Chapter 7—Digital Images in the Language Arts Classroom

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Introduction: Dahabo's Story

Dahabo was one of 31 seventh graders enrolled in my first period, on-level English class. These seventh graders read and wrote at a variety of different levels, mirroring the range of their attention spans, investment in class goals, and curiosity as learners. The learning environment in the classroom changed from day to day, depending on who showed up, what task we were exploring, and how willing the class was to give it a shot. Dahabo quickly blended into the middle of the third row, quietly observing the class and contributing only when prompted, often leading me to question at the close of a busy day if she'd even been present.

Our first novel was Steinbeck's *Of Mice and Men*. Students were happy to view the film version, but initially made minimal progress when it came to engaging with the novel. With much prompting, most students used the stacks of sticky notes made available to them to mark up the novel with ideas and questions. We used these notes to run "hot seat" discussions, enact scenes, construct character journals, and fuel further reading. Momentum built slowly, but as the class became increasingly confident and more engaged, students were increasingly drawn to the text. Dahabo, however, would sit in her group, book in hand, silent. Where other students' copies of the novel grew fat with colored notes and other signs of active meaning making, Dahabo's remained slim and closed.

During our weekly reader's conference, Dahabo initially explained her reticence by declaring that, though she understood the models and instructions offered in class, she "didn't have anything to say" about the pages she had read. The more I pushed her, however, the more she revealed. She told me that writing in response to the novel felt awkward because "my words aren't published… they can't live on the same page and mean anything."

It turned out that Dahabo's lack of entries had little to do with her comprehension or understanding of the text and everything to do with her lack of confidence in her role and voice as a reader. As I turned the pages of her reader's log, I noticed that most of her responses were graphic: she depicted her understanding of the text primarily through sketches and drawings. She explained, "I see things in pictures, and I like to write that way."

It was Dahabo's idea to try to use pictures as a means of annotating and marking her way through the novel. She saw it as a way to use her visual skills to represent her understanding, but I saw it as an opportunity for her to have a presence in the text—a visual record of her active construction of meaning. She identified a series of "logographic cues" that would signal different responses to the text (i.e., a chain link fence for an area where a theme or character connected to another text she had read, or a

question mark for those areas that generated confusion). Although she initially drew the images onto sticky notes, she later printed digital images onto stickers or added them to her response journal entries for additional reflection and writing. Her library eventually expanded to include 35 different images.

It was the use of visual images that allowed her to enter into a dialogue with the printed text, build on past knowledge, and develop interpretations she felt confident enough of to share with other students. Here, my role as teacher wasn't to equip her with a set of canned annotations (the *what* of marking up a text), but to lead her to see *how* to use her visual mode of understanding to interact with the text. Like Dahabo, students who are encouraged to use their visual intelligence when engaging with literary texts become invested in generating representations and meaning, communicating that understanding to others, and returning to the text to verify, explore, and know.

How Can Images Help Students Learn Language Arts?

Images provide ways for student readers and writers to engage with both visual and printed texts. Digital images offer the added benefit of providing immediacy, accessibility, and even a compelling "hook" into a learning task. Armed with a digital camera, students can capture what they see, often acquiring large libraries of images that are then filtered and narrowed as they work to refine their thinking and meet the specific requirements of the task at hand. Digital images provide an editable text, allowing students to revise image content or combine multiple images into one picture using photo editing software. What follows is a general (and certainly not exhaustive) list of possible uses and applications for digital images in the language arts classroom.

Digital images can help readers envision text

Good readers often visualize the action of a story, creating a mental movie of images evoked by the text. Struggling readers often lack this skill. Teachers have sought to address this issue by developing a technique called a *visual think aloud*, which takes a standard classroom reading strategy and transforms it by using video editing tools to develop image sequences organized along digital timelines.

In a traditional *think aloud*, students read printed text orally. They pause to insert their questions, connections, applied reading strategies and observations. In a *visual think aloud*, students pause to select pictures that represent the mental images the printed text has evoked, and use image editing software to arrange the images and illustrate the story they are reading.

The reading process is usually invisible. Working with a visual think aloud, however, can make steps in that process visible. Images are paired with the text that evokes them and arranged in a narrative sequence. Student readers typically demonstrate a tremendous increase in comprehension when using this strategy. The visual think aloud helps readers work with rich literary texts, developing their understanding through supported visualization. We will say more about how to create and use visual think-alouds later in this chapter.

Digital images offer a unique bridge to writing
Just as digital images provide an entry point for readers, they can also provide an entry point for writers in creating their own texts, whether narrative, persuasive, or expository.

Filmmaker Ken Burns popularized the technique of combining still images with short video clips and a narrated voice-over to create documentaries that bring history to life. Joe Lambert has since developed a variant of that technique at the Center for Digital Storytelling in Berkeley, California (Lambert, 2002). The method he developed with the Center's co-founder, Dana Atchley, allows everyday citizens to create similar documentaries of their own lives. These short digital stories can be used to illustrate a key experience or new understanding in 3 minutes or less.

The emerging art of digital storytelling allows students to combine digital images with oral narration to tell their own stories. Effective expression in this medium can be used as a bridge to writing. In some cases, the written script may precede the oral narrative, while in other instances the oral expression may be translated into written form.

Digital images allow students to communicate meaning visually
In the two previous applications, digital images serve as scaffolding to make reading and writing more accessible to students. However, there is ample justification for working in this visual medium in its own right. Ultimately, English class is not about printed characters on a sheet of paper, but about communication.

Until now, still and moving images have constituted a "read-only" medium. Digital image editing tools now allow students to write in this format, as well. The emergence of image editing software has made it possible to incorporate new and powerful communication tools into our language arts classes. For example, students have used editing tools such as Adobe Photoshop Elements to create photo collages representing their understanding of a printed text. In secondary classrooms, these have evolved into "open minds": photo collages that graphically represent a character's thoughts at a given point in the text.

Teachers can take advantage of the unique capacity of these software tools by fusing image and word. The content created communicates at multiple levels, engaging students on the same terms as media experienced outside the classroom.

Digital Image Activities for the Language Arts Classroom

The rest of this chapter summarizes some of the potential instructional uses of digital images in the language arts classroom. Anchored to specific, authentic reading and writing tasks, these activities can be directly and effectively mapped to state and national language arts standards. Each includes one or more stages of the acquire-analyze-create-communicate model. Further, each is reflective of promising practices in reading and writing instruction. Digital imaging technology can add to the efficacy of those practices by increasing the level of student engagement and giving them the opportunity to work

with multiple forms of text. Digital images can help struggling students enter texts in compelling, rich ways and allow them to insert their voices into the classroom conversation.

VISUAL READ ALOUDS

Grade Level(s): 6-8

Objectives:
Students will be able to discuss and analyze their understanding of a select reading passage.
Students will be able to develop, describe and evaluate the "mental movie" (or visualization) created when reading print text.
Students will be able to identify and evaluate the "recitation voice" and "conversation voice" created when reading print text.

NETS•S Addressed: Standard 4—Technology Communication Tools
Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

NCTE/IRA Standards Addressed: Standard 3—Evaluation Strategies
Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features.

Materials Needed: Class texts (i.e., novels, poetry, short stories, nonfiction), Art supplies, databases of images, digital camera, digital video editor (i.e., iMovie or MovieMaker)

Resources:
Allington, R. L. (2001). What really matters for struggling readers: Designing research-based interventions. NY: Longman.
Langer, J. (1995). Envisioning literature: Literary understanding and literature instruction. New York: Teachers College.

Reading aloud in the classroom is an effective strategy for improving comprehension, whether a teacher is working with low-level elementary students or highly advanced eighth graders. Literature is an invitation to experience, to question, to dialogue with others, and to see through eyes that aren't our own. Reading literature aloud allows students not only to immerse themselves in the story but also to practice, apply, and later reflect on specific reading strategies. Engaged reading is a visual experience, the text evoking an imagined story world often referred to as a "mental movie." Not only do student readers need to learn how to develop these "mental movies," they also need to be encouraged to explain, connect, and reflect on their own understanding. Students must learn to construct and communicate meaning to others, and reading aloud can help.

Readers construct meaning as they engage with the words on the page. During this stage of the reading process, students should be challenged to figure out how they are making sense of the text through their active, recursive work as readers. Here, instructional goals should include:

- envisioning the textual world
- making and testing predictions
- monitoring understanding
- asking questions
- making connections

By providing adequate scaffolding for these strategies, teachers can help students enter rich literary texts, monitor their thinking, bring ideas into discussion, and apply what they read to their own lives.

In a visual read aloud activity, students read the text, generate visual representations of the story world, and use multimedia presentation or digital video software to fuse the visual elements with a recorded narration of the text. Here, digital imaging technology allows students to create a film-like product that replicates both the visual and oral components of their "mental movie." What makes this activity different from round robin reading paired with a picture is that the reading is conducted and narrated by each student, represented through multiple and varying depictions, and analyzed and discussed by the entire class community.

The visual read aloud strategy builds from Langer's notion of "envisionment," in that student representations of the story world are "dynamic sets of related ideas, images, questions, disagreements, anticipations, arguments, and hunches that fill the mind during reading, writing, speaking or other experiences where one gains, expresses, and shares thoughts and understandings" (1995, p. 9). Through the visual read aloud, students construct a tangible representation of what they see, hear, think, and envision about the text.

There are several steps involved in constructing the visual read aloud, each of which is described below. These steps are illustrated further in the sidebar using Dahabo's work and experience in developing her work.

Acquire

Reading and Seeing. Students start this activity by first reading the printed text.
To help students use these words to envision their own "mental movie," start with a storyboard. Ask students to draw pictures (or select photos) evoked by the story, and sequence these images on paper alongside the appropriate text. Students should be encouraged to represent their ideas graphically by drawing, painting, creating collages (using Photoshop Elements or cutting and pasting images together), and/or finding or taking photos that express or represent a key element of the story. This planning stage allows students to organize their thoughts and continually revisit the text prior to sitting down at the computer to create their visual read aloud. Depending on the length of the

passage, the length of your class period, and the other tasks that students might also be completing, this step can take anywhere from one to two class periods.

Creating (and Saving) Images. Using either a digital camera or a collection of art supplies, the students' next step is to create the visual elements they wish to pair with their narration. Whether they are importing images from the Internet or a compact flash card, or scanning their original art to create a .jpg, students will need somewhere to store their work—either a portable USB disk drive or a school-provided server account folder that can be accessed from any networked computer. In my own classroom, I require students to take their photos or create their art outside of the classroom, so as to maximize their in-school computer time by focusing on importing images and beginning to work with the digital video tools.

Create

Importing Images. A multimedia presentation tool such as iMovie, MovieMaker, or PowerPoint should be used to import and organize the images, record narration, and add transitions and effects. Students must import the images into the timeline of the digital video tool, a step that should take mere seconds if they have already scanned and saved their images and have them stored in one location. Again, the storyboard can come in handy, as it helps students to sequence all of these different materials.

Recording Narration. Student record their own narration of the passage from the text. It is recommended that these files be recorded one sentence at a time, easing editing and revision. Digital video editors like iMovie or MovieMaker allow students to record audio and place the resulting files directly into the timeline. Keeping the passage to be read short limits the amount of time that students will need to spend on this step, generating a text that can be periodically re-entered and explored.

Sequencing and Rendering. The final step is for students to sequence the images alongside the narrated clips to ensure that the right words are heard when a particular image appears on the screen. Again, having a manageable passage length helps to prevent students from getting overwhelmed and bogged down. Some students might wish to add special effects such as fades, wipes, and other transitions. This should be done in moderation, only when time permits, and (most importantly), only when it helps to enrich and extend the meaning being conveyed. The last step is to "render" the movie, creating a small Quicktime file by exporting the content in the timeline.

Analyze

One thing that typically happens when students create visual read alouds is a tremendous growth in their awareness of narrative voice. Many struggling student readers do not hear a narrative voice as their eyes read over the words on the printed page. By joining visual images to an audio track they have recorded themselves, students become sensitized to narrative rhythms and patterns, helping them to hear that voice in later interactions with

printed texts. The technology allows students to hear themselves read aloud, creating an artifact they can return to throughout the class for reflection, analysis, and goal setting.

A more complicated set of voices are heard internally (and subsequently recorded externally) as students become more proficient and texts become more challenging. Tovani (2004) identifies these as the "reciting voice" and the "conversation voice." The reciting voice simply reads the words from the page while the conversation voice interacts with those same words, questioning, probing, and unpacking their hidden meanings. For most students, the reciting voice quickly gives way to the conversation voice once they begin to internalize basic reading strategies.

However, students often have a difficult time focusing that voice on the ideas and issues raised in the text. Instead, the voice follows tangents and unrelated topics. In Dahabo's case, this initially led her to stop reading completely. Her eyes pulled from the page, the book closed, and her work shifted from developing understanding to trying to get back to where she thought she was supposed to be in the task. Interestingly, Dahabo wasn't alone. The visual read aloud activity opened a space for the class to discuss narrative voice as we viewed all of the students' "finished" products.

Several students pointed out that there was an important element missing when we only included the images and the narrated audio track. As one student explained, "I wanted to include the voice I hear as I read this text because it helps *and* hurts when I'm trying to understand what's happening." When asked to identify those areas where "voice" was a distraction, several students pointed to passages with complex syntax and difficult vocabulary. They read, reread, and probed those sections in order to discern what was happening. This work eventually evolved into a visual think aloud activity (described later in this chapter) as students sought to include their thoughts, questions, and challenges in the visual read aloud they had created.

Communicate

In as much as student constructed visual read alouds are designed to convey their individual readings of class texts, they are also class texts, communicating ideas about what it means to read, how readers engage with complex texts, and how we use images to represent and convey understanding.

Essential to this visual read aloud activity is the notion of community. As Lave and Wenger (1991) explain, "Learning… is a process of becoming a member of a sustained community of practice….Developing an identity as a member of the community and becoming knowledgably skillful are part of the same process" (p. 65). The visual read aloud can be structured either as an individual or group activity, but it should always be anchored to a classroom community framework in which students are expected to share their ideas and products with one another. For meaning making to advance beyond the pairing of images and text, it is important that "individuals consider multiple ways of interpreting and view individual selves within the class community as interwoven" (Langer, 1995, p. 4).

The strength of the visual read aloud is that it allows students to read text aloud, create their "envisionment," and fuse the two together in an oral and visual product. Teachers should spend significant class time debriefing after each read aloud is viewed, exploring how the narrated text and the visual representations work to convey meaning. This process gives students "a concrete reference as they ask themselves and others: Why did you do that? What else can you do?" (Wilhelm, 1995, p. 498). Further, the end product allows students to see themselves at work as readers, making a largely invisible process quite tangible (and attainable).

SIDEBAR

Developing Dahabo's Story

At the start of this stage of the task, Dahabo was uncertain as to how to proceed. She started slowly, working to graphically represent her ideas by drawing, creating collages (using Photoshop Elements or cutting and pasting images together), and painting. She explained in a reader's conference, "now I can't just talk with the book… there is more on the line because I have to show what I see." Where some students' struggled with their ability to visually represent their ideas, Dahabo was more concerned with the way that she would be positioned in what she created. She explained, "I'm just now figuring out what I want to question and push as I read… but pairing my pictures with the words shows where I am as a reader with this book. That's risky."

Figure 1 offers only 30 seconds of Dahabo's work with Speak, her self-selected independent reading novel for the first term of the quarter. The sequence of images runs across the screen as she reads a selection from the text which, as a reader, she found to be problematic:

> "You need to visit the mind of a Great One," continues Mr. Freeman. Papers flutter as the class sighs. The radio sings louder again. He pushed my pitiful linoleum block aside and gently sits down an enormous book. "Picasso." He whispers like a priest. "Picasso. Who saw the truth. Who painted the truth, molded it, ripped from the earth with two angry hands." He pauses. "But I'm getting carried away." I nod. "See Picasso," he commands, "I can't do everything for you. You must walk alone to find your soul" (Anderson, 2001, 118).

Figure 1. Thirty seconds of video sequence from Dahabo's work with the novel, *Speak*.

The images that she chose were a combination of the logographic cues she'd used to mark the passage and Picasso images that represented her own confusion about what it meant to "see." She explained, "I'm not an artist, but I stopped as soon as I read the last line. I re-read this passage so many times, remembering what I knew about Picasso (which was weirdness – not truth), and thinking about how I see." There was also a connection to Melinda, the novel's protagonist. As Dahabo explained, "the eye is my eye but it's also hers… what pushes me into and out of this book is that I'm often her – and she's often me."

Dahabo emphasized at the close of her first experience in building the visual read aloud that she had a difficult time reaching a stopping point. She offered, "it wasn't that I couldn't pick the passage, it was that the more I worked to show, the more I saw… Reading kept happening."

LOGOGRAPHIC CUES

Grade Level(s): 5-7

Objectives:
Students will apply their understanding of how readers annotate print text to mark their own paths through select passages.
Students will use images to represent their responses to print text (i.e., connections, questions, or areas of confusion).
Students will discuss and analyze their understanding of select passages of print text.

NETS•S Addressed: Standard 3—Technology Productivity Tools
Students use technology tools to enhance learning, increase productivity, and promote creativity.

NCTE/IRA Standards Addressed: Standard 3—Evaluation Strategies
Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features.

Materials Needed: Class texts, digital camera, sticker printer paper

Resources:
Wilhelm, J. (2004). Reading is seeing: Learning to visualize scenes, characters, ideas and text worlds to improve comprehension and reflective reading. NY: Scholastic.

Instead of using conventional annotation methods when they read, in this activity students mark up texts using images that represent their responses, ideas, and connections. One of my seventh graders, for example, used a picture of his father's tool bench to indicate those moments in a text where he'd need to "break through" in order to understand what it was expressing. Logographic cues can be printed out as stickers, saved onto the classroom computer for work with electronic text, and added to student response journals for additional reflection and writing. Visual annotation through logographic cues allows student readers to have a presence in the text and encourages active meaning making as they insert images and responses onto the page.

Acquire and Create

Logographic cues can easily be created in the classroom using a digital camera (or digital image files), a computer, and a printer.

Capture and save the digital images. Students first must identify and/or capture the images to be used. The image needs to be meaningful to the student, calling attention to

something specific in the text each time it is used. Students can bring printed images from home that can be scanned, or take their own photos using a digital camera.

Print the Images. Numerous software tools can be used to resize and print images. If you already have a digital camera, chances are students can use the software that came with the camera to open the image file on the computer, select a size, and select the number of prints they would like to make.

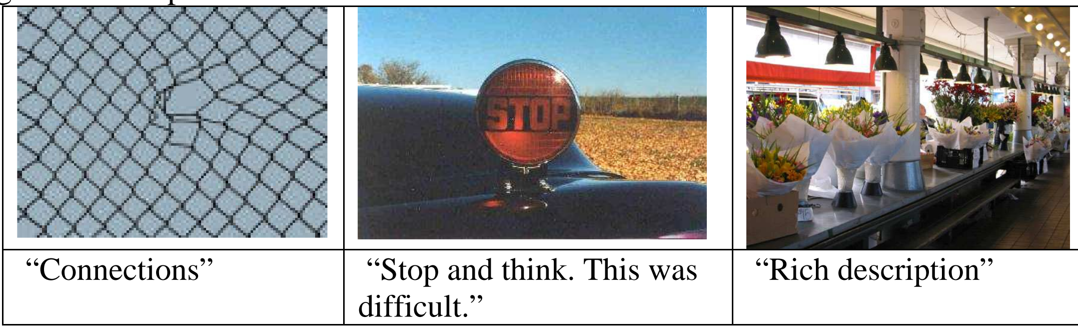
Annotate print text using the images. Although sticker paper has proven to be most useful for this task, students can also transfer the image to a sticky note or simply place it onto a textbook page as a discussion marker. It will depend on your situation (and your creativity) as to what form the cues need to take in order for your students to use them effectively for annotation.

Analyze and Communicate

In this stage, students discuss and evaluate both the images that they use to mark up text and the ways in which those images allow them to navigate the reading and construct meaning.

The images in Figure 2 are examples of cues that Sam, a sixth grader, captured and saved for use in marking up and annotating texts. Images came from his neighborhood, the school grounds, and an album of his former home in Seattle.

Figure 2. Examples of Sam's visual clues.



"Connections"	"Stop and think. This was difficult."	"Rich description"

As a reader, Sam would paste these "cues" throughout the text, explaining that he could "put more meaning into a picture than into notes in the margins." Previously, the pages of Sam's textbook were blank, containing no annotations, notes, questions, or reactions. But armed with these logographic cues, Sam quickly became a master annotator. Sam's pages of *The Giver* (Lowry, 2002) were lined with logographic cues and written notes that expanded on what he meant to signal with his cues. In other words, Sam constructed meaning through a process of representation (selecting the image for the cue), identification/connection (locating areas in the text and matching them with logographic cues), communication (placing the image and supplementing with written notes), and interpretation (making meaning by considering the text, the image, and the notes.) Sam's metaphor was that the cues functioned as road signs, "showing [him] how to work through the words on the pages."

In subsequent work with literary texts, Sam continued to annotate extensively, using a combination of consistent logographic cues and marginal notes. These tools provided him with a means to decipher, consider, and dialogue with the ideas on the printed page. Sam also began participating in class book talks and Socratic seminars, now able to draw on direct textual references drawn from these textual notes.

VOCABULARY PICTURES

Grade Level(s): 4-8

Objectives: Students will be able to define vocabulary terms.

NETS•S Addressed: Standard 5—Technology Resource Tools
Students use technology to locate, evaluate and collect information from a variety of sources.

NCTE/IRA Standards Addressed: Standard 9—Multicultural Understanding
Students develop an understanding of and respect for diversity in language use, patterns and dialects across cultures, ethnic groups, geographic regions and social roles.

Materials Needed: Class vocabulary lists, digital images, printing materials

Web Resources and Software: www.flickr.com (a tool for organizing images), Photo editing software (i.e., Photoshop Elements or iPhoto)

Fran Claggett (1992) described an activity in *Drawing Your Own Conclusions* in which students "draw their vocabulary words." The task challenges students to think carefully about the meaning of the words they are studying, and is designed to improve their understanding and retention. Claggett's strategy can easily be modified for use with digital cameras.

Acquire

Ask students to take photos that represent vocabulary terms they are currently studying. Grade level vocabulary lists tend to be static, lacking a context outside of the classroom assignment. Here, students collect images by "reading" their community in an attempt to find "visual definitions" of required vocabulary terms.

The value of this activity can be summarized in these words from a fifth grader: "Taking pictures lets me understand the definition of the word on my own terms. I picture the word, create the picture, and then start to know the word." As opposed to memorizing words on a list, students are actively constructing meaning of terms and connecting it to their lived experiences outside of the classroom. Figure 3 shows three examples of an eighth-grader's "visual vocabulary."

Figure 3. Examples of vocabulary pictures

“Cumulative”

“Intermittent”

“Voice”

Communicate

Images can be posted to a class “word wall,” which ultimately challenges students to develop a shared visual library.

An extension of this activity would be to challenge students to record literacy events experienced outside of the classroom. In *Changing Our Minds: Negotiating English and Literacy*, Myers (1996) explains that speech events are an essential part of situated knowledge, offering students opportunities not only to study language in action but also to examine differences between presentational and conversational modes of communication. Extensive discussion in class subsequently explores how students can use images to capture oral texts and bring meaning into being. Building on student visual and verbal literacy skills, these images can be paired with written reflections that explain the event, what meaning it represents, and how it enriches, complicates, or challenges student’s understanding of literacy.

VISUAL LITERACY NARRATIVES

Grade Level(s): 4-8

Objectives:
Students will be able to use images to communicate intended meaning.
Students will use their understanding of their experiences and work as readers to have richer, more successful interactions with print text.

NETS•S Addressed: Standard 4—Technology Communication Tools
Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

NCTE/IRA Standards Addressed: Standard 5—Communication Strategies
Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.

Materials Needed: digital camera, digital images, multimedia presentation tool or digital video editing software

Resources:
Myers, M. (1996). Changing our minds: Negotiating English and literacy. Urbana: National Council of Teachers of English.

One of the most powerful writing prompts in a language arts classroom is to ask students to write about their own experiences as readers and writers. Literacy narratives invite students' own stories and experiences into the classroom, providing a writing space where students can explore what they know about their own literacy skills and experiences. As Myers points out, "Reading and writing are acts of self definition," (1996, p. 130), and the literacy narrative is a space for students to explore those selves.

Visual literacy narratives require students to construct a digital story, using PowerPoint slides, iMovie, or Adobe Premiere, to communicate their experiences as readers and writers. For example, Pacey, a seventh grade student, wrote about the school media center and his introduction to reading outside of the classroom. Using images of the media center and the stacks of books that he had explored (see Figure 4), this student's visual narrative both showed a reader in action and celebrated the people who had passed a book his way. The narration paired with his original images included the following passage:

> I don't hang out in libraries. I stopped in the media center because it was the one place that wasn't littered with kids that I didn't know and who didn't seem at all interested in the Navy brat who had just stumbled through the door. The librarian, Mrs. Pearson, noticed me, called me over and handed me a card. I didn't know what to say or think. She thought I was a reader. The card had my name on it, and there was something oddly attractive about how the plastic cover caught the light. She handed me a book and nodded toward the couch in the corner, away from the window. It was as if she knew.
>
> It took me forever to read. I was so slow that I'd forget what was on the top of the page by the time that I'd worked my way down to the bottom. That first book took me over a month to finish, and I can't even tell you its title. What I can tell you is that I kept coming back, and, each time, she handed me a book to get lost in. She wasn't just giving me books. She was giving me a window into a world I'd never known.

Figure 4: iMovie Timeline segment to a seventh grader's visual literacy narrative

Acquire and Create

In this activity, students use a variety of original still, moving and scanned images, which they arrange in a timeline.

Pacey used a digital camera to capture short, 10- to 30-second videos demonstrating the paths he had taken as a reader. When placed alongside still images of books and passages in which he narrated what it meant to think and work as a reader, these videos added up to a powerful, authentic, reflective narrative of where this student was and where he wanted to go next as a reader. Further, it provided us with a "text" of his reading to which we were able to return throughout the semester to track his progress and skill development.

Communicate

The audience of students' visual literacy narratives is other readers and writers, expanding the class community and offering rich opportunities for authentic response and assessment.

In as much as Pacey's visual narrative provided him with a space for self-reflection about his own work as a reader, it also challenged him to communicate those ideas in a way that would be accessible and meaningful to other readers in and beyond the classroom community. Although on one hand, Pacey was the primary audience of his work, his peers, his teacher, and any viewer made up a larger audience. Further, they were an audience who needed to walk away from viewing his work with an understanding of his experience and valuing his story. Pacey's classroom teacher held a public screening of the narratives, inviting teachers, parents, and community members to participate in the audience. Students "opened" each piece with a description of their work and an invitation for feedback from the audience. After each was shared, students debriefed with the audience, establishing connections and building community as readers, and focusing on those areas of the story that were the most powerful or resonant for the viewers.

Visual literacy narratives capture a student's understanding of his or her literacy or literate experiences within a particular moment of time. That said, each functions as an artifact suitable for portfolio reflection and written peer review. Students might also revise their story throughout the semester, reflecting the growth and experiences provided throughout the semester.

VISUAL THINK ALOUDS

Grade Level(s): 5-8 Objectives: Students will be able to discuss, analyze and evaluate their comprehension of a select passage by examining their mental movie, readers' voices, and think aloud responses.

NETS•S Addressed: Standard 3—Technology Productivity Tools
Students use productivity tools to collaborate in constructing technology-enhanced models, preparing publications, and producing other creative works.

NCTE/IRA Standards Addressed: Standard 3—Evaluation Strategies
Students apply a wide range of strategies to comprehend, interpret, evaluate and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features.

Materials Needed: Digital camera, digital images, class text, digital video editing software (i.e., iMovie or MovieMaker)

Resources:
Cunningham, P. M. & Allington, R. (2003) Classrooms that Work: They can ALL Read and Write. Third Edition. Boston, MA: Pearson Education, Inc.

Harvey, S. & Goudvis, A. (2000). Strategies that Work: Teaching Comprehension to Enhance Understanding. Portsmouth, NH: Heinemann.

Wilhelm defined the act of reading as the "reader's evocation of the text as imagined, visualized, and experienced" (1995, p. 120). Engaged reading is a visual experience, the test evoking an imagined story world in the mind's eye. Not only do student readers need to learn to develop these "mental movies" from the words on the page, they must also learn to explain, connect, and reflect on the text via their own storytelling, thereby constructing and communicating meaning for others.

The think aloud is a well known and effective research-based practice commonly used in reading instruction. In a think aloud, readers read the text out loud, pausing at intervals to insert their own comments and reflection. This strategy makes the mostly invisible reading process tangible and open to discussion and analysis. Think alouds can be presented either orally or in print; a written think aloud challenges the reader to record responses, thoughts, questions, and ideas next to the text segments that are being addressed. Expert readers use the think aloud as a space for inference, connection and elaboration, whereas novice readers typically use it as a place to connect details and develop a literal reading. Think alouds can demonstrate and model what good readers do, showing how they apply strategies to envision the text and keep all of the information straight.

The visual think aloud reworks this strategy by fusing oral and print texts with digital images, depicting the interpretive work of the reader through the visual imagery elicited by the text.

Acquire and Create

Using digital images and digital video editing software, students create a short digital movie that includes a visual representation of their imagined story world, together with two narrated audio tracks. Students can take their own pictures or scan original or found art. One of the audio tracks is dedicated to their verbatim reading of the story (the read aloud). The second is used for inserting their think aloud comments and connections. The finished product fuses the read aloud and think aloud, using digital images and video software to communicate the reader's unique understanding of the literary text. Students use the visual think aloud framework to infer, predict, connect, decode, and converse with the author.

The steps in creating a visual think aloud are similar to those in the visual read aloud, except that students are working with two audio tracks, not just one.

Reading and Responding. Students should start capturing their "conversation" with the print text as soon as they begin reading. Equipped with sticky notes or pads of paper, students should note areas in the text where they see connections with another book or a prior experience, questions that come up as they read, observations about the writer's style, predictions, evaluation comments, or any other "aha" moments.

Storyboarding and Creating Images. In the next stage, students compile their notes and plan a visual component to go along with them. Students can use paper and pencil (or software such as Inspiration) to map each image, technique, and element of their envisioned story world, pulling it all together to construct a storyboard.

Importing images. Students import their images into the digital video timeline—a step that should take only a few seconds if they have already scanned and saved their images and stored them in one location. The storyboard comes in handy for sequencing the images appropriately.

Recording narration. Students first record their read aloud of the print text. Next, they record their think aloud notes, inserting them into the video's second audio track (see Figure 5). Each audio line will color the track differently (i.e., Track 1 files are purple, and Track 2 files are orange). It is recommended that an additional layer of organization be added to clarify the naming of files: read aloud sentences should include the letters "ra" in the file name, while think aloud sentences should include the letters "ta." For example, the first sentence of a think aloud could be saved as "1_ta," and the second sentence of a read aloud could be saved as "2_ra."

Figure 5: iMovie time line from a student visual think aloud

Sequencing and Rendering. At this stage, students sequence the images with the two audio tracks, while possibly adding special effects and transitions to signal those

moments where the “viewer” needs to pay particular attention to what is being said. Most students, however, will probably use little more than “fade” or “wipe” transitions and an occasional pan across an image. The final step is to “render” the movie, creating a small Quicktime file by exporting the content in the timeline.

Communicate

Students work within the visual think aloud to present their work as readers when engaging with a print text. Although the audience is largely themselves, students are also working collaboratively with others in the class literacy community to develop readings, articulate strategies, and represent their processes.

When used in the classroom, the visual think aloud opens a space where individual student voices can be heard. Our experience with this strategy has confirmed Beers’ (2003) view that “it’s more critical for dependent readers to talk about texts during the reading than after it” (p. 104). With a bit of scaffolding, work on a visual think aloud project empowers students to talk about texts before, during, and after their reading. Further, it provides an immediate opportunity for teachers to provide guided practice, conference about understanding, and assist with higher order thinking skills.

Reading is not just about “decoding” a printed text, it is also a process of encoding it with personal meaning, and the visual think aloud provides a perfect vehicle for doing just that. One student described it best, offering that her work on a visual think aloud project “was the first time that reading actually made sense.”

One reinvention of the visual think aloud activity just described is to use the second audio track to record a *class* think aloud. Instead of focusing on an individual reading, interrupted reading allows for multiple student voices to enter into conversation with the text, interrupting a read aloud to talk about some aspect of the text. This strategy is very useful for modeling active reading strategies to the full class and can invite reluctant student voices into the larger class discussion. It can also work well with small groups.

No matter how this technique is adapted, the fundamental elements are the same: students create a visual representation of the story world; they record themselves reading the story and save this as one audio track; they record a second audio track with responses, questions, comments, and reflections from as many group or class members as possible.

Sidebar – Managing the Technology

For all of these “during reading” activities, it is important to make sure that the technology adds instructional value to the task and doesn’t become a distraction unto itself. Many of these same tasks can be accomplished using magazines, scissors, and construction paper; however, software tools like iMovie or MovieMaker allow students to generate short, animated films that more authentically represent the way they see the “mental movies” evoked by a text.

Yes, learning how to use these software tools requires a greater investment of time, but that investment is usually paid back many times in increased understanding and student use of effective comprehension strategies. Many of the activities described in this chapter were student-initiated, building from the unique talents and skills they brought to the classroom. Whenever using new technology tools in the classroom, teachers should ask themselves the following questions:

- What is the value added by using technology in this activity?
- What are the resources at my disposal?
- What do I need to know in order to make this work?

Next Steps: An Invitation to Reinvent

Learning isn’t primarily about absorption or transmitting knowledge; it’s about thinking and providing students with authentic experiences to transform what they know. What my colleagues and I have discovered in the short time we have been working with digital images in the language arts classroom is that effective teaching practices paired with powerful technologies provide student readers and writers with unique experiences that can transform their understanding of texts, words, and images. Literacy demands that students communicate and make meaning from a variety of texts, all of which must be incorporated and understood within the context of their personal lives. All language arts teachers want their students to become lifelong readers, writers, listeners, and thinkers—and perhaps even seers.

Incorporating digital images into the curriculum provides students with new, engaging opportunities to work with and create texts. Reading instruction is about leading students to a more complete and complex understanding of how texts work and what strategies good readers and writers use to unlock their secrets. The activities described in this chapter can add to a student’s toolkit of reading strategies and, more importantly, their modes of entry into rich literary texts. Images allow students to represent what they think they know, connect the new to the known, and express their understanding in ways that are visual, auditory, scholarly, and powerful.

These activities and strategies are, of course, just the beginning of what we anticipate to be a much longer list of practices for leading students visually and verbally into close, mindful interactions with text. They are simultaneously a glimpse of the possibilities and an invitation for teachers to examine, invent, reinvent, and join in the conversation.

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