LEARNING connections

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Digital Storytelling

By Regina Royer and Patricia Richards

eeting the needs of struggling readers in today's classrooms is a challenge. Teachers are called on to enable students to meet core content standards while at the same time facing the reality that many middle and high school students still need to learn to discern meaning from printed text. Students can decode the words but often cannot answer questions about the meaning. With a bit of adjustment, digital storytelling will not only engage students in developing technology literacy, writing skills, and specific curricular content but also improve their reading comprehension.

The following discussion outlines the alignment between digital storytelling and the 16 recommended strategies for reading comprehension from the National Reading Panel and Allington's five pillars of effective reading instruction. (See Effective Reading Instruction on this page.)

Success Strategies

Active listening. Active listening involves listening to comprehend and remember. The National Reading Panel concluded that reading aloud, rereading, and one-on-one feedback from an active listener are all essential for the success of fluency teaching. Have students listen actively to their peers as they read their digital storytelling narratives for editing purposes.

Cooperative learning. Cooperative learning has four key characteristics: delegation of authority, shared responsibility for learning, mixed-abil-

ity grouping, and complex academic tasks. Have students work in groups to create group digital storytelling projects and/or to provide feedback when editing individual projects. Give students specific roles and responsibilities to create group and individual accountability.

Fluency. Fluency is the ability to read aloud with accuracy, speed, and expression. Effective instruction for oral fluency has three key components: oral reading, repetition, and guided feedback. Have students work one-on-one with partners to read and rehearse their narratives multiple times until they can read them expressively with ease.

Graphic organizers. Graphic organizers help students identify the structure of text and increase memory of the content they read. They provide a framework to help students understand the relationship between ideas. Creating graphic organizers for their own digital stories can help students identify the structure in their own as well as others' texts. Have students provide story maps of their projects before writing their narratives. These will resemble storyboards used for movies, which integrate the visual as well as the verbal flow of the story. They may be linear or nonlinear.

Mental imagery. Mental images help students comprehend and recall text. Have students critically evaluate the meaning of images that they choose to illustrate their narratives. Encourage strategic selection of images that could provide literal or symbolic representations.

Effective Reading Instruction

The National Reading Panel was convened by Congress to address the demands of the No Child Left Behind act and determine research-

based reading strategies. The panel examined 205 empirical studies of reading comprehension instruction and ultimately recommended 16 strategies. These strategies fell into the categories of phonemic awareness, phonics, fluency, vocabulary and comprehension, which became known as the "five pillars" of reading instruction. While the National Reading Panel report investigated research conducted in controlled settings, Allington examined descriptive studies and added five additional "pillars" of effective reading instruction.

Question asking. Asking questions prior to reading helps students develop a purpose for reading. The strongest scientific evidence was found by the National Reading Panel for the effectiveness of asking readers to generate questions during reading. Encourage students to ask questions throughout the process of developing their digital stories. Have students ask questions prior to reading content selections as they gather information and prior to listening to their partners' narrations of their own stories.

English Language Arts

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This graphic organizer illustrates how to use technology to foster reading competence through digital storytelling.

Reciprocal teaching. Reciprocal teaching includes the gradual release of control from the teacher to the student. The teacher carries out the task first and demonstrates for the students, explaining the task and thinking aloud. Once the task is modeled, the teacher has the students perform the task with the teacher still scaffolding the activity. Finally the teacher attempts to give the students the responsibility to carry out the task independently. This gradual release of responsibility has sometimes been explained as "I do it, We do it, You do it." For digital storytelling, model aspects of digital storytelling. As with any multimedia project, we urge teachers to create their own digital stories first, to ensure that the project can be completed with given resources and to identify aspects of the project that students might find difficult. Use reciprocal teaching to model questioning when gathering information, summarizing, story mapping, the writing process, and/or selecting appropriate images. *Sequencing.* Sequencing helps students identify the structure of text. Have students provide a storyboard of their projects to identify the appropriate order of events.

Summarizing. Summarizing helps students identify main and supporting details. The experience of summarizing content or personal narratives helps students learn to identify important details and determine their relationship to each other. Additionally, the limitations of digital storytelling, usually 3–4 minutes each, force students to identify important details. Have students create graphic organizers and storyboards to identify the important details to include.

Vocabulary. Extensive vocabulary helps extend prior knowledge, a prerequisite for comprehension. Encourage students to incorporate new, interesting, and aesthetically powerful word choices in their stories.

Allington's Five Pillars

Writing. Reading instruction is most effective when combined with writing instruction.

Over a decade ago, Rob Tierney and Tim Shanahan summarized the research on reading–writing relationships in the second volume of the *Handbook of Reading Research*. Since that time, researchers have simply added to the evidence that reading and writing have reciprocal relationships with each other. Composing can enhance comprehension. Spelling can facilitate decoding. And so on. (Allington, 2005)

In digital storytelling, the process approach to writing is particularly powerful because the success of the idea (prewriting), the first version (draft), revised versions (revision and editing), and the recursive nature of the process are authentically realized in this multimedia publication format.

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The impact of language and word choices and of phrasing and punctuation are concretized in the written-tooral narration process.

Access, choice, and collaboration.

Providing students easy access to an array of interesting texts, giving students choices about what to read, and allowing for opportunities to collaborate with other children while reading increases reading achievement. To integrate this strategy into digital storytelling, allow students to select their own topics for personal narrative. Build into the process as much opportunity for student choice as possible, while still focusing on content area goals. Finally, provide ample opportunity for students to collaborate throughout the digital storytelling process to create a personally meaningful, socially appropriate, culturally authentic product.

Differentiated reading instruction.

Because children differ, no single text or any single task can be appropriate for all children in a classroom. In digital storytelling, students use their own language and experiences, much like the language experience approach—to access, adjust, and add to their background knowledge and expand reading capabilities in the areas of comprehension, vocabulary, decoding, and fluency.

Classroom organization. Effective reading instruction provides a balance of whole-group, small-group, and side-by-side lessons every day. To integrate this reading strategy into digital storytelling, allow students to work independently and collaboratively with peers and with the teacher. Provide the necessary instruction and scaffold students in acquiring the necessary reading, writing, research, and media skills to create digital stories.

Expert tutoring. Struggling readers benefit enormously from access to tutoring. In fact, the evidence on

this is so clear that it is one of only two research findings that have been included to date on the U. S. Department of Education's list of "Gold Standard" findings (www.ed.gov). When designing digital storytelling activities, provide opportunities for peers to support and mentor each other using the roles of filmmakers to create their finished products. Literacy development is social and cultural. Expert peers can provide a zone of proximal development that fosters literacy development in less capable peers who struggle as readers and writers.

Implementing the Strategies

The strategies described show the potential for digital storytelling to foster literacy development and increase reading comprehension. However, when planning digital storytelling instruction, teachers must carefully consider their specific content goals and the literacy goals they wish to emphasize through digital storytelling.

For example, active listening may be a secondary rather than a primary objective and can be addressed incidentally rather than explicitly. It might be included on the final assessment instrument bundled with some other incidental objectives, such as expert tutoring, cooperative learning, reciprocal teaching, and student choice and access to interesting texts. Major objectives might include appropriate level texts, fluency, vocabulary development, and summarizing.

Digital storytelling can build content knowledge and support struggling readers by providing differentiated reading and writing activities at each student's level of successful challenge. Students' digital stories can span a range from simple personal narrative to complex, research reports.

Collaboration among students of varying achievement levels and conscious planning on the part of teachers to scaffold the reading challenges can ensure success for all students. Students create authentic 21st-century multimedia literacy products similar to those they encounter and value outside of school.

Resources

- Allington, R. L. (2005). The other five "pillars" of effective reading instruction. *Reading Today*, 22(6), 3.
- National Reading Panel Report. (2000). *Report* of the National Reading Panel. Washington, DC: National Institute of Child Health and Human Development and the U.S. Department of Education.



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HomePage

Books

iste

(Psst ... Home page books coming soon! Pass it on.)

www.iste.org/bookstore

Library of Congress Has Old and New Resources

Millions of primary sources can be found on the Internet, and the resources continue to expand. Primary source documents such as original letters, photographs, and newspaper articles tell us something different from the secondary source interpretations found in social studies textbooks. By using technology to go beyond the textbook, we can teach children how to construct historical understandings.

The standards of time, continuity, and change established by the National Council for Social Studies (NCSS) provide us with guidance for using primary sources in teaching history. The guidelines outline the importance of historical teaching in which students link the past with the present and develop an understanding of multiple perspectives.

Beginning in 1991, the Library of Congress opened its Internet doors with online access to vast amounts of information. And true to Thomas Jefferson's purpose, the Library continues to promote education. Millions of original documents, once only available to historians, have been digitized and are ready for classroom use.

In addition to primary sources sorted by time periods and themes, there are also collections that have been packaged in an interactive format to provide an engaging approach for historical inquiry. The Library of Congress database of primary sources enriches teaching when used with literature or in a lesson plan.

Click on the Teacher link to discover a wealth of resources for teaching and learning. Use the new Classroom Materials Finder to access a searchable database of resources, categorized by



The Learning Page, a resource specifically for teachers, has lesson plans that promote historical inquiry.

grade level, topic, and era to simplify the task of locating digital resources. Lesson plans available at the Learning Page help teachers to build understanding of historical inquiry in elementary classrooms.

In addition to a searchable database, teacher resources are divided into collections. One of these, American Memory, is an online archive of more than 100 unique collections important to America's heritage. More than 10 million primary source documents can be found at this Web site including photographs, films, and recordings that reflect a collective American memory.

Gail Petri, author of "The American Memory Collections from A to Z," advocates combining literature with primary sources. Literature that tells stories of America's past is enriched with primary sources that make the stories real. A plethora of narrative and expository tradebooks provide historical insight when used with primary source documents. The Library of Congress offers the elementary teacher a wealth of resources that enrich units planned around holidays such as Columbus Day, Thanksgiving, and Black History Month.

The Learning Page is a useful entrance to the American Memory archive, featuring activities and tips for using the collection in the classroom. In the early grades, teachers can access primary sources to make the periods of time real to young learners. The Learning Page is an excellent starting place for exploring the world of digital artifacts.

When students use primary source data to examine historical events, they are developing observation and reasoning skills. They learn the process that historians engage in as they investigate and interpret the past. PowerPoint time lines, simulated journal entries, and presentations provide students with opportunities to share their historical constructions. Using digital

By Judy Britt

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Social Studies



The Waldseemüller map, the first to depict clearly a separate Western Hemisphere and to use the name *America,* is one of millions of primary source documents available at www.loc. gov.

Even great thinkers make revisions. This rough draft page of the Declaration of Independence illustrates some of the changes that were made in crafting the document, which can be accessed at www.loc.gov.

opportunities that enrich historical understandings for K-12 students.

By engaging students in historical inquiry with on-

line exhibits and interactive activities, teachers can extend learning beyond what could be done without technology. The Library of Congress Experience offers hands-on interaction with rare cultural treasures in ways that inspire and engage. Silverlight technology provides teachers and students with the ability to access, manipulate, and interpret raw materials of our past.

artifacts available at the Library of

of people and events in history.

Congress, students conduct historical

research to construct the significance

The Library of Congress Experience

Beginning in 2008, the Library of Con-

gress initiated an immersive, "Library

of Congress Experience," offering both

walk-in and online visitors unique his-

torical and cultural treasures brought

to life through cutting-edge interactive

technology and a companion Web site.

housed at the Jefferson Building in

Washington, D.C., comprises a series

of new ongoing exhibitions, dozens of

interactive kiosks, and awesome mul-

timedia access to artifacts. The online

access to digital resources and the use

of interactive technologies make the Library of Congress and its collections

more dynamic and accessible than

ever. Today's social studies teachers

can take advantage of these innova-

tive technologies to extend learning

The Library of Congress Experience

Silverlight is a cross-browser, crossplatform, and cross-device plug-in for delivering the next generation of media experiences and rich interactive applications for the Web.

Artifacts like the Waldseemüller map (the first to include the name *America*), the rough draft of the Declaration of Independence, and original volumes from Thomas Jefferson's Library can be viewed online. Using Flash, students can explore the books on the shelf. Turning pages is accomplished with a click of the mouse.

Personalizing the Library of Congress experience is made possible with one of the library's new online tools. By logging onto myLOC.gov, the new personalized Web site available at the Library of Congress, elementary teachers can continue their exploration of the world's largest collection of knowledge, culture, and creativity. By adding lesson plans and links to collections and exhibits, teachers can save their explorations of the library's collections.

Learning history becomes meaningful when students and teachers explore digital resources that foster historical inquiry. Lesson plans, documents, and a range of artifacts provide today's elementary teachers with access to old and new technologies that make history real to their students. The world's largest library continues to provide rich historical resources for social studies learning in the elementary grades.

Resources

Library of Congress: www.loc.gov LOC personalized Web site: myLOC.gov National Council for Social Studies: www.socialstudies.org Silverlight: http://silverlight.net

—Judy Britt is an assistant professor in the Department of Curriculum and Instruction at Winthrop University in South Carolina. She is a former classroom teacher and technology coordinator, who promotes technology integration in the elementary classroom.

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Succeeding at Math

otivating students to want to learn math is a challenge many teachers face on a daily basis. As a teacher for a nonprofit organization dedicated to creating opportunities for at-risk children, I am challenged to instruct those students deemed unreachable. Integrating technology into the classroom was the carrot I needed not only to motivate, but also to reach the unreachable.

My students are placed with Holy Family Institute by the courts for reasons of abuse or neglect or are referred by schools because they have significant emotional and behavioral problems. I teach a multi-age classroom. Many of my students have never excelled at school. In fact, most are working significantly below grade level. Some have even built a wall of defiance that completely interferes with their ability to learn.

With a classroom this diverse, I needed a technology that was not only extremely adaptable and flexible, but also provided me a way to customize each student's independent learning path and motivate each to learn math and build self confidence. After reviewing a number of technology solutions, I decided that Apangea Learning's SmartHelp best met the needs of my students.

Merging Two Technologies

In the computer lab, Holy Family Institute implemented NetOP to allow me to monitor what content was being viewed on all 24 computers and provide me with the ability to take control of any computer and close down inappropriate sites.

SmartHelp provides my students great feedback as they work through problems. However, my students can



The marriage of NetOP and SmartHelp allows teachers to monitor multiple computer screens and help several students at once.

become easily frustrated and often act out. I was faced with a major challenge: I not only needed to monitor the activity of all my students, but I also needed a way to provide personalized instruction to my students needing additional help.

I pressed our IT department to figure out a way to marry NetOP and SmartHelp. My perseverance paid off, and integrating the two technologies provided the perfect solution to my dilemma. I can now monitor an entire class while providing individualized instruction. And it has saved me from running around from desk to desk, improving my response time in helping students by at least 75%.

I can take over any student's mouse and explain to them what they need to be looking at or where they need to click next to find information. I then give them back the control and watch to make sure they understand the concept or directions I gave them. This also helps with my students who have personal space issues from past problems of abuse because I don't have to hover over them. From my central position I can monitor the rest of the class to make sure that behaviors are not out of control.



SmartHelp's math content is based on state academic standards and on student grade and performance levels.

Additionally, students sitting right next to each other never know if the other is asking for help. Students can get the help they need without having to look vulnerable to the rest of the class. As a result, students have begun to break down the walls they built up, and they now feel comfortable asking me for help.

Helping Students Succeed in Math

SmartHelp's math content is based on state academic standards and on student grade and performance levels. The program allows me to customize each student's learning pathway and even make changes to it on the fly. I am able to tailor its content, level of difficulty, and even the amount of help my student receives so that true individualized instruction is possible.

SmartHelp provides my students a one-student-to-one-teacher differentiated learning experience through a unique tutoring model that integrates proprietary tutoring technology and live, online certified teachers. Initially, my students received instant support and guidance from its computeranimated learning coaches. If they required more specific help, they received individualized assistance

By Scott Huffmyer

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Mathematics





Praise and encouragement through Smart-Help motivates students to work harder. When students struggle, SmartHelp teaches problem-solving skills.

It has been very interesting to observe how SmartHelp's new motivation system has engaged my students and made them want to learn and work through math modules.

in real-time from Apangea Learning's live, online certified teachers who would communicate with them through interactive voice, chat, and electronic whiteboard technology.

Additionally, this system provides a number of administrative tools that keep me informed of which students need help and with which skills. Most importantly, it always addresses the specific learning needs for each student.

During my 14 years of teaching, I have found that many students aren't engaged because they can't conceptually work through a problem. They struggle to read a problem and decipher what is important and how to apply it. Smart-Help teaches my students problem solving skills. SmartHelp gives them a new way to look at solving math by teaching them a five-step problem-solving process that helps them break down any problem into manageable steps. Each time students work through a problem, this process is reinforced and it chips away at the walls they have built. It stresses a skill set that can be used to address many different types of problems encountered inside and outside of the classroom.

When students complete a math lesson or even a module, it reinforces that they can do it, and it builds self-pride and confidence. One of my students last year taught himself advanced math concepts through SmartHelp. He was successfully working through problems on material he had never done or seen in a classroom or textbook.

Similarly, many of my students have never been rewarded or even praised for doing well in school. It has been very interesting to observe how SmartHelp's new motivation system has engaged my students and made them want to learn and work through math modules. Because of the rewards provided, they actually see tangible results that correlate to their effort.

Perhaps a student said it best: "Math is a lot cooler if you can learn it on a computer." I think that I would have to agree.

—Scott Huffmyer is coordinator of Computer Assisted Instruction at Holy Family Learning in Pittsburgh, Pennsylvania.

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Robotics for All Learners

ngaging students in inquirybased instruction is a great way to develop conceptual understanding, content knowledge, and scientific skills. Using scientific inquiry and math skills, this hands-on project on robotics is a wonderful way to incorporate mathematics, science, real-life concepts and principles into elementary classes with students of all ability levels. Robotics also addresses visual, kinesthetic, and auditory learning styles and is an attention grabber for elementary students.

Automata—simple machines that include moving parts such as gears, cams, ratchets, pulleys, and cranks are a marvelous way to introduce small machines that use most of the mechanical processes found in almost every modern machine.

Working in pairs, students use the Internet to research simple machines and basic mechanics with a focus on gears and cranks and share their findings with the class. Group students with special needs with students that are highly motivated and stay on task. To accommodate all levels, it is a good idea to begin the unit by previewing vocabulary terms. Show students pictures of different types of moving parts before sending them off on their own to explore. You can also show them a video on simple machines from http://streaming.discovery education.com.

Next, have students explore automata—sometimes referred to as mechanical toys or kinetic art—and determine what simple machine/automata they would like to build based on what information they have learned at this point. Have students explore the site www.howstuffworks.com for home-

By Stacey Bayley and Lytania Mackey

work to learn more about their chosen machine. The site shows how things found in your household can be taken apart—a wonderful way to see how something works. Having students actually take something apart is another great component to these lessons. Students construct their machine, which includes some sort of gearing and/ or crank mechanisms, by using heavy stock paper to keep the construction costs down. Have students take digital photos or movie clips of key steps and challenges.

Next, students design a presentation that includes what they learned about simple machines, how and why they work, why they chose to construct their machine, any obstacles along the way, and how they solved those problems. Make sure they know you expect high-quality presentations by designing and handing out a presentation and project rubric when you are explaining the requirements. Allow the use of PowerPoint, iMovie, or Windows Movie Maker, and/or the use of still pictures or video clips of the process.

The most amazing part is how involved special education students are throughout the process, as many don't realize what they are learning, and they think they are just making something. In the words of one pupil it's "like art class."

Once the students understand the basics of simple machines they are able and more prepared to begin working with robotics using LEGO kits. The students start by building a robot. They must be able to work cooperatively and follow directions given to them. Put students into small teams (4–5) with assigned jobs: engineer, programmer, troubleshooter, tester, and recorder. Provide a rubric



Flying Pig Paper Animation can teach kids how to construct devices using card stock.

and clear expectations that individual and group work and cooperation are mandatory. The jobs rotate each day so everyone has a chance to do each one throughout the build and programming portions. It is important to design your own rubric to encompass your personal expectations and how many points you want to allocate.

After the build is complete, the robots are ready to be programmed using the software that comes with the kits. Introduce the programming using an LCD projector so the entire class has the opportunity to see what blocks can be chosen and what help options are available within the software. When students begin programming, the mathematical concepts that can be instilled are countless. For more advanced concepts or programming challenges you can add sensory options or additions such as arms or other moving parts.

Students of all learning levels show an incredible amount of interest in the entire process and choose to form groups inside and outside of school to work on other, more advanced automata and robotic projects.

Robotics units encourage excitement and motivate students to learn in the science and math classrooms

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Science

howstuffworks



Internal Combustion

The point, and an even the basis perceptive behavior any processing research constraints response if perperception of the processing the basis generalized as which, we choose basis and spatial is a simulation answer of a transport of the processing the basis of integration generalized as a simulation of the second second



How Stuff Works shows how common household machines can be taken apart. while meeting the rigorous demands of state standards and special education students. Making minor changes in a classroom can greatly increase the success of the special education population. When using the computer to present in class, make sure the text and contrast are adjusted for any students that have visual learning disabilities. Having all your documents on a computer with a Kurzweil 3000 system allows the materials to be read aloud, enlarged, highlighted, and easy to follow. Speaking clearly, repeating instructions, and making all expectations of the project clear at the beginning are easy ways to make sure all learners understand. The reward is a community of diverse learners who boast self-confidence after mastering areas in two subjects with which many students struggle.

Resources

- Automata provides a history, introduction to mechanisms, templates, and other links: www.automata.co.uk
- Automata Store lists many different books on this subject: http://astore.amazon.com/ dugnorth-20
- First Lego League is a foundation that offers information and support to form clubs and enter LEGO League challenges: www. usfirst.org
- Flying Pig Paper Animation Kits offers paper kits to make animated models out of card stock: www.flying-pig.co.uk/

—Stacey Bayley has taught math in grades three, four, and six for more than 12 years in Las Vegas, Nevada. Both have just completed their master's degrees in technology in education from Lesley University, where they met and collaborated in several classes on many different group activities and papers.

-Lytania Mackey is a high school biology teacher in Swampscott, Massachusetts, with five years of experience teaching middle school science. After receiving her master's in technology in education from Lesley University, she is currently working toward a CAGS in Educational Leadership.



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Inspiring Students with Special Needs

f you're a general education teacher with inclusion students, you may be surprised how thoroughly graphic organizer software supports students of all abilities across the curriculum. And if you're a special education teacher like me, you'll welcome the accessibility features for students with learning, physical and health disabilities, including students with low vision.

The graphic organizer software I use is Inspiration, which gives you a visual representation of concepts and their relationships by linking ideas, pictures, symbols, and text. It provides different colors, shapes, fonts, and patterns to group and classify words, ideas, and concepts. Students with learning or cognitive disabilities can use graphic organizer software to brainstrom their ideas for projects, stories, and reports and then organize them into a sequence.

Another example of Inspiration's flexibility and usefulness is the ability of teachers to create individualized templates for students and teacher-created launchpads with hyperlinks to preselected Web sites and/or documents, as shown in the Snowflakes example.

My friend, Christi Gongola, who is a teacher of students with visual im-



with hyperlinks to Web sites.

By Barbara F. Green

pairments, helped me identify some accessibility features embedded in Inspiration that she uses with her students with low vision.

- Contrast schemes
- Gridlines help to organize and use space
- Zoom text (Magnifier in WIN XP)
- Moveable symbols box; mouse over graphic and larger image appears
- Word guide (dictionary) with audio and syllabication
- Student- or teacher-created sound files to enhance understanding
- Screen reader-friendly after project is exported to word processor

Gongola gives further insight:

I think some of the beauty of the program is that it draws it for them (students with low vision) in a nice, neat, organized fashion, and this is hard for our students because of their issues with depth perception, spacing, sizing, orientation, etc. The program also teaches part to whole in a nice way.

A former fifth grade student of mine had physical and health impairments, including vision problems. Because her handwriting was almost indecipherable and she had difficulty organizing her thoughts for writing, I showed her Inspiration. (She was already producing work in Word, saving files, etc.)

It was like Christmas for her—she just took off. She was webbing everything from that point on. We discovered that once she was shown how to do something on the computer, she would remember it. I asked her to explain her experiences for this article:

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Special Needs

On Tuesday we used it for webbing facts about ostriches. ... We webbed facts about building structures that can hold up to earthquakes. We researched buildings, and added pictures to our Inspiration. It was helpful when I thought of ideas before writing a report on a single subject. It made me feel delighted!

The best part of using Inspiration as assistive technology is that the students love it! They understand how it helps them be better students.

—Barbara F. Green is a Georgia certified special education teacher. She is especially interested in assistive technology for students with special needs. She has taught special needs students for 11 years and has been a computer lab specialist for four years.

Free Online Books

Benetech's Bookshare.org was awarded \$32 million over five years from the U.S. Department of Education's Office of Special Education Programs last fall to make its 40,000 plus electronic book collection available free to qualifying students in public schools. Students who are identified with either a print or visual disability would be eligible to download these copyrighted books either at school or at home.

This award also provided Benetech an opportunity to add 100,000 new educational books to its existing repository. Benetech expects to create student-ready materials in digital audio, large print, and Braille from the textbook files provided by publishers in the mandated National Instructional Materials Accessibility Standard. Last spring Bookshare.org partnered with Don Johnston (donjohnston.com./products/rol_bookshare/ index.html) to provide a free text reader, Read:OutLoud Bookshare.org Edition, for students with print disabilities to access the electronic books in the Bookshare.org library. This text reader is expected to be available for Windows this fall with the Mac version expected in 2009.

For more information on school, individual, or organizational membership, go to Bookshare.org.

Kathleen McClaskey is a member-at-large of SETSIG, ISTE's special interest group for Special Education Technology.

English Language Arts



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