10%) checked both. On the same questionnaire 11 students (55 %) said they would rather write on a computer and 9(45 %) said they would rather write with pencil and paper. 10(52%) students said that seeing a video or hearing about something helps them to write, 2(10%) said it does not, and 7(37%) said they were not sure. In this questionnaire given before I took over the writing class 11 students (55 %) said they like to write and 9(45%) said that sometimes they like to write.

Findings from the Observations

During my initial 5 observations of writing class, I immediately began to notice some common themes. In the first writing lesson I observed (field notes, 2/5/08), the classroom teacher put students into pairs. She then instructed each group to discuss things that happen in a given month of the year. As I walked around the room and visited with each group I noticed some patterns. Many of the students were not discussing the months of the year. They were talking about sporting events or upcoming birthday parties in the class. In the next writing class students wrote poems about their month. While students were writing their poems I noticed two of the students, Mark and Jimmy, were drawing pictures and talking about video games. When I asked them why they were not writing about their month Jimmy responded, "nothing happens in May." Students were talking to each other while the teacher was giving instructions or an explanation. Two students

asked the classroom teacher what they were supposed to be doing during the lesson. During my initial observations of writing class before integrating technology, students were off task and not doing what they were instructed to do (field notes, 2/5/08).

During my first lesson integrating technology into the writing curriculum, I used a Power Point presentation to teach my class how to write a limerick. I observed a few of my students making comments such as "wow," "cool," and "awesome" as the Power Point slides changed colors or font size (field notes, 3/17/08). Students were looking at the projector and were not talking to each other, as I had observed in previous lessons. I was able to leave sample limericks on the overhead so students didn't have to ask questions such as "What do we do next?" or "What do we do on the next line?" Kimberly, a usually quiet student, raised her hand at the end of the presentation and asked, "Can we write our own limerick?" As the students wrote their own limerick I was able to walk around the room and read their work. I spent much less time answering questions than I had in previous lessons. I could see the benefit of using power point as a teaching aid. When a student was confused about what a limerick poem should look like I was able to put the example from the Power Point lesson on the board. (field notes, 3/17/08).

As my lessons went on using Power Point I noticed there was much less talking amongst the class. Students appeared to be on task and I did not have to stop my lessons as often to keep students on track or stop disruptive behavior (field notes, 4/4/08). During a lesson about fairy tales, I played the story of Cinderella from a storytelling website. I displayed the words of the story on the Power Point so students could follow along. Students were looking at the board and following directions. Students laughed a few

times at the storyteller's accent (field notes, 4/11/08). In previous lessons when I had observed the classroom teacher reading a story to students I noticed some students looking around the room, raising their hand to ask the teacher unrelated questions, or making comments (field notes, 2/21/08). During this lesson students did not raise their hands for comments and they were not looking around the room. I was able to walk around the room and monitor students as the recording played over the speaker.

Our first trip to the computer lab was for our fairy tales unit. Our assignment was for students to create their very own fairy tales. During my observations of students in the computer lab I noticed many students talking to each other especially when a student was having computer trouble and needed my assistance (field notes, 4/15/08). On a few occasions students asked me if they could play a computer game when they were finished. Students were given two writing class periods to write a rough draft of their fairy tales before typing their stories. Students who needed extra time were given time which worked out since there were not enough computers for every student to use at the same time. Some students expressed their frustrations with using the computer. One student remarked "this thing doesn't work!" Another student expressed his frustration when he had to retype part of his story because we could not find it on his computer.

As time went on students began to talk less in the computer lab. Most students in class wanted to know how to change the font size and type. Most students in class changed the font so the title looked different and changed other elements such as writing "the end" in bigger font than the rest of the text. After our first time in the computer lab students began to ask when they could finish typing their fairy tales, or they could type a

story again (field notes, 4/16/08). A student asked, "can we type poems?" during our third trip to the computer lab for typing our fairy tales (field Notes, 4/18/08).

I first played classical music for students on 5/1/08. I noticed there was no talking and students were all writing (field notes, 5/1/08). The next day Cameron asked if I could play music again during writing (field notes, 5/2/08). Students appeared to be focused and were not distracted (field notes, 5/1/08).

Findings from Student Interviews

During student interviews every student in the class reported that they liked listening to classical music while writing. Students said the music was peaceful and relaxing and that it helped them concentrate and write better. One student commented that when there is singing in the music it is distracting, but he liked listening to classical music while writing. Another student said, "I really liked listening to music because it was very peaceful and helped me get my ideas out better" (interviews, 5/8/08).

All of the students in the class stated in their interview that editing was easier on the computer. Connie said that, "it is easier to just hit backspace than to use an eraser and when you use an eraser it leaves marks and sometimes I can't remember what it was supposed to say." Shawn, who is granted a scribe through his IEP, stated that he liked typing because his hand didn't hurt and he could get more of his ideas out. All of the students in the class also stated that they liked typing their stories. Most of the students in the class reported that they liked typing their stories and poems because it looked neater. Shawn, who often has trouble reading his own handwriting, shared one of his poems he had typed at Arts Night (a night for parents and families to come to the school and see the school decorated with student art work, as well as hear students read some of

their writing). The next day he expressed that he was very proud of his poem and that everyone loved it! (interviews 5/9/08)

During the interview session, 19 out of the 23 students (82%) said they would rather type an entire piece from the beginning, rather than writing a rough draft first. Twenty out of the 23 (87%) students said they liked hearing Cinderella from the storyteller website. One student said, "I like hearing you tell stories but it was fun to hear it from someone else." When asked during interviews, students said they paid more attention to the story. All of the students said that seeing a video prompt helped them write better. One student reported, "It helped get ideas into my head being able to see what the penguins were actually like" (interviews 5/8/08).

Analysis of Student Work

Since the purpose of this study was to find out what happens when I integrate technology into the writing curriculum, I did not put an extreme emphasis onto grading the student work. For the fairy tales I analyzed the students stories based on three factors. Students were given points on a scale of 1-3 for: elements of a fairy tale, grammar, and structure. Poems were graded on a scale of 1-3 (1 being the lowest, 2 medium, and 3 the highest score, based on correct form and grammar). Other short stories were graded similarly. It is important to note that students did not receive any graded work. I did give students suggestions for improvement; however the grading was for my use only.

Generally students' writing assignments were successful, in the sense that students wrote for the task they were assigned used their creativity, came up with their own ideas, and used correct spelling and grammar. For the fairy tale assignment 16 out of 23 students received 8 out of 9 points, 2 students scored 7 out of 9, 5 students scored 6

out of 9. I took the fairy tales and created an *Apple Elementary 2nd Grade Fairy Tale Collection Book*. Many faculty members were impressed with the work. Students completed an *I Am* poem. Some students were allowed to use an *I Am* poem template on the Internet. Other students created their poems using the sample I had put on the Power Point. This assignment was one of the most successful. Students who used the template were usually struggling writers. One student who used the template said she felt very proud of his poem. Using this template allowed for these students to finish at either the same time or earlier than the rest of the class. On this assignment 20 students received a 3/3 and 3 students received a 2.5 out of 3. The class also wrote short stories based on the video clip we watched containing a group of penguins playing. I did not grade this assignment because students were not given very much time and I just wanted students to be practice their creative writing. Overall I was pleased with the short stories; they were creative, interesting, and well written.

New Understandings

Throughout the study and after analyzing my data, I found that using technology in the writing curriculum was especially beneficial to my students who have IEP's. One of my students who has an IEP often had difficulty reading her writing. When Andrea would go back to work on a writing assignment she often forgot what she was writing even if it was only a minute ago. Since it was very difficult to read her writing it was a challenge for her to finish her work. Using computers helped Andrea because she could easily read what she had previously typed and continue on with her ideas. Andrea could keep up with the pace of the class when using computers for writing class. I saw a great improvement in Andrea's writing since using computers. I also noticed her confidence

level went up; I received comments from her resource room teacher and from her mother about her writing! It was also a great benefit to be able to read Andreas thoughts in her poem, I rarely had the privilege of seeing a finished writing from Andrea, and never one where she could write about her feelings and beliefs. Another student in my second grade class who had an IEP had similar benefits. Shawn did not need a scribe while doing writing assignments on the computer, like he did with traditional written assignments. He also composed longer works and reported feeling proud of his work (Interviews, 5/9/08).

Students seemed more excited to write when using technology. Hearing students call assignments cool and asking when they could work on them again was something I was not used to hearing at Apple elementary. During interviews all of the students reported using video games and computers often. I see the benefit in relating classroom activity to the student's world. During interviews all 23 students reported liking typing stories and writing assignments. All of the students who completed the second survey (20 students) reported liking the lessons taught using Power Point on the projector. When asked on the survey if students prefer to type a story or poem or write it with pencil 17(85%) said type, 2(10%) said pencil, and 1(5%) said both. 14 students(70%) said they were more interested in lessons taught using the computer 4(20%) said they were not and 1(5%) said both. Students were asked what they liked best about using the computer to do our writing assignments on the survey 4 (20%)said it looked neater 2(10%) said it was faster, 4(20%) said they liked typing, others reported they liked making changes and being able to do the assignments on their own. 14 students (70%) reported on the survey that typing our writing assignments was easier 4(20%) said writing with a pencil was easier and one student did not answer this question. Students prefer using computers for

writing, they are more interested in assignments using technology, and prefer lessons taught using technology. Students find it easier to do writing assignments with assistance from technology such as computers. Students feel relaxed and like to write when listening to classical music.

During interview sessions 17 out of 23(73%) students said that when they write for a long time their hand gets tired and they have to stop. When asked students responded that during this time they would sometimes forget what they were going to write and 4(17%) students said they might "hurry up and finish" agreeing that this may make their story "not as good". Using a computer to type a story helps students write longer works and complete their thoughts. Students can type more without the pain and without interruptions where thoughts can be lost.

New Directions

The integration of technology into writing is a topic that I hope to explore indefinitely. I am sure I can always find new ways to integrate technology into the writing curriculum. When I have my own classroom I will have more time and more control to explore these opportunities. From all of the interviews, observations, surveys, and collections of student work I collected, the response I valued most is that students liked doing the assignments. If the students like using technology for writing and it is working, it is worth the extra work and definitely worth putting more thought into. Integrating technology into the writing curriculum may take some extra planning for teachers especially if one must arrange available lab time. Of course teachers must also

remember that students will finish at different times and that there may not be enough computers for every student to be working at the same time.

During interviews, 20 students (87%) said that writing stories or poems using the computer would have been better if students knew how to use the computer better. (interviews 5/9/08)I could not agree more. One student thought she already knew how to use the computer and two students said they did not know. Since students at Apple Elementary do not have a computer class where they are taught the basic lessons of using a computer and using word processing programs, there were many difficulties in the computer lab. I would like to see if students who do have computer class have an easier time and if classroom management would be easier.

Since using technology in the writing curriculum worked so well for me and for this class I would like to see what happens when I integrate technology into other subject areas and with other classes. Particularly I might be interested in using the Internet for Science class. I know there are many great educational websites that allow students to do "experiments" on the computer. There are also great programs available on the computer for math instruction. Students can complete web quests to find out about important historical figures or events. There are possibilities for students to take virtual tours of far away wonders. The ways of using technology in the classroom are limitless and I would definitely like to integrate many different types of technologies into my classroom seeing how much children use technology today and predicting how much it will be used in the future.

In the broadest sense what I did in this study was look into my student's world; I looked at what are they interested in, what they do for fun, and what kinds of things are

relevant in their world. I saw technology and I brought that into my classroom. I saw very positive affects and few negatives. This is something I would like to continue throughout my teaching experiences. I will continue to look at what is being used by my students, or what they are interested in, and try to incorporate this into my lessons or classroom activities in any way possible. In the future this could mean using my student's hobbies or interests in lessons. This also means that I will pay attention to the latest inventions and innovations my students are using so that I can try to incorporate them into my classroom instruction. The idea is trying to keep my students interested and using everything I can to improve my teaching. I want to be open-minded and use all of the resources available. Some of the teachers I have met who have been in the profession for a long time are still doing the exact things they did in their first years. Their instruction has not changed and a few of them told me they do not know how to use Power Point. Some teachers complain about doing attendance on the computer one teacher admitted that it would be easier if she learned how to work it but "I'm just stuck in my old ways." I want to make sure that I do not become one of these teachers. I think that by keeping up to date with what is new and innovative in my student's world I can avoid this it is as Stewart Brand once said "Once a new technology rolls over you, if you're not part of the steamroller, you're part of the road." I certainly do not want to be a part of the road; I want to do everything I can to take advantage of the developments or discoveries that are sure to come in the future.

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Appendix A

First Survey

My Thoughts on Writing........

Please check the statement you agree with.
I write best when
It is quiet_____
There is music or other noise____

I would rather write
On a computer_____
With pencil and paper_____

Seeing a video or hearing about something
Helps me to write_____
Doesn't help me_____
I'm not sure_____

I like to write_____
I hate to write_____
Sometimes I like to write____

If you were the teacher what would you have the class write about?

How would you introduce the topic?

Appendix B

Consent Form

Dear Parent/Guardian,

Hello! My name is Jessica Mallon, I am a student teacher in your child's second grade class. I am a graduate student in the Masters of Science in Teaching program at Rowan University. I will be conducting a research project under the supervision of Dr. Beth Wassel as part of my master's thesis concerning what happens when we integrate technology into our writing curriculum. I am requesting permission for your child to participate in this research. The goal of the study is to determine the possible benefits of using technology for teaching writing.

I will be designing writing activities that will include media and technology. To collect my data I will observe students during writing activities, keep a journal of activities, samples of work, give students surveys, interview students, and record work sessions. To preserve each child's confidentiality I will use pseudonyms for each student.

Your decision whether or not to allow your child to participate in this study will have absolutely no effect on your child's standing in his/her class. If you have any questions or concerns please contact me at MallonJ1023@yahoo.com Thank You!

I am really looking forward to working with you and your child!

Sincerely,
Jessica Mallon

Please indicate whether or not you wish to have your child participate in this study by checking the appropriate statement below and returning this letter as soon as possible.

_____ I grand permission for my child_____ to participate in this study.

_____ I do not grant permission for my child_____ to participate in this study.

_____
(Parent/ guardian signature) (Date)

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Apendix C

Interview Questions:

1.   Did you like the writing lessons when I used power point? What did you like/ dislike about it?

2.   What did you think about hearing the Cinderella story on the power point?

3.   What did you like better writing with a pen and pencil or using the computer

4.   Did you like writing our fairy tales on the computer? What did you like about it?

5.   Is it easier to edit your work using the computer? Why or why not?

6.   Do you like writing your first draft on paper and then typing it or would you rather write from the beginning on the computer?

7.   What did you like or dislike about writing the *I am* poem?

8.   Did you like listening to classical music while we wrote? What did you like or dislike?

9.   Did you like the lesson where we watched the video clip about penguins and wrote about it? Did watching a video help you write?

10.   How often do you use the computer/ play video games at home?

11.   Do you think you would like writing on the computer better (would be better at) if we had a computer class where we learned to type and use the computer and programs?

12.   What is the best part about typing our writing?

13.   What else would you like to tell me about our writing class or using computers and technology?

Appendix D

Survey 2

Directions: Please answer the following questions honestly. Only write your name if you want to.

1. Did you like the lesson about fairy tales when the stories were on the overhead?

2. Did you like hearing the fairy tale from the computer?

3. Which do you prefer typing a story or poem or writing it with a pencil?

4. Which is easier?

5. Did you learn from the Shrek lesson? Would you rather have watched the dvd or heard the story from a read aloud?

6. Is typing your writing more frustrating than writing it with a pencil?

7. Do you think you would like using a computer for writing if you were better at typing or had more practice using a computer?

8. Were you more interested in lessons when they were taught using the computer?

9. What did you like best about doing our writing assignments on the computer?

10. What did you like least about doing our writing assignments on the computer?