

# Picture This: Students find their Voice through Digital Storytelling

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## Abstract

A five-day workshop was hosted for young children at their school with the cooperation of *Student's Motivated by the Arts Center (SMARTS)* at a Midwestern urban area with the intent of correlating the use of digital photography with literacy development. This five-day workshop's intent was to foster a child's ability to be an effective storyteller through the use of digital photography and the use of storyboards, storybooks, or computer-based digital storytelling. The research methodology sought to prove that children's literacy development, in relationship to generativity and story elements, can be enhanced through the use of digital photography.

## 1. Introduction

Young children are storytellers by nature. Listen quietly during their playtime and you will hear stories of vacations, weddings, dolls, and trucks. Prompt any child you know and they will begin to tell you stories that can stir anyone's imagination. But where do these stories begin and how do children become effective writers of stories? It is quite evident that these stories begin and are grounded in some meaningful real-life event in a child's life that can often spin into a creative and delightful fantasy. Children's social and everyday experiences create reason to communicate. Oral storytelling is a playful way for children to tell others about themselves and their world.

Developmentally, children begin to *write* their stories through pictures of symbolic representation. Children use their pictures to help them remember characters, sequence (beginning, middle and end), and plot; and can generate these details quite vividly (Raines & Isabell, 1999). Adults, whether it be the child's parent or teacher, often prompt a child to *tell* them about their drawings. What we hear is often much more meaningful than what the picture appears to represent and the experience of the child as storyteller unfolds. It is often with the help of the classroom teacher and/or parent that words begin to be transcribed as a story below the picture, and though the child remains the storyteller, the experience of transcribing words begins to tell the child that the spoken word can also be

communicated through the written word. Dyson (2002) believed this to be a new way of "social dialogue" for the child and, if it remains intrinsic, can be a great form of self-expression, as children developmentally grow accustomed to telling their stories through the written word on paper.

The question remains, however, how do we keep young children intrinsically motivated to tell their stories through the written word? Labbo, Eakle, and Montero (2001) believed that the use of digital imagery through the use of photo storytelling or digital storytelling can play a role in the on-going literacy development of young children, since it can combine the effort of a natural storyteller with visual tools that can stimulate and captivate the young child's imagination; just as their own paintings can be a springboard into narrated stories. These photos, particularly if taken by the child, can become the drawing that captivates the child and promotes his or her desire to tell a story to others. Photography lets children speak with pictures. Underserved or at-risk students fare especially well when encouraged to use visual art to tell stories because, often, their writing skills are not at grade-level. The visual image gives them a story cue that provides a catalyst for generating ideas. The use of digital storybooks, in fact, has grown increasingly popular with older students (middle-school to high school-aged) as a way of teaching history, geography, and world events in ways that students who are uncomfortable with - and at times, embarrassed by their literacy - are more successful (Bull & Kajder, 2004).

Current research is finding that literacy is more than reading and writing. Literacy is interacting with and creating texts from a variety of print and non-print resources. The new literacies include technology that supports students' "thinking and engagement with learning." In order to support students' literacy development, it is essential that teachers include these technology-rich literacies in the curriculum (Albers, 2007). Digital storytelling is a way to integrate technology with the Language Arts curriculum. Chen, Verdig, and Wood (2003) found that story sharing through digital storytelling extends the traditional areas of Language Arts: reading, writing, listening, speaking,

viewing, and visually representing. These areas include self-expression, non-linear story playing, interaction with the Internet, use of graphics, animation, and sound effects. Ohler (2006) found that digital storytelling enables students to develop creative skills in art, media production, and other areas of self-expression that might not otherwise be used. These skills help students to improve media literacy. Other research found that the process of digital storytelling enables students to develop metacognitive skills regarding their own writing (Strassman & D'Amore, 2002). These electronic storybooks impact how students interact with text and images, and how they use technology in the writing process (Chen, Verdig, & Wood, 2003). Albers (2007) suggests that digital presentations that include animation, music, images, and student narration help breathe life into the content.

Banaszewski (2002) found that including a digital storytelling project creates excitement in the classroom. Not only does it promote a positive climate, but it empowers students to express themselves as they go through the process of creating storyboards, choosing images, editing, and recording their stories. He added that it is a powerful experience because the students are in charge of the project. The teacher becomes the facilitator as students take ownership of their stories.

Ohler (2006) advised that digital storytelling can be valuable to the curriculum if teachers remember two important concepts: (1) the primary focus should be on the story and (2) digital storytelling should be used to develop critical thinking, writing, and media literacy. In order to keep the focus on the story, students must be taught how to be good storytellers. A poorly written story will not be improved by the use of technology. Banaszewski (2002) reminds us that although the use of presentation software programs supports students as they learn to use a digital camera or camcorder, import music, and edit their stories, technology should always be secondary to the actual storytelling. The goal is to help students become confident writers and storytellers. Kullo-Abbott and Polman (2008) concluded that a digital storytelling project can benefit students as writers because they use the technology to organize and sequence ideas. The visual images inspire them to write with more detail and think about the relationship between images and words. Their study also found that involvement with digital storytelling inspired students to extend their creativity and discover different ways to express their ideas.

Ohler (2006) further recommended that prior to adding digital and technological elements to their pieces, students should engage in story mapping, writing and prewriting, and oral storytelling. Labbo, Eakle, and Montero (2002) found that the process should begin with students reacting to a prompt or stimulus experience that is set up by the teacher

and end with follow-up activities where students share their stories orally, in print, or on the computer. Ohler (2006) also emphasized that it is important for students to have the opportunity to participate in oral storytelling in preparation for digital storytelling. This experience will help students find their voice and the way they want to tell their story. This will also give them practice if they choose to add their own narration to their digital presentation.

Sadik (2008) recommended digital storytelling because it employs authentic integration of technology into the curriculum. Students become actively engaged as they complete their stories. Robin and Pierson (2005) suggested that students at all levels can learn how to create digital stories. They found that teachers can integrate this technique into most subject areas in order to help students learn and understand the content. Using digital storytelling in the content areas encourages students to express their content knowledge in a creative way.

Sadik (2008) concluded throughout the process of creating digital stories, students were able to find their voice, establish a point of view, and become engaged in the topic through visualization and sound. They learned to delve into the topic while learning how to use various technology applications. Students reported that they enjoyed using the various technology tools that enabled them to create high quality multimedia stories.

Regan (2008) stressed the importance of visual literacy. He found that teachers must find ways to involve students in activities that engage them in visualization. The more students can engage in projects that include photography, drawing, and multimedia production in content areas, the more they will retain the information. A teacher in the study reported that when students use multimedia software programs they become active learners. Digital projects reach students who often fail to complete traditional assignments. They can also serve as a supplement to the often challenging content text book.

Besides the element of effective storytelling, introducing children to photography at an early age also promotes visual literacy. Learning photographic techniques in perspective such as framing within a frame, the rules of thirds, and ideas of foreground and background further enhance their vocabulary and their way of organizing and seeing their world. Additionally, many underserved or at-risk students do not have access to a camera. In their experience, many students that SMARTS have worked with do not even have photographs of their families or themselves. Allowing children to have a disposable camera to document their lives tells the child that he or she matters. Sharing their "picture lives" with others is the ultimate of show and tell. Children are shaping and representing their identities.

Table 1  
Workshop Schedule

EXPERIENCE	
DAY ONE: (Monday) There's a Story Inside ME	
12:45 pm	Choose something in the room that can tell someone else about you.
1:00 pm	Share.... (We are all storytellers at heart)
1:15 pm	Read a story from a book (fold-out)) Read a story with visual pictures Share a digital story (use of LCD & computer with internet access)
1:30 pm	Discuss the components of what made each story interesting. Facilitator will write it down on large paper. Ask children; What were the similarities and differences? Discuss the elements of a good story
1:45 pm	Choose a story prompt they want to write about from the following; I wish, Once upon a time, A Day in My Neighborhood When I Grow Up, My Family, My Pet (The children will use the same story prompt they used on this day to write another story after they take pictures.) Pass out paper, have children write their story.
2:15 pm	Collect stories, closure
STUDY	
DAY TWO: (Wednesday) A "KODAK" Moment	
1:00 pm	Have a variety of photos around the room Children will walk around the room with a notebook and choose a photo that they like, They will write down their reasons. Children will share why they chose that photo.
1:30 pm	Children will be taught the "art" of photography."
1:45 pm	Children will be asked to think about the topic that they wrote the first day and write it down on paper. They will be asked to brainstorm and write all the possible pictures they could take that might support this title. Children will be asked to choose the type of media to present their "photo" story. These choices will include: Fold-out story, (2) big book, (3) narrated digital story These choices will be shown to the children and be written on large easel paper. The children will be asked to sign-up for one choice, so that materials can be ready at the next gathering.
2 00 pm	Pass-out cameras, have children put their names on the disposable camera and/or zip lock bag. Children will be asked to take camera home, with brainstorm sheet and take pictures. All cameras must be returned to their teacher by Friday: (The SMARTS coordinator will pick-up the cameras on Friday for developing.)
2:15 pm	Closure
PERFORMANCE	
DAY THREE: A Picture is Worth a Thousand Words!	
1:00 pm	A story with photos will be read to the children and discussed
1:15 pm	The process of storyboarding will be discussed, children will be given their developed photos and asked to create their storyboard
1:30 pm	Children will be put into small groups according to media choice Children will write their story from the storyboard with their chosen media.
2:00 pm	Closure
PERFORMANCE	
DAY FOUR Used as a time when students can finish- stories w/classroom teacher	
CELEBRATION	
DAY FIVE: A Parade of Stories	
1:00 -2:00 pm	Children's stories are displayed-beginning and end stories Children have an opportunity to tell their stories to each other Mini celebration

## 2. Methodology

To begin to investigate the art of digital photo storytelling with young children, a five-day workshop was developed for 15 third graders attending an urban school. Though it was tentatively scheduled for five consecutive days, classroom scheduling extended these five days to include three weeks to allow more time for students to create their storyboards and their finalized digital stories. The workshop was a collaboration between two faculty in the department of teacher education. The workshop focused on the process and product of digital imagery, as well as the process of good storytelling (see Table 1). Children chose a story

Table 2  
*Writing Rubric*

4	<ul style="list-style-type: none"> <li>▪ Focuses on the topic</li> <li>▪ Has a logical structure that flows naturally with beginning, middle and end</li> <li>▪ Has supporting details</li> <li>▪ Has an effective use of language with a variety of words and sentence patterns</li> <li>▪ Generates a substantial story with 150-200 words</li> </ul>
3	<ul style="list-style-type: none"> <li>▪ Generally focuses on the topic</li> <li>▪ Has a logical order with an apparent beginning, middle, and end, although some lapses may occur.</li> <li>▪ Contains adequate supporting details</li> <li>▪ Has generally adequate word choices and sentence patterns</li> <li>▪ Generates an adequate story with 100-150 words</li> </ul>
2	<ul style="list-style-type: none"> <li>▪ Attempts to address the topic, but may include material that is loosely related</li> <li>▪ Shows an attempt at organizing the story around a beginning, middle and end</li> <li>▪ Includes some supporting details</li> <li>▪ Word usage and vocabulary are limited, along with limited and meaningful sentences.</li> <li>▪ Generates a minimum story with 50-100</li> </ul>
1	<ul style="list-style-type: none"> <li>▪ May or may not address the topic</li> <li>▪ Offers few details and is only slightly related to the topic</li> <li>▪ Demonstrates little or not evidence of an organized structure; beginning middle or end may be poorly defined or be nonexistent</li> <li>▪ Uses limited or inappropriate vocabulary that obscures meaning of story</li> <li>▪ Generates a limited story with 50 words or less</li> </ul>

prompt that would be used for writing before and after taking pictures. Comparison of the pre and post writing samples provided data that was based on generativity (number of words) and story elements (beginning, middle and end) and was measured through a developmentally appropriate writing rubric adapted by the writers from the Department of Education (1999) writing rubric found in the Model Competency-Based Language Arts Assessments (see Table 2). Though scoring writing samples could include the criteria of spelling, grammar, and punctuation, the main focus of this study was to demonstrate an increase in generativity and story elements. Therefore, additional writing criteria were not included in the rubric.

The sequential topics of the workshop were developed to facilitate a young child's understanding of story writing and digital photography. The researchers felt it was important that children understood story criteria that promoted an effective story prior to writing the first sample. This would help to eliminate the bias that children's stories improved due to increased knowledge of an effective story from the workshop. Therefore, the first day of the workshop contained experiences and discussions that fostered an understanding of effective story elements so the children wrote their first story without their photograph.

Children were also taken through a process of photography and brainstormed different types of pictures they might take that would go along with the storyline they chose. It was important that children were given the opportunity to take the cameras home with them to promote a degree of ownership for their own stories. However, it was also important not to give the children too much time so that children would stay connected to the story that was building within them. Children were shown also three types of story formats: a fold-out story, a big book, and a digital story. The stories from each format were read and similarities and differences between the three formats were discussed. Children were then asked to sign-up for the type of format they wanted to use for their photo story. All 15 children chose a digital story.

One week later, the photos were given back to the children on a CD and were viewed on the computer during their computer lab time. Four of the 15 children had taken pictures that had a different storyline than their original pre-writing sample. This difference in themes was based on that fact that students were able to take pictures of things that were convenient for them and did not include the involvement of an adult. All of these pictures the students took were available in or around their home, but still focused on a story prompt of interest to them (e.g., My Family vs. Once Upon a Time). There were also two of the 15 students who were not allowed to take photos. One was based on lack of parental approval and the other was based on behavioral issues.

Children were asked to choose between 10 and 12 of their best pictures and print them. This promoted critical thinking and visual literacy, since children needed to think of both their storyline and what constituted a quality picture. Each child was then given a storyboard that allowed the child to sequence and re-sequence his or her pictures until the child was satisfied with the order. Once satisfied, children proceeded to glue their pictures on to the storyboard and write their stories. Children were given one week to complete their stories on the storyboard.

After their storyboard stories were completed, the children were ready to create their stories through the chosen format of a digital story. The choice of digital storytelling allowed one additional dimension, which was narration. Narration alone was a truer form of storytelling and one that promoted a greater appreciation of the child as storyteller (Achermann, 2001). The digital story was done in PowerPoint during their computer lab time. The technology teacher expressed interest in the experience, since she was working with the children in PowerPoint. Therefore, she facilitated the process with the use of the university's headsets. Each child's digital story was put on an individual jump drive. After completion, children were given the opportunity to share and celebrate their stories during the last day of the workshop experience through a celebration.

### 3. Current Findings

Much can be said about the findings of this study, both in quantitative and qualitative data. Even with only 15 third graders, "ahh" moments were extensive and exhilarating. It was no surprise to the writers that the children were excited and totally engaged. After all, children were immersed in developmentally appropriate practice through active learning that was of high interest to them. Children chose their own story lines, took their own digital pictures, created their own storyboards, and chose a method to create their own story. Choice empowers children and motivates them. It is important to again draw attention to the fact that all of the children chose the method of digital storytelling. Technology is of high interest to children and in itself can be a motivator for learning.

The results from the pre and post assessment of the writing sample demonstrated increased scores on the writing rubric that include both word usage (generativity) and story elements. Eleven of the 13 students scored 1 on the pre-assessment writing sample (on a scale of 1-4) and two of the children scored 2. All children but one improved their scores on the post-writing through their digital stories. Nine of the 13 children improved to a score of 3 or 4, two of the children improved to a score of 2 and one of the children remained the same. However, even the child who did not improve the scores (2 and 2) did improve the amount of words used. But this student did not have enough

improvement in their story elements to warrant a score of 3 (see Figure 1).

What was most astounding from the data was the amount of word increase that each child had from the pre to the post assessment (see Table 3). All children increased the amount of words they used. Improvements in word usage ranged from 67% to 433% with an average increase of 233% (see Figure 2). These findings are not surprising, since visual

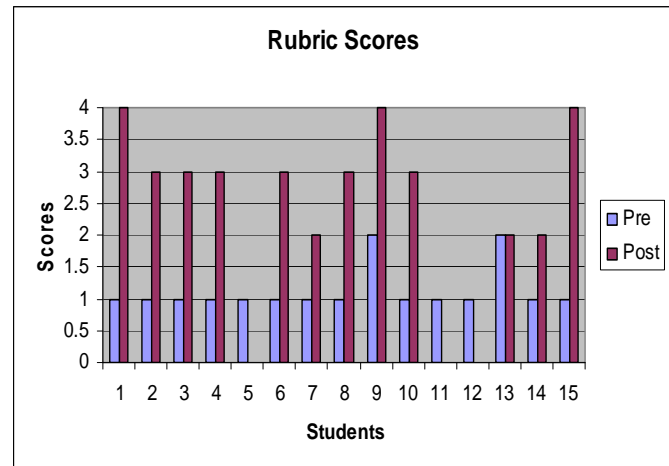


Figure 1. Graph of rubric scores

pictures, and in this case digital photos, empower children to tell their stories in more descriptive and expressive ways. It is much richer and often more expressive to tell your friend about your vacation using photos, than to tell them about it without the photos. The experience comes alive again and

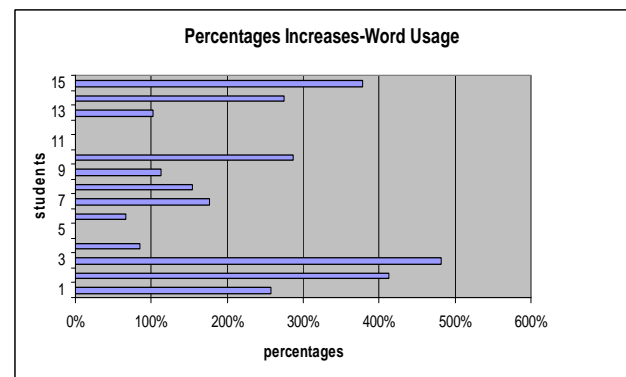


Figure 2. Percentage of increase in word usage from pre to post

the storyteller becomes much more engaged and verbal using the photos. This remained true for the children. They

had a personal and engaging visual picture that prompted them to communicate and tell *their stories*.

#### 4. Future Implications

What implications does this research have on the practices that are used within early childhood education classrooms to support literacy development? It is quite evident in classrooms across America that literacy development is at the forefront of most early childhood education classroom.

Table 3

*PRE and POST Rubric Scores and Number of Words Used*

Student	Story Prompt	Pre (before photos)		Post (after photos)	
		Rubric Rating	Generativity (# of Words Used)	Rubric Rating	Generativity (# of Words Used)
1	<i>My Pet</i>	1	41	4	147
2	<i>Once Upon a Time</i>	1	38	3	195
3	<i>Once Upon a Time</i>	1	39	3	227
4	<i>I Wish</i>	2	67	3	124 <i>My family*</i>
5	<i>My Pet</i>	1	1	X	
6	<i>Once Upon a Time</i>	1	42	3	70
7	<i>Once Upon a Time</i>	1	25	2	69 <i>Best Friends &amp; Family*</i>
8	<i>Once Upon a Time</i>	1	42	3	107 <i>My family*</i>
9	<i>When I Grow Up</i>	2	69	4	147 <i>Football*</i>
10	<i>When I Grow Up</i>	1	38	3	147
11	<i>A Day in My Neigh.</i>	1	1	X	
12	<i>Once Upon a Time</i>	1	1	X	
13	<i>My Pet</i>	2	51	2	103
14	<i>My Pet</i>	1	16	2	60
15	<i>My Family</i>	1	37	4	177

Children learn to read and write during the early childhood years. Research often leads practice. Therefore, this research, along with other research in this area, can have significant implications for learning and promoting literacy development.

There is also much to be said about digital technologies in the classroom. Whether children are creating a digital photo story or a narrated digital story, children are active,

engaged, and expressing themselves. With the evidence, it is important to continue to disseminate research to classroom teachers who are working diligently to promote literacy development. Early childhood professionals understand at the heart of any successful learning is a child who has experiences learning through meaningful and active engagement that incorporates real world experiences. The use of digital imagery promotes both meaningful and active learning, hence increasing a child's motivation to communicate and tell their stories.

The writers hope to continue to disseminate their findings through continued workshops for other students in early childhood classrooms, as well as to teachers who teach in early childhood classrooms. If digital technology can promote and sustain the intrinsic motivation of young children to be effective storytellers, then it is important that teachers hear about this research, particularly in urban schools where children could be at a disadvantage in literacy development.

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