

Abstract

This article describes a visual literacy project completed by teacher candidates at a Georgia university with students in field placement classrooms in grades 3-5. The purpose of this project was to explore how teachers can use photography to integrate literacy and the content areas. The project was completed during an eight week time period in which each teacher candidate tutored one child in grades 3-5 who struggled in an area of reading. Picture literacy samples indicate that teachers can integrate math with photography and music with photography.

An ancient Chinese proverb once said a picture is worth ten thousand words. Can a picture actually tell a story as well as promote a large amount of descriptive text when a writer writes? Think of this proverb as it relates to the K-5 classroom setting. Can images prompt students to write more reflective, descriptive pieces?

In 1996, the New London Group coined the term, multiliteracies, This theory draws upon a range of ideas about new literacies that have been caused by technological change. One type of new literacy is called visual literacy. Felten (2008) describes visual literacy as "the ability to understand, produce, and use culturally significant images, objects, and visible actions" (p. 60). This definition places an emphasis of one's personal construction of a message from a visual image. A constant in our student's lives in the concept of visual literacy. Visual literacy is all around our students in the world. Different examples of visual literacies include; photography, film, and using pictorial and simple graphic symbols and signs (Alberto, Fredrick, Hughes, McIntosh, & Cihak, 2007). All of these examples can be used in the K-5 classroom to connect content to the lives of our students, and in this particular article, photography was utilized.

As explained by Zenkov and Harmon (2009),

"digital photography has taken a more critical role in our teaching, especially with those students who are reluctant writers" (p. 581). A visual image can spark a student's idea and may allow the student to write more than without picture support. Reluctant writers become motivated by the picture cue and when personal photographs are implemented the assignment becomes more of a text-to-self connection for the writer. Research has shown that visuals assist struggling readers and writers, and English as a Second Language students (Hite & Evans, 2006; Goldenberg, 2008; Sylvester & Greenidge, 2009). In the study conducted by Sylvester and Greenidge (2009), students used photographs as they composed digital stories. "Clip art, photographs, or other graphics may visually compensate for the details that the struggling writer inadvertently omits" (Sylvester & Greenidge, 2009, p. 291). Details that a struggling writer may omit include; figurative language, sensory words, descriptive words. When a photograph is included in the piece, students can go back and revise to add these details.

Researchers agree that visual literacy can assist children in learning to read as well as enjoying reading (Walsh, 2008; Martinez 2010). A study conducted by Walsh in 2008 demonstrates classroom evidence of changed literacy practices involving visual literacy. Her study indicated, "the facilities of digital technology afforded concrete experiences to be used with and transferred into digital texts, as shown in the example of students making figures that were photographed, then developed as a story in a claymation" (Walsh, 2008, 107). Claymation is one type of stop motion animation in which dramatic enactments could aide in visual and kinesthetic learning for younger students.

Emergent readers are learning to read and write while older readers begin to read and write to learn. In writing to learn students do not necessarily go through all the steps of the writing process. Generally students create informal writing that helps them think through key concepts. Much of writing to learn is conducted in third grade and up and is often connected to the content areas.

Content area texts are filled with visual images that support the text. Felten (2008) asserts that images are "becoming central to communication and meaning-making" (p. 60). This is compared to the past when images in texts were used to illustrate and entertain. "The re-envisioned content classroom reflects what we know about how children best learn alongside access to technology" (Flynt & Bronzo, 2010). Teachers in content area classrooms now use Webquests, Glogsters, and Virtual Field Trips to enhance the content area curriculum. All of these multimedia tools

include visual literacy that help students comprehend and clarify as they read and write. Using multimedia tools has a positive impact on collaborative working skills and learner's attitudes (Abbitt & Ophus 2008; Merchant, 2009; Rance-Roney, 2010).

Visual literacy has been found to motivate young readers (Lapp, Flood & Fisher, 1999; Cleaver, 2008). An image can increase motivation by prompting students to connect the photograph to the literacy assignment. Zenkov and Harmon (2009) found that students started off writing explicit questions to photographs but by the end they came up with metaphorical ideas. The content of the writing expanded as higher level questions were asked regarding the photographs.

Visual literacy supports higher levels of thinking such as evaluation and synthesis (Martinez, 2010). Students can be prompted and scaffolded to think deeply about photographs. Kress (1998) poses an important question, "As we move to an increasingly visually-dominated culture where students are expected to code and decode complex messages in a variety of media, shouldn't literacy instruction include visual media as well?" Visual media can be "decoded" as students explore a picture's deeper meaning.

According to Williams (2010), "The shift from the printed text to the visual is obvious in our daily lives, but the concept of visual literacy is still very limited in classroom practice" (p. 635). This article explores ways in which visual literacy can be integrated into content areas within classroom practice. Content literacy was selected as the assignment's focus because, "using visual literacy in the content areas is not purely limited to the creation of stories but is an opportunity for students to expand their knowledge of the world around them" (Williams, 2010, p. 641).

The intent of this assignment was to identify ways visual picture literacy could be integrated into the content areas. Research questions that were involved in this study include; What subject areas can be integrated into visual picture literacy? What were the teacher candidates perceived benefits and challenges of using visual picture literacy in the classroom? How did teacher candidates integrate visual picture literacy into the content areas?

Context of a Picture Literacy Project

Teacher candidates at a university in Georgia, each tutored one student in grades 3-5 over the course of eight weeks. The student struggled in at least one area of reading, and received fourteen hours of literacy instruction with the teacher candidate. The teacher candidates completed a larger portfolio project in which they conducted interest inventories

and literacy assessments. After conducting these assessments, candidates developed an instructional plan for their student. During this time, this small study resembled action research as the teacher candidates developed a picture literacy lesson plan (based on prior assessments), collected student's picture literacy work samples, took field notes, and assembled observational data about the students.

The students tutored were all from diverse backgrounds. The teacher candidates in this project all participated in an urban cohort and attended classes held at a Professional Development School (PDS). All the schools they had their field experiences at were in an urban part of a large school district. Many of the students came from low socioeconomic backgrounds and some of the students were English Language Learners.

Picture Literacy used in Multiplication

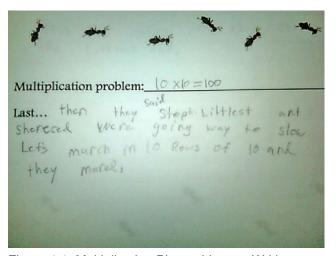


Figure 1.1: Multiplication Picture Literacy Writing

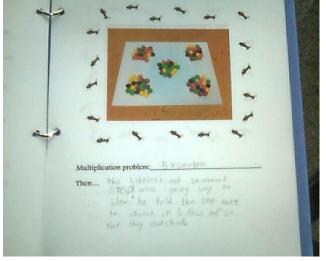


Figure 1.2: Multiplication Picture Literacy Page

Figures 1.1 and 1.2 illustrate book pages from a written retelling of the story 100 Hungry Ants by Elinor

J. Pinczes. The teacher candidate administered an interest inventory on her fourth grade student. She found that this student enjoyed creating and solving math problems; however they also struggled with multiplication. The teacher candidate wanted to integrate multiplication review with literacy in order to practice for the upcoming achievement tests that would take place.

The teacher candidate read the book to her student who was also an English Language Learner (ELL). Herrell and Jordan (2008) described the Read-Aloud Plus strategy to assist ELLs in their language acquisition. The teacher candidate implemented that strategy by stopping the read-aloud every few pages to have the students model the math problem. The student used jelly beans to represent the groups of ants. As the teacher candidate checked the student's work, she took a picture to keep as a future visual.

The next day the teacher candidate brought the math problem pictures into the tutoring session and had the student retell the story by sorting the pictures according to the sequence in the story. Once the student had sorted the picture math problems correctly, she gave him a page to write the multiplication problem and the story to match the problem. Once each page was complete, the teacher candidate used book rings to bind the book together, read it with the student, and encouraged him to revisit the text by bringing it to future tutoring sessions. The classroom teacher found out about this exciting project and asked to have the copy to place in her classroom library for all the students to read.

Picture Literacy Used in Estimation

Another teacher candidate decided to extend her student's love of math and incorporate a concept the student was learning about, which was estimation. The book, *Betcha!* by Stuart J. Murphy was read in a tutoring session. In the text, two boys have to estimate how many jelly beans are in a glass jar in order to win tickets to a playoff game. The text explains an estimation strategy that the teacher candidate wanted to try with her student.

After the book was read, the teacher candidate brought in a jar of gumballs for the student to estimate. The student took two pictures of the jar of gumballs. Figure 2.1 was taken looking into the jar from the top, and Figure 2.2 was taken looking at the side of the jar. Using the picture of the top of the jar, the student divided the top of it into four equal sections. Then the student counted the number of gumballs in one section. This number was multiplied by four to estimate the total number of gumballs on the top layer of the jar.

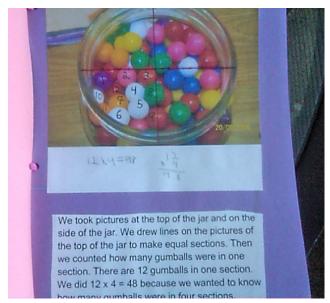


Figure 2.1: Picture Literacy Gumball Estimation

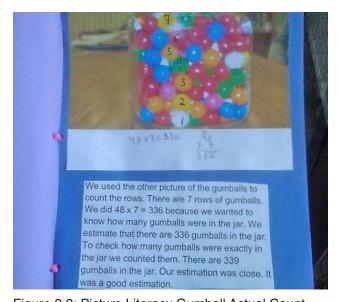


Figure 2.2: Picture Literacy Gumball Actual Count

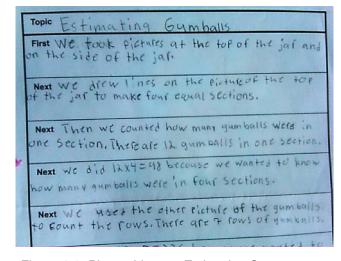


Figure 2.3: Picture Literacy Estimation Sequence

The picture in Figure 2.2 was then taken and used to count the number of layers in the jar. That number was multiplied by the number of gumballs on the top layer. This gave the student an estimate of gumballs in the entire jar. The student's estimate was 336, and the actual number of gumballs was 339. The student had to show her math work beside her pictures as she went along. The sequencing organizer (see Figure 2.3) was used to record each step of the problem. Once the student was finished, the teacher candidate had the student review the sequencing organizer and edit the work. The final product was then typed using the computer and then the student assembled a "How-To" book on estimating gumballs in a jar.

Picture Literacy in Language Arts and Music

A way to bring Gardner's (1983) musical intelligence theory connected with literacy is to have students design an album. Based on an interest inventory, a teacher candidate found that her tutee enjoyed music. The student also had a class assignment in Language Arts which instructed her to write her autobiography. She struggled to gather ideas and extend upon them. She had the tutee select five songs that connected to major events in her life. The student then wrote "liner notes" for her album describing how each song connected to her life. This project required the student to make text-to-self connections, identify themes, and allow the student to edit her writing.

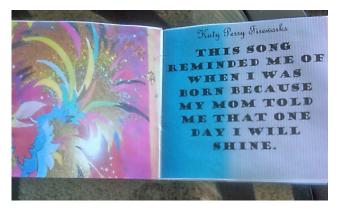


Figure 3.1: Picture Literacy Liner Notes

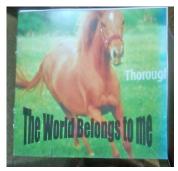


Figure 3.2: Picture Literacy Music Album Cover

To begin the teacher candidate created an organizer on which the student wrote the song title and a description of the connection. The teacher candidate then allowed the child to use Microsoft Word to type up the liner notes (see Figure 3.1). The student worked harder at communicating clear

and detailed ideas while working on the computer. She knew her intended audience would see a published version that resembled a compact disc (see Figure 3.2), so she became motivated to revise and edit her work correctly.

Discussion

Teacher candidates who took part in this project used the student's interest inventories and literacy assessments to guide their picture literacy project. It is recommended that teachers also use content area assessments to determine student needs in those areas. For example, if a student performs below average on a science pre-test about simple machines, then a teacher could have the student bring in a picture of their bicycle and then label and write about the parts of it that make it a simple machine.

Many students included in the project were reluctant writers. They became engaged in the project, specifically when the teacher candidates allowed them to take a picture or bring in a picture. One teacher candidate explained, "As my student was writing he kept explaining the concept in the picture in greater detail. I was surprised to see him write as much as he did."

Another interesting comment made in the teacher candidate's field notes was how typing on the computer assisted students in the revision and editing process. A teacher candidate discussed, "My student showed a lack of detail in his hand writing. When I had him transfer it to the computer, he realized he needed to add more detail to make the audience fully understand his directions". The student flourished when typing on the computer because he didn't have to worry about neatness in handwriting.

The project assisted ELLs in their revising and editing. One Vietnamese student wrote a "How-To" book about creating origami. "At first, he wrote the directions down like he spoke", one teacher candidate admitted, "I then re-read what he wrote so he could hear someone else read it aloud. This method worked because he actually noted that the grammar was incorrect." This teacher candidate also reflected in a journal that she took the student's sentences from his book and completed syntax surgery on them. Syntax surgery is a method where the teacher identifies grammar errors and lists sentences with those errors on sentence strips. The student cuts out the grammatically incorrect word and replaces it by writing the correct word form in. This method allowed the student to identify the errors first, and then go back to revise and edit his piece.

Obstacles of Change

Although the picture literacy project was a favorite

among teacher candidates in this course, one consistent obstacle was discussed in reflection. Teacher candidates were afraid and hesitant to use a camera in the classroom in fear of other colleagues labeling them as teachers who did not teach to the standards. "I'm afraid others will view this as a fun picture activity with little meaning or learning", one teacher candidate commented.

To alleviate their fears after the project was completed, the teacher candidates went back and labeled the standards that each project covered. The teacher candidates were surprised that not only did their projects meet a few literacy standards, but it also met cross-disciplinary standards as well. Most of the projects covered either science and literacy or math and literacy, but options were discussed of how to cover social studies and literacy as well.

Another obstacle for change was classroom management. This project was completed with one student. Teacher candidates feared that with a classroom of twenty-five students, it would be very difficult to monitor equipment and control the classroom. This discussion led to helpful recommendations when utilizing picture literacy in a regular size classroom. One idea was to seek out grants in order to purchase disposable cameras that could be send home with one child for a few days, and then rotated among a small group of 5-6 students. Another idea involved placing the digital camera at a learning station so a smaller number of students would have access to it at one time.

Conclusion

After the project was completed in the Spring of 2011, the teacher candidates went inside a PDS to meet in a fourth grade classroom for a class. Once inside the K-5 school, teacher candidates commented about the hallway displays. One third grade teacher had displayed student's work on insects where the students had taken real-life photographs and written about the particular insects. Another hallway display showed pictures of fifth graders now in fifth grade, and then when they were just kindergarteners. The students also did some writing about their accomplishments throughout that time.

As the teacher candidates passed through the hallways they were excited to see picture literacy fill the school! The opportunities to incorporate visual literacy in the classroom seemed endless. I was excited as well to know that this type of visual literacy is motivating students to write more and add detail to their writing.

A picture can be interpreted in various ways and is worth many words. Photography can scaffold students in their literacy learning. According to the EnGauge report on 21st century skills, visual literacy is a key skill for the future. Utilizing photography as part of visual literacy can infuse 21st century skills in our K-5 students.

References

- Abbitt, J., & Ophus, J. (2008). What we know about the impact of webquests: A review of research. *AACE Journal*, 16(4), 441-446.
- Alberto, P., Fredrick, L., Hughes, M., McIntosh, L., & Cihak, D. (2007). Components of visual literacy: Teaching logos. Focus on Autism & Other Developmental Disabilities, 22(4), 234-243.
- Cleaver, S. (2008). Comics & graphic novels. *Instructor*, 117(6), 28-30.
- enGauge (2003). 21st century skills: Literacy in the digital age. North Central Regional Educational Laboratory and the Metiri Group. Retrieved from: http://pict.sdsu.edu/engauge21st.pdf.
- Felten, P. (2008). Visual literacy. Change, 40(6), 60-64.
- Flynt, E.S., & Bronzo, W. (2010). Visual literacy and the content area classroom: A question of now, not when. *The Reading Teacher*, 63(6), 526-528.
- Gardner, H. (1983). *Frames of Mind.* New York, NY: Basic Books.
- Goldenberg, C. (2008). Teaching English language learners: What the research does—and does not say. American Educator, 33(2), 8–44.
- Hite, C. E., & Evans, L. S. (2006). Mainstream first grade teachers' understanding of strategies for accommodating the needs of English language learners. *Teacher Education Quarterly*, 23, 89-110.
- Kress, G., Ogborn, J., & Martins, I. (1998) "A satellite view of language: Some lessons from science classrooms." *Language Awareness*, 7(2-3), 69-89.
- Lapp, D., Flood, J. & Fisher, D. (1999). Intermediality: How the use of multiple media enhances learning. *The Reading Teacher*, 52(7), 776-780.
- Martinez, M. (2010). New literacies for a new era. *Phi Delta Kappan*, 92(3), 72-73.
- Merchant, G. (2009). Literacy in virtual worlds. *Journal of Research in Reading*, 32(1), 38-56.
- Murphy, S.J. (1997). *Betcha!* New York, NY: HarperCollins.

- Pinczes, E. (1993). *One Hundred Hungry Ant*s. Boston, MA: Houghton-Mifflin.
- Rance-Roney, J. (2010). Jump-starting language and schema for English-language learners: Teacher-composed digital jumpstarts for academic reading. *Journal of Adolescent & Adult Literacy*, 53(5), 386-396.
- Sylvester, R., & Greenridge, W.L. (2009). Digital storytelling: Expanding the potential for struggling writers. *The Reading Teacher*, 63(4), 384-395.
- The New London Group (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review*, 66(1).

- Walsh, M. (2008). Worlds have collided and modes have merged: Classroom evidence of changed literacy practices. *Literacy*, 42(2), 101-109.
- Williams, T.L. (2010). "Reading" the painting: Exploring visual literacy in the primary grades. *The Reading Teacher*, 60(7), 636-642.
- Zenkov, K., & Harmon, J. (2009). Picturing a writing process: Photovoice and teaching writing to urban youth. *The Journal of Adolescent & Adult Literacy*, 52(7), 575-584.

GEORGIA JOURNAL OF READING CALL FOR MANUSCRIPTS

As editors of the *Georgia Journal of Reading*, a refereed journal of the Georgia Reading Association, we invite those interested in improving reading and language arts instruction at all levels to submit manuscripts for publication in future issues. *The Georgia Journal of Reading* is published twice yearly in Spring and Fall.

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These articles should deal with research, current issues, and recent trends in reading or literacy programs. Appropriate topics for the Journal include project descriptions, research or theoretical reports that address pedagogical implications or issues in reading education at the local, state or national level. Preference is given to articles focusing on topics that impact Georgia's students.

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Articles for this column should describe creative teaching ideas and strategies that can be implemented in the classroom. These articles are shorter than full-length and may or may not require references.

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Reviews should describe and critique children's books, professional books, or reading resources that are appropriate for use by teachers and reading professionals. Complete bibliographic information, the

address of the publisher, and the cost of the resource should be included.

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Manuscripts should be submitted electronically in Microsoft Word, double-spaced, and the format should conform to the guidelines presented in the Publication Manual of the American Psychological Association (6th Ed.). Manuscripts should not exceed twenty double-spaced typed pages. The author's name, full address, telephone number, email address, and school/affiliation, and a brief statement on professional experience should be submitted on a separate cover page. The author's name or any reference that would enable a reviewer to know who the author is should not appear on the manuscript. Manuscripts will not be sent out for peer review until this information is provided. All manuscripts will undergo a blind review by at least two members of the editorial board. Decisions will be made within 8-12 weeks of publication of the journal for which the submission was made. Only electronic submissions will be accepted.

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