Creative
EDUCATOR™

Digital Storytelling
The heART of a compelling story

Literature Connections
Inspiring young authors

Project–Based Professional Development
Workshops that model effective integration

Zoom In, Zoom Out
Using summer school to foster integration

# "Exchange ideas quicker than a greased June bug!"

Search the Trading Post for ideas to use with your students, or share activities you have created and projects your students have completed. The Trading Post is the place to share your ideas and find new ways to inspire your students!

What you'll find at the Trading Post:

Pixie® Activities

Are you looking for activities to boost students' life cycle knowledge? Explore the Trading Post to find activities to help students learn important math and science concepts, develop language arts skills, and more. Have you created a customized Pixie activity to help students learn initial sounds? You can upload and share your own modified and differentiated activities with other teachers.
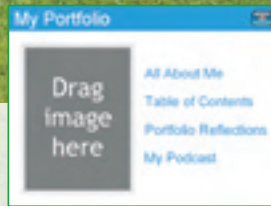
WebBlender™ Templates

Explore the Trading Post to find pages that will help you forge strong school-to-home connections on your classroom web site. Download a variety of electronic portfolio templates to further your exploration of authentic assessment. Share templates you have created for Internet scavenger hunts, new photo gallery themes, or WebQuests.

Twist™ Ideas

Twist is commonly used for illustration, but it is also great for creating fantastic charts, diagrams, and certificates. The Trading Post includes files that will jump-start illustration, cartooning, and page layout projects. Find template starters for newspapers and postcards, and share your own ideas for student-created diagrams, illustrations, and comics.

Sample Projects

Sometimes what you really need to inspire your students is a great example. The Trading Post contains examples of WebBlender stories, Twist bookmarks, and maps created with Pixie stickers, so you can show students your expectations for their project work. If you have a great project example, share it so that students and teachers can see the possibilities!
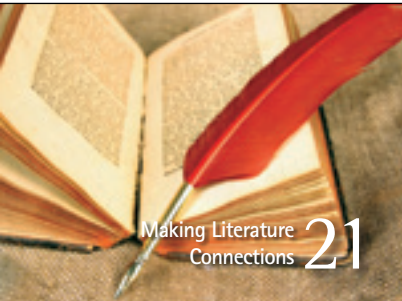
Join us at http://tradingpost.tech4learning.com

Contents

18 Whiteboard Interactivity

07 A Project-Based Approach to Professional Development

10 Zoom In, Zoom Out

Making Literature Connections **21**

14 The Art of Digital Storytelling

30 What Matters?

Announcing the 2008 Tech4Learning Innovative Educators!

The **Tech4Learning Innovation Educator** (TIE) award program recognizes outstanding educators and the projects they have done with their students. The winners of this year's TIE Awards demonstrated a combination of innovation and integration that is truly awesome!

You can find their stories at: **www.tech4learning.com/tie/educators_2008.html**

Liz Allen—*L'Anse Creuse SD, MI*
Big 6™

Combining the Big 6™ research process with student-authored work in WebBlender helped motivate and engage my learners. My students, across all grade levels, have grown in leaps and bounds in classroom curriculum, information literacy curriculum, creativity, and self-esteem. Students who in the past could care less about the research process now can't wait to get started.

Jeff Bonifate—*Fox Chapel Area SD, PA*
Podcasting

When the second grade students recently completed a language arts unit dealing with fables, I thought this would make a great project for our next Hartcast, our Hartwood Elementary podcast. Students combined their illustrations and narration into their own digital retelling of the fable The Ant and the Grasshopper.

Kimberlea Burk—*Manor ISD, TX*
Standards

My philosophy is that technology is a tool that should be used all day everyday. For example, my students make history timeline slideshows, they create diagrams and stories on the water cycle, and design their own maps and legends. Right now my third graders are creating their own ABC books to share with the Pre-K and Kindergarten kids.

Sheila Buscemi—*Frederick County PS, MD*
Publishing

Students today are motivated, inspired, and eager to complete tasks when they know they are not only authors and illustrators, but they are digital publishers. From the class video of special experiences with our grandparents to our fall activities T-shirts made with iron-on transfers, the creative possibilities are endless!

Katy Hammack—*Santee SD, CA*
Digital Storytelling

I have always felt that children learn best by doing, and computers can engage and motivate students where simple pencil-and-paper tasks will not. My focus this year has been on digital storytelling as a powerful way for students to showcase their writing across the curriculum. It has been a total joy assisting teachers and students with their digital stories.

Linda Oaks—*Brea, CA*
Self-esteem

In a video we created last year demonstrating multiplication, students were having trouble and it was my special needs student who came up with the answer. The class not only learned multiplication, but also respect and self-esteem for a student who had never been given those attributes before.

Ellen Phillips—*New York City BOE, NY*
Collaboration

I believe that encouraging students to work on projects with an authentic purpose is the best preparation for a successful life. In a recent clay animation project, my students learned how to collaborate in planning their films, how to share responsibilities, how to settle disagreements, and how to provide constructive criticism to improve their final projects.

Angela Whitley—*Anderson County SD, TN*
Illustrating

One of the most successful projects that I have done incorporates children's books and technology. The students brings their favorite books from childhood and then read and reread their books several times. They re-illustrate the book with their interpretations, using Twist to make the books "come to life" in their own vision.

Note from the Editor

The fanfare at the top of this article may seem like a bit much, but I am enthused by several recent events. On the preceding page, Tech4Learning announces our Innovative Educators for 2008. Their stories are a reflection of the fantastic teaching that is happening in our schools everyday, and I encourage you to read more online. I have also been receiving more and more emails, URLs, and samples of projects the rest of you are doing to make content learning relevant, enjoyable, and successful.

"Unexpected solutions and creative ideas come out of a murky state where purpose and focus are temporarily suspended."

—William Bridges
The Way of Transition

This energy seems to be returning at the educational technology and curriculum conferences I have attended recently. While we still have to cope with the testing required by NCLB, many teachers seemed comfortable and calm, having appropriated their state standards into their regular routines and are reaching out for new technologies to engage students in the curriculum.

While I would love to see more uses of technology that focused on student learning and not teacher instruction, experience with the ACOT Five Stages of Technology Integration and the LoTi levels lets me see that this is a necessary step toward technology integration. To get to the open-ended, student-centered use at the high end of the scale, we have to pass through a more teacher-centric stage.

To foster this progression, this issue includes some ideas for using interactive whiteboards and document cameras. We have also combined this with lesson plans and ideas at a range of integration abilities and shared a few ideas for fostering successful professional development to support improved integration.

Whatever your level, celebrate your success, and I hope this issue will inspire you with some new ideas as well.

Cheers,

Melinda Kolk, Editor

Classroom Connections
Here's what your colleagues are doing.

Alpharetta, Georgia

"My first grade TAG class had a wonderful experience this year producing a clay animation movie titled *How Possum Lost Her Tail*. This lesson on folklore was a re-telling of a Native American nature myth. Prior to this project, these students had no experience writing stories or any exposure to the Pixie and Frames software we used.

Illustrating facts about possums with Pixie motivated even the few reluctant students to continue their research. By the end of their production, my students had acquired the skills they needed to write research papers on their own. Instead of getting the typical one-to-two page reports that first graders usually write, they now wrote five-to-seven page papers! They are only six years old!"

Suzanne O'Brien
Alpharetta Elementary

Philadelphia, Pennsylvania

"I just finished my first two clay animation movies with my first grade groups! The movies are about the Mealworm Club and Mealworm Gang. We were learning about the life cycle of insects, and each student got his or her own mealworm to raise to a beetle. They named them and wrote a diary for them.

I had just gotten my clay animation kit and showed it to them, and they came up with a great idea for their movie. Clay worms were really easy to make, and the students got into making their own distinguishing characters for the movies. The results were wonderful and unique, and the students really enjoyed making and sharing them."

Tracy West
MaST Community Charter School

Bronx, New York

"By combining digital storytelling with Frames, I hoped to make an eighth grade illustrated poetry project even more appealing to my "plugged-in" young teens. Students began by writing their own poems. Then, they were required to find fifteen pictures for a class database that all students could use as a resource for their digital poems. This work ignited excited discussion, and suddenly I was hearing the buzz of engaged, creative minds at work.

Once the students had selected pictures appropriate to their poems, they revisited their writing. What was immediately clear in the next round of revisions was that the images encouraged the students to be more descriptive in their writing, and their poems demonstrated more life, sparkle, and originality. Their pilot lights had absolutely been lit by the selection process and creation of the visual poetry work."

Molly Sherman
JHS 162

Brooklyn, New York

"Every year, my upper–grade students have used MediaBlender to create multimedia nonfiction projects, incorporating original artwork, text, movie clips, images, and personal narration.

What I find particularly gratifying is seeing my special needs students totally engaged in a research project that might otherwise have proved too demanding for them. The tools provide them with a multisensory approach to learning, which motivates them to keep working. One student in particular, who last year proved quite difficult to reach due to emotional and behavioral issues, has created a beautiful project about lions. He is currently working hard to record the narration of his completed project, and I expect to showcase his work in a schoolwide Technology Fair in May."

Nancy Costa
PS 131

A Project–Based Approach to Professional Development

Workshops that model effective integration

by Melinda Kolk and David Wagner

"Success will be judged not by how many teachers and administrators participate in staff development programs or how they perceive its value, but by whether it alters instructional behavior in a way that benefits students."

—Dennis Sparks and Stephanie Hirsh
A New Vision for Staff Development

If any professional development event can be legendary, it is Camp Apple. Many of us have Camp Apple stories. They usually involve a statement along the lines of "it changed everything" or "I owe everything to…" Our Camp Apple story is no different; it really did change everything.

Camp Apple was not a single event, but occurred over several years in the mid-1990s. It was a yearly staff development program designed to support Apple Computer's education grants program. As part of their grant, teachers, principals, and professors from each team were required to participate in a multiday workshop that featured an immersive 24/7 technology-enriched environment. This transformative professional development experience was led by John Schiller from Sonoma County Office of Education, Don Zundel of Apple Computer, and Madalaine Pugliese from Simmons College in Massachusetts.

The staff development included a project-development process that guided participants as they developed strong technology skills and gained experience learning with technology. The process also provided a road map for project-building that educators could take back to their classrooms to use with students.

At these workshops we had the opportunity to meet and work with some of the most talented staff developers we have had the privilege to know. Late at night, we would sit in the dorm lounge and wonder how we could take the successes of this event in a "perfect world" and translate them to the real world of the schools and districts we worked with every day. Over the years, we have combined that project-building process with a project-design process, delivering staff development based on the tenets of project-based learning.

So much technology staff development is precisely that— technology staff development. Workshops focus on how a specific hardware, software, or online tool works and how to use its features, with the focus on the technology, not the learning process. In this model, an expert dispenses knowledge, and the learner attempts to follow the leader and repeat the process. How many conferences do we attend that perpetuate this model, where many of the featured speakers are talking about tips and tricks for software, or taking better pictures with a digital camera. At a recent conference, the most popular session I saw (with a line out the door and around the corner) was a hands-on workshop on advanced features in Final Cut Pro.

If we want to help educators integrate technology into their curricula and change their classroom model from the "sage on the stage" to the "guide on the side," standing in the front of a workshop disseminating information while participants follow the leader to learn the technology is not appropriate modeling.

A project-based approach to technology staff development improves teaching, learning, and technology skills by modeling their effective implementation in the classroom. In the words of Mahatma Gandhi, we need to "become the change we want to see." We believe that a project-based learning environment not only fosters learning in the classroom, it also provides an effective model for staff development.

In the Classroom

Project-based learning (PBL) engages students in work that allows them to construct their own knowledge and develop authentic products while dealing with real-world issues. In this environment, the teacher guides students as they work to complete long-term, interdisciplinary projects that require content knowledge, creativity, innovation, collaboration, critical thinking, and communication skills.

In a PBL environment, technology is simply one tool students use to explore the content of their projects, collaborate with peers and experts to form opinions, gather and organize data, and communicate ideas and information. Asking students to engage the curriculum with relevant tools helps them feel connected to school. By bringing PBL concepts and technology together, educators can guide students to create real-world solutions using powerful open-ended tools.

In Staff Development

Most of us did not experience PBL as students in the classroom, so before we can expect educators to foster this type of learning environment, we need to expose them to a technology-rich, PBL environment. Modeling a PBL environment during staff development gives educators firsthand experience with the process of planning, working in a collaborative group with peers, and learning in a project-based setting. This allows them to experience the same successes, failures, and frustrations their students will encounter in this type of classroom environment.

"As many teachers have long known, student projects offer unique advantages. No other strategy is nearly as effective in developing students' self-management skills. Nor is any as likely to make subject-matter learning as personally meaningful to students. Projects are also unsurpassed in helping students learn about life in general, including lifelong study skills and skills for getting along with others. In addition, student project work frees teachers from many routine chores and gives students the opportunity to exhibit high dignity, energy, self-management, community, and awareness."

—Merrill Harmin
Inspiring Active Learning: A Handbook for Teachers

In this model, we begin by sharing the tenets of PBL and samples of student technology projects that fall on the PBL continuum. Then, we challenge workshop participants to choose a unit that they teach, determine the essential questions for that unit, and write an authentic task students could complete that would help them explore this question and demonstrate their understanding. Participants learn to engage students in content learning by combining student-directed technology projects with rigorous academics.

At this point, most teachers are excited and ready to jump online to find relevant online resources and begin building their lecture presentations. However, they still need the learner experience, so we ask them to take a risk, abandon their roles as teacher, and complete their projects as if they are students. Since they are already content-area experts, we can safely assume we do not need to create foundations of knowledge before asking them to apply what they know. After completing the project as a student, participants now have a high-quality example they can use to set expectations for student work.

Facilitators demonstrate a model project process that educators can replicate in their classrooms, including how to introduce a project and its requirements, the brainstorming process, group formation, storyboarding, strategies for maximizing group dynamics, and feedback and assessment. Trainers model the coaching, facilitation, and assessment skills the participating educators will need to lead successful projects in their classrooms.

Finally, we give them time to return to their teacher roles and develop the unit plan. This may include building graphic organizer work sheets to build foundations, creating introductory movies and presentations, using Recipes4Success to develop My Books that include necessary technology skills, and creating rubrics to support assessment.

To complete the workshop, we ask participants to formally present their projects to the rest of the group. During this presentation, they must present their samples as if they are students. The facilitator models

effective feedback, asking questions to highlight learning that occurred during the process, and soliciting audience comments on the summative work. Workshop participants also share their entire plans and any challenges they think they will encounter and what they have planned to overcome those obstacles.

The goal of project-based staff development is to create tasks and an environment as similar as possible to what participants will be expected to create in the classroom. In the same way that project work in the classroom requires an extended time frame, a project-based model for staff development requires a multiple-day commitment. Participants gain firsthand knowledge of the learning process and the experience to create that environment in their own classrooms.

A project-based model for technology professional development demonstrates a successful classroom environment for the inclusion of technology in the curriculum. The model provides for continuous improvement of technology proficiency for participants. New technology, as well as curriculum, can be easily integrated into a process that is specific to neither.

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Biography

Melinda Kolk is the Director of Professional Development for Tech4Learning. She has been helping train teachers to effectively integrate technology for over 13 years.

David Wagner is the CEO of Tech4Learning. David leads Tech4Learning in designing and developing educational products that support effective student learning.

Melinda Kolk & David Wagner

Training Connections
Modifying the process for media specialists

Janene Gorham

"For three years, Library Media Specialists in Virginia Beach have had the opportunity to bring a classroom teacher to a two-day project-based learning workshop. With a focus this year on digital storytelling, our elementary instructional technology team offered an introduction to this compelling process, hands-on instruction with software tools, and most importantly, guidance in developing a project to be implemented with students.

Working with Joan Schlegelmilch and Michelle Miller, we worked with participants to complete a series of miniprojects, modeling and reinforcing the elements of project-based learning such as authentic tasks, cross-curricular applications, and cooperative learning.

The real fun began when teams began working on developing their own projects. Once participants sketched out a project idea, they worked through the project themselves, noting resources needed, skills used, and potential pitfalls. The process was filled with 'a-ha' moments and from time to time, 'oh no' moments.

At the end, each team shared its project idea, the sample project the team created, and lessons learned along the way. Project topics were diverse and demonstrated that student project work could both address standards and be fun and creative.

We invited the principals to attend as a way to introduce them to the concepts of both digital storytelling and project-based learning, as well as encourage their continued support of technology integration and collaborative planning and teaching.

The best outcome is when they see that the work completed in the workshop can be transferred to instruction in the classroom. One teacher reported, 'I took the class on a Thursday and Friday, and by the next week, my students and I have completed a great finished project!' Project-based learning workshops have become a tradition that we hope to continue in Virginia Beach."

Zoom In, Zoom Out

Using summer school to foster integration

by Melinda Kolk

Inside the computer lab at Amelia Earhart Elementary, students are busily working at computers to finish their digital book reports. Headphones on, they are focused on their work. While you can feel the excitement in the room, the only sound is the continuous tapping of fingers on the keyboard.

This isn't taking place in the cold of a Midwestern February, this is happening Miami, Florida, where the ocean breeze and sandy beaches are calling. This isn't a gifted class either; it's a group of struggling readers attending summer school before entering third grade. The students are motivated, and the classroom is buzzing due to an engaging summer school curriculum called **Zoom In, Zoom Out**.

Time is in short supply and budgets are tight, but the staff in the Instructional Technology department at Miami-Dade County Public Schools found a creative way to foster technology integration. Dr. Sylvia Diaz and her staff responded to a request for proposals for summer school courses with an innovative curriculum that engaged struggling readers and writers, and provided tools and training for the teachers leading the classes.

A recent introduction to digital microscopes provided the spark for Maureen Cooling as she designed the curriculum. Knowing that summer school students are often strong visual learners, she felt imaging tools would

provide a great catalyst for students to read stories and complete activities on the topics they encountered while reading. These visual experiences would then help them weave their own stories. Revolving around the books *Miss Rumphius* and *Thunder Cake*, this innovative curriculum partnered reading with activities using digital cameras, Google Earth, and ImageBlender.

After reading about Miss Rumphius, for example, students used digital microscopes to explore the growth of radish seeds, learning about plants and their life cycles. Using paper towels and water to "plant" their seeds, students took pictures of the seeds every day with the digital microscopes and then wrote about the seed's growth in their journals.

Miss Rumphius's travels and the origin of the spices used in baking the thunder cake provided a connection to locations and cultures around the world, which they visited virtually with Google Earth. Students created personalized postcards and stories from these locations, using

Sugarcane is grown mainly in the Caribbean.

ImageBlender to add their photographs, as well as the magnified images of spices they had taken.

The strong technology component also helped to ensure a very high level of attendance. It was rare for students to miss even one day of the summer institute. The teachers loved a summer employment experience where they were both "challenged and interested," shares Julie Tuttle.

Myriam Garcia, a reading teacher at Earhart Elementary, had worked with the instructional technology team in the past and jumped at the opportunity, though she had not taught a summer session in years. "I can't believe they are paying me to do this," she whispered to her principal after one especially successful day.

Myriam's summer school experience provided additional strategies she used to reach her students. Myriam teaches retained students, as well as students who are diagnosed with ADHD and other learning disorders, but have not been formally tested. Having ADHD herself, she knew that these students would not respond to traditional teaching and that lectures would never work.

Both Myriam and her principal, Dr. Hernandez, soon noticed that integrating technology into her reading classroom was directly affecting student success. Because many of her students hadn't been formally tested for learning disabilities,

they were required to take the FCAT test along with their peers. Normally, Myriam assesses student understanding through visual projects instead of taking traditional tests, but working with technology had improved their reading so much, many of them passed the FCAT for the first time in their lives.

Myriam also became a technology leader at her school, training and inspiring other staff members with the tools she had learned. After using WebBlender to create a portfolio to document student work during summer school, she applied her new skills to create her own classroom web site. When parents started commenting, other teachers wanted to get involved, so Myriam offered a workshop to interested teachers on creating classroom web sites using WebBlender.

With only one day of professional development, most teachers at Earhart now have their own custom classroom web pages. The program has been so successful in fostering school-to-home communication that when students change grades, their parents are requesting the classroom URL to be sure they can check in with their students' progress. They are also now surprised to find a teacher who does not yet have his or her own classroom web site.

This transformation didn't happen overnight; and certainly not without a lot of time, hard work, professional development, and support. As she developed the curriculum, Maureen tried to create "enough variety that kids would interested, but not so technology-oriented that the new technology users would freak out." She also worked with

Julie Tuttle and Sandra Desormeau to design training that would foster successful implementation. Over the course of two days, the participating teachers received petri dishes, digital microscopes, digital cameras, scanners, and software, and explored how these tools could be used to engage students, spark imagination, and support reading and writing goals.

As with all good education, the process was modified and adapted based on experience, changing needs, and available human resources. Many teachers did not have access to the materials during the rest of the school year. So, the following year, Linda Trupia, the Director of Instructional Technology, worked with principals to choose sites where the summer school teachers taught the rest of the year. This helped to ensure that those teacher could apply what they had learned throughout the normal school year.

To expand the potential for integration at the summer school sites, the Instructional Technology Department also provided materials for workshops on the technology tools throughout the year. They developed a Digital Imaging and Critical Thinking for Elementary Teachers workshop delivered by summer school teachers and instructional technology staff. Participants in these workshops learned how to use the digital microscopes and software to make connections to math, science, and literacy with technology, knowing that these tools were ready to use at their schools.

Maureen Cooling was thrilled at how many staff members, in addition to the summer school staff, moved beyond where they thought they could be. "People walked away thinking 'I can do this in my classroom.'"

Creativity Connections
Summer school strategies

Susan Difederico & Paula Marczynski

"Funding from a grant received by Hillsborough County Public Schools allowed us to be integrated into the 2007 summer school instructional wheel for a two-week enrichment project. After attending clay animation training by district staff, we were ready to use this exciting process as part of our instruction.

Students in the summer school program were incoming, at-risk high school freshmen, ranked in the bottom quartile for reading and math. Having given up part of their summer to attend remediation classes, they arrived frustrated and reluctant to participate.

Due to a short time frame and limited reading skills, we elected to utilize fairy tales as the theme for their animations. Because of their multicultural heritages, we discovered that many had not been exposed to some traditional childhood fairy tales, so we brought in preschool books and used the Internet to explore a variety of fairy tales.

To help students better understand animation, we discussed the animation process and showed them some professionally-created animated TV shows, movies, and commercials. This also helped to reassure them that we did not intend them to do anything juvenile! Students then chose the fairy tale they wanted to animate.

It was amazing to see students who were initially reluctant to participate suddenly transformed into eager, excited, creative students. They were even bringing in friends to participate in the activities!"

Science Suggestions

Learning together with a document camera

by Elizabeth Buyer

You may have just received a document camera or have access to one, and you may be wondering how to use it to create powerful learning opportunities. Science in the elementary classroom is a great place to start.

Document cameras can be easily integrated to support teaching and facilitate whole-group instruction. Combining a document camera with Pixie or Frames allows you to capture images and frames directly into the software. Not only does this provide instant feedback for students, it makes it easy to capture and revisit classroom discussions and develop projects as an entire class.

The document camera can serve as a stepping stone for young students, allowing you to model a process before students complete it on their own. For example, place a flower (roots and all) on the document camera and locate the roots, leaves, stems, and flower as an entire class. If you open Pixie, you can capture a picture of the entire plant as a background for a labeling activity, or each part as a sticker students can use to discuss the plant's structure. Use these files in the lab and ask students to use Pixie's text and paint tools to label each part of the plant and discuss its function. Students can even use the Share feature to create a book or movie about the parts of a plant.

Many document cameras have zoom features, allowing you to use it with Pixie as a digital microscope for students. Use the zoom feature to explore the cellular structure of onion skin or a slide with a drop of saliva to compare both plant and animal cells. Then, capture these in Pixie and ask students to use the Venn diagram template to label and compare the images.

If you use Frames, you can import frames directly from the document camera to easily document procedures such as dissections. Once all of the frames are captured, have students label the images, record narration, and export a video or podcast they can share with others.

Importing images directly into Frames also makes it easy to create time-lapse movies that illustrate change over time.

For example, place an ice cube in a tray below the document camera. Capture frames of the cube as it melts over the course of the day. Review all of the frames and discuss how water changes its state from solid, into liquid, and eventually evaporating into gas. Have students adjust the timing of the images and record narration to discuss what causes the cube to change states.

You can use your document camera to create a clay animation as an entire class, modeling the process before students embark on their own projects. Create a flat background you can lay below the document camera. Have students create 2-dimensional clay characters to move on top of this flat surface. With a couple of student helpers, capture this movement in Frames. Then, work as a class to choose a title, transitions, music, and narration, having students take turns on the computer as the process is shown using a digital projector.

With a little time and creativity, Frames and Pixie can open doors to provide a new avenue of understanding for your students' daily science curriculum.
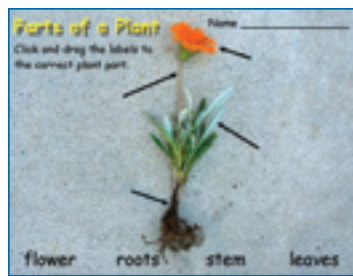
Community Connections
Creating a virtual museum

Shawna Shaw

"I teach 3rd grade at MacFarlane Park IB Elementary. My goal is to provide a stimulating, rigorous classroom environment that is both teacher-guided (to meet state standards) and student-led (to meet the differentiated needs of my students as individuals). The IB philosophy is to allow student choice in creating authentic products that represent their individual learning.

Recently, while studying rocks in science, students started bringing in unidentified rocks from home. Soon they were wondering what the rocks were and started researching to answer their questions. Before I knew it, we had a bona-fide Rock Museum. We opened the Museum up to the school and district dignitaries to tour with students taking turns as docents.

Students expressed concern that certain loved ones were unable to come in to visit our Rock Museum. It was a natural extension to have students each choose a favorite rock and write a script describing its characteristics. We took digital photos and recorded individual students describing their rocks and used WebBlender to create a Virtual Rock Museum for our class web page. The resulting project has received enthusiastic reviews from students, schoolmates, administrators, and relatives as a wonderful opportunity to visit our Rock Museum at any time and a testament to the authentic learning occurring in my classroom."

Cultural Connections
Using technology to explore heritage

Andrea Hernandez

"I teach at a Jewish Day School with a bilingual English/Hebrew program. Our students start learning Hebrew in Kindergarten, and by first grade they are reading and writing in both languages. The Hebrew classes have started using Pixie in a number of ways to enrich students' acquisition of a second language. With Pixie, bringing technology and second language instruction together has added a whole new dimension to our Hebrew program. Using stickers for the Hebrew characters as opposed to typing on a keyboard engages both visual and kinesthetic learning styles.

For one project, each student illustrated one portion of a story. We combined the illustrations into a slideshow and recorded the whole class reading the story. This activity provided an entertaining opportunity for reading and speaking practice, and the children were delighted with the final product that we were able to easily share with parents via our web site. Using Pixie to record students' voices not only allows easy export to the web so that parents can enjoy the product, but it adds richness to the story as well.

The Kitah Aleph (first grade) class also used Pixie to create its exhibit for our school's Jewish History Fair. The theme of this year's Jewish History Fair was Israel, in honor of Israel's 60th birthday. Kitah Aleph students created cardboard suitcases for a trip to Israel. Each student made a name tag for their suitcases using a photograph of themselves and the Hebrew stickers in Pixie. They then used Pixie to draw and label in Hebrew the various items they would take on the trip. The resulting display was a big hit with the many visitors to the fair.

SNACKS
Frames™
Capture from a DV Source

You can capture frames from a digital video camera, a web cam, or a USB document camera.

Make sure that the camera is turned on and connected to your computer.

In Frames, click the **Capture Mode** button in the Preview area.
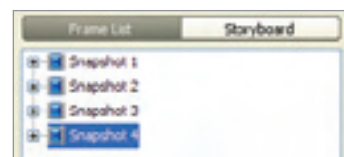
You will see a preview from the video source.

Click the **Capture** button.

You will see a new frame in the Frame List or Storyboard.

A new frame will be added every time you click the **Capture** button.

When you are finished capturing frames, click the **Edit Mode** button in the Preview area.

The Art of Digital Storytelling

Part I:
Becoming 21st-Century StoryKeepers™

by Bernajean Porter

Tell your tales; make them true. If they endure, so will you.
—James Keller.

Gather round those roaring campfires, picnic tables, or even a fondue pot, because the ancient art of storytelling is being revived into an emerging communication mode called digital storytelling. Stories are as old as people and are more important than ever for our spirits, minds, and human progress. Becoming good storytellers gives us personal power as we guide, motivate, entertain, educate, inspire, and influence others through the artful use of story.

Designing and communicating information requires students to deepen their understanding of content while increasing visual, sound, oral language, creativity, and thinking skills. Making meaning out of an experience deepens the communication for both the author and the viewers. The author's narrative voice is the center of all the multimedia decisions. The story's narrative is first made into a voiceover and then all images, sound, music, transitions, and special effects are organized around unfolding this story.

Telling stories together about things that really matter has an extraordinary effect on people. Digital media and digital distribution to the world community is reshaping the power of oral storytelling, enabling us to unfold a highly sensory experience that dances a narrative voice with images, sound, and music into illuminated understandings. What an experience to incorporate digital storytelling into your classroom and guide a new generation into becoming 21st-Century StoryKeepers™, knowing their personal narratives will endure for others long after the fires die down!

Take Six: Elements of Good Storytelling

To help increase the quality of student stories, I developed *Take Six*: Elements of Digital Storytelling. For example, Showing not Telling is a quality long expected in good writing pieces, and this same element also creates exceptionally good stories as well. However, I want to focus on two specific elements in this article because they are considered especially essential for good storytelling: Living in the Story and Unfolding Lessons Learned. If either of these two elements is missing, you likely are viewing a great digital story… but not storytelling.

Living in the Story

So many digital stories are telling *about* their topics; even personal ones such as a story about grandma, a pet, or getting a first bicycle. Even if told very well, we often can't feel the author in these *about* tales. Digital storytelling encourages authors to write a very personal emotional connection with the tale being told. The power of storytelling is not in telling about an event or someone else's life, but rather in shifting the lens to using the setting, details, and events for telling *your* story with the experience.

You may not be a character in the story, but your audience should still be able to feel what you feel or how the situation affects you. In *A Whole New Mind*, Daniel Pink defines story grammar as the "ability to encapsulate, contextualize, and emotionalize information, understanding, and experiences for yourself and others." Emotionalizing information gives important "sticking power" in our brains and for our audience. The written narrative for storytelling should be coached as a first-person perspective, unfolding the storytelling from the author's heart, not his or her head.

Unfolding a Lesson Learned

Have you ever been with someone who is telling a story and seems to be going on and on and on? You begin to get restless, wondering… is there a point here you are trying to make? Good storytelling needs a "spine" to hold the audience's attention and deliver a timely, memorable ending. Good storytelling strives to find the essence of meaning or value this person, experience, or situation made in their lives. The lesson learned is a kind of moral of the story, such as the ones we find in fairy tales—revealing the wisdom or understandings gained from the experience or knowledge. Wrapping up each digital storytelling with a lesson learned also gives it depth and meaning beyond the "what happened" story points.

Finding the Lessons Learned

Frequently an author knows the story he or she wants to tell but has not made meaning out of it yet. What does my sister's autism mean to my life? How do I find meaning in my life as a foster child? What do I now know, believe, or understand about the world from this experience? It requires the author to dig deep, reflect, and make personal meaning beyond the facts. Finding the lesson learned significantly changes authors as well as the experience they create for their audience.

Good storytelling is a journey for every author who is digging deep into the meaning of their stories for themselves and others. As part of a digital storytelling week, I worked with Ms. Liza Medina's middle school class at Ramapos Central Schools, New York. Students were given the task of finding their own visual parallel personal stories to unfold while narrating Robert Frost's poem, "The Road Not Taken".

When students began, they struggled to create more than a literal connection to the poem. When we tried to get them to uncover their own emotions and feelings behind their experience with Frost's poem, students clammed up. After numerous efforts, Ms. Medina decided to share her own story two different ways (see below).

A *Take Six* Story Transformation

Version 1

When I was in college, I left the education department for six months. One of my education professors refused to take me on school visitations to observe classrooms. She told me I looked too much like the kids and didn't act my age. Once when I turned in a paper two days late, she refused to grade it. She pulled me aside and told me that I was never going to be able to become an effective teacher because I was too immature. I became angry. She had recommended to the head of the education department that I be removed from the program. Rather than fight with her, I dropped my education major and took up jewelry making and photography. After one semester outside of the education department, I decided to appeal to the head of the education department. With a renewed conviction, I rejoined the education department.

Version 2

Dr. Sawyer looked down her narrow pointy nose at me. "So why do you want to teach?"

Because I taught Michelle how to tell time when I was in second grade. Because I taught Samantha how to speak Spanish last summer. Because I don't know how not to be a teacher.

None of these answers would be enough for her. Intimidated by her icy stare, I muttered, "I don't know."

"Then there is no reason for you to waste your time in this department." she declared. "You do not have the disposition of a teacher. Your behavior is no better than that of the children."

Because Hope Ann and I smile in your classroom? Because we giggle and chat with students in the hallways?

Anger boiled in my head. I like children. They're happy! Why is it a crime for me to be, too? "You look like students, you dress like students, and you act like students. You are not fit to be in the classroom." She turned away from me with a dismissive tone. Stunned and outraged, I only managed a passive nod.

Defeated and humiliated I wandered in a daze, reluctantly arriving at my advisor's door. I handed him my second semester registration form with "Fine Arts" scrawled in my shaky handwriting across the top next to the word Major. He signed his approval.

I lived with my misery every day the following semester; making jewelry, taking photographs, and doing art critiques. My spirit was flat and unconnected. I missed the kids. I missed my dream of making a difference, student by student, through the years.

When time came to register for next semester's classes, I realized that I was wasting my time and ambition. I appealed to the head of the education department and won. With renewed conviction, I rejoined the education department. I knew then that I would never again let someone else dictate my future or take my life dreams away. My dreams are mine to make true, even when others don't believe in them. I believe, and that is all that matters.

After sharing her first story, Ms. Medina said, "*See*? I almost wasn't a teacher at all!" Joshua, sarcastic as usual, shouted out, "*Good!*" After sharing the second story, she turned back to Joshua asking, "Do you still feel like saying 'good' after this one?" "No," Joshua said, "The first one was just a summary, like the words on the back of a book. It's telling what happened, but not telling it real. But I feel sad after the second one about how that teacher treated you. You had to kinda face a bully, but you won. You made it very real."

Then something very interesting happened—Joshua volunteered first to tell his story. Normally, Joshua is a Hockey Player—capital H, capital P, ALL Hockey, ALL the time. Joshua told us very briefly about being six years old and choosing to play hockey for the first time with a traveling team. He talked about getting up at 4 AM, going to practices early in the morning before light and coming home late at night when it was dark. He talked about having no time for family and no time for friends.

In that moment, Joshua became more than just a Hockey Player to us—Joshua became a scared, insecure human being. This is not the boy his classmates are used to—usually wisecracking, quick witted, and sarcastic. This person sounded like he wasn't so sure that being ALL Hockey, ALL the time was the best choice. This person sounded unsure—not his words—but his voice. At the end of the period, I took Joshua aside. I told him that knowing him as I do, I couldn't imagine him not playing hockey. I told him this is the reason I find his story fascinating. "You do?" he seemed surprised. "I think you sacrifice an awful lot for that sport, and I think there is a seriously interesting emotional level to your story that other people can relate to. Consider doing it in your group with the Frost poem." He smiled, "Okay."

Sharing Stories that Need to Be Told
After a digital storytelling is shared, it should be remembered for its soul, not the bells and whistles of technology.   —Bernajean Porter

Good storytelling reaches down deep into our minds, hearts, and spirits—it connects the humanity in all of us. Through storytelling elements we can craft stories about life, experiences, and understandings into being very real for others. Good storytelling lets our students be deeply heard and honored. And those are the stories that need to be told!

Next Issue: Don't miss The Art of Digital Storytelling: Part II Digital Storytelling in the Classroom!

Bernajean Porter
bernajean@DigiTales.us

Biography
Bernajean Porter is the author of *DigiTales: The Art of Telling Digital Stories.* Bernajean travels the world facilitating effective digital storytelling.

Get More!
Read more articles from Bernajean, find resources, and view samples from her digital storytelling camps at:

http://www.DigiTales.us

Take Six
Elements of good digital storytelling
by Bernajean Porter

While there are endless approaches to crafting stories, depending on purpose and audience, at least six elements are considered fundamental to this particular storytelling style.

Living Inside Your Story—The perspective of each story is told in first person using your own storytelling voice to narrate the tale. Rather than a detached telling that this happened and that happened, viewers experience you living inside this story.

Unfolding Lessons Learned—One of the most unique features of this specific digital storytelling style is the expectation that each story express a personal meaning or insight about how a particular event or situation touches you, your community, or humanity.

Developing Creative Tension—A good story creates intrigue or tension around a situation that is posed at the beginning of the story and resolved at the end, sometimes with an unexpected twist. The tension of an unresolved or curious situation engages and holds the viewer until reaching a memorable end.

Economizing the Story Told—A good story has a destination—a point to make—and seeks the shortest path to its destination. The art of shortening a story lies in preserving the essence of the tale—using the fewest words along with images and sound to make your point.

Showing Not Telling—Unlike traditional oral or written stories, images, sound, and music can be used to show a part of the context, create setting, give story information, and provide emotional meaning not provided by words. Both words and media need to reveal through details rather than named or simply stated.

Developing Craftsmanship—A good story incorporates technology in artful ways, demonstrating craftsmanship in communicating with images, sound, voice, color, white space, animations, design, transitions, and special effects. Ask yourself whether your media resources are decorating, illustrating, or illuminating.

SNACKS

Frames™
Making Digital Stories

You may already be using Frames to create stop-motion and clay animation, but have you tried using it for digital storytelling? With Frames, students can add text, shapes, and transitions to images, and add narration and a sound track to tell their stories.

Before you begin building your movie, adjust the Frames Preferences for digital storytelling. Go to the **Edit** menu and choose **Preferences.** Choose **Animation Options** from the list.

In the Frame Duration area on the right, change the **Default Frame Duration** to 5 seconds to make it easier as you work. You will still be able to adjust frame duration to match your narration later.
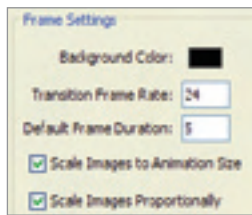
Building a digital story in Frames is easy. You can add all of the images you have collected into a folder by clicking the folder button in the Preview area when you begin.
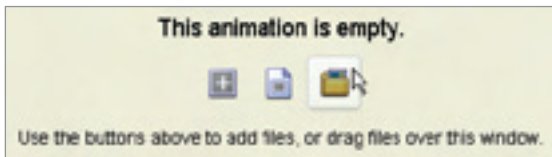
Use the Storyboard or Frame List to change the order of the images.

Next, record the story's narrative. Click the first frame in your story and then click the **Audio** button on the toolbar and choose **Record Sound.** Read your entire narrative at one time to simplify the process. You will see the recorded audio track on the timeline at the bottom of the window.


The timing of your narration and images will not match. Before adjusting duration on each of your frames, add any blank frames, text frames, or transitions to your story.

To match the scenes and images to the narration, you need to work from beginning to end. Rewind the movie and watch it from the beginning. When the timing doesn't match, stop the movie. Click the frame that needs to be adjusted and change the **Duration** on the Options panel. Then, begin playing the movie again until you need to adjust the duration on another frame. If you adjust your timing from start to finish, getting it all to match up is a snap.

You can also add background music to your story. Click the first frame in your story and then click the **Audio** button on the toolbar and choose **From File.** Navigate to the music file you want to use. You will see it in the second audio track in the timeline at the bottom of the window.

When you are finished editing your story in Frames, you are ready to create your movie. Click the **Export** button. Choose the movie format you want to make and click the **Export** button.
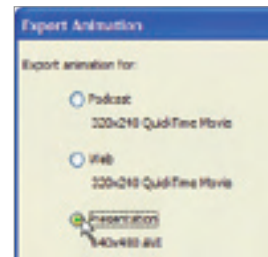
Frames will create a QuickTime or AVI file (don't choose animated GIF since those type of files cannot contain sound) of your story. You can add this file to your web site, a multimedia presentation, or simply double-click it anytime to watch it on your computer.

Whiteboard Interactivity

Using Pixie to bring your curriculum into focus
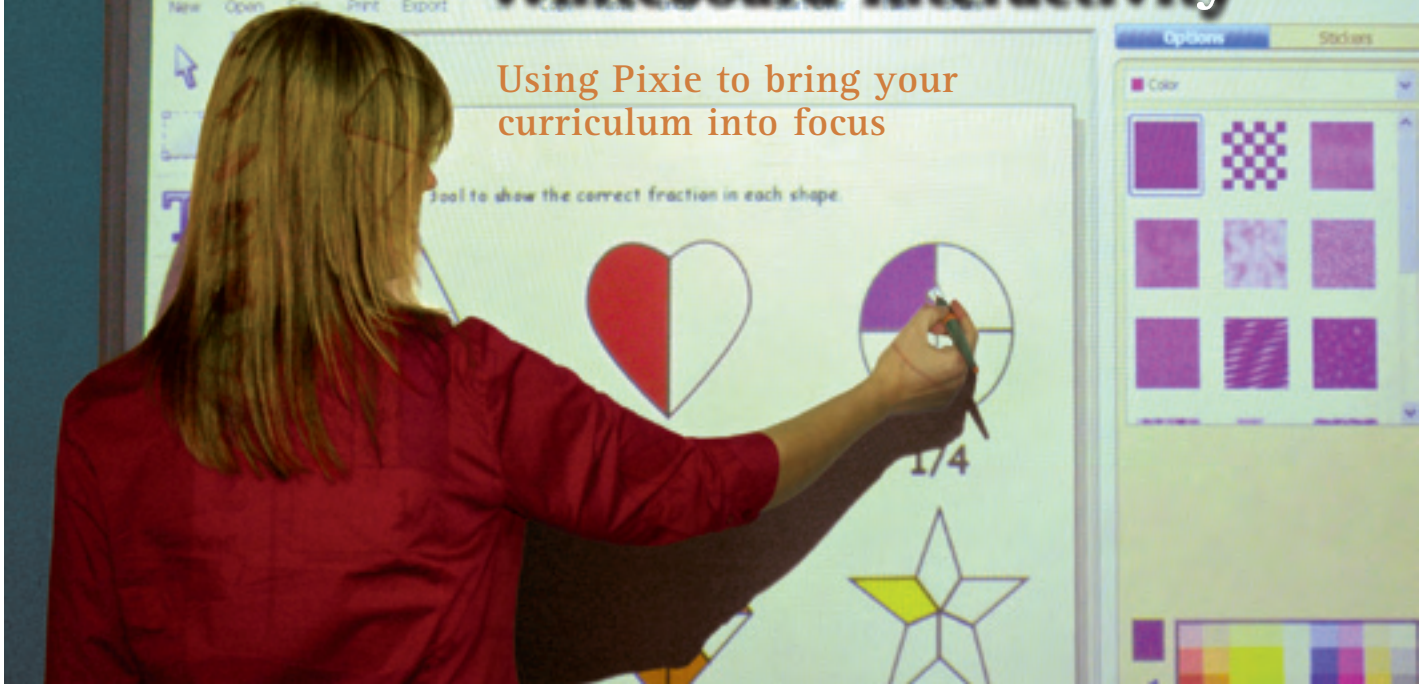
If you have been to an educational technology conference recently, you probably noticed all of the interactive whiteboards. You may even have one in your classroom. How do you use it beyond a simple projection screen and delivery mechanism? How can you use it to change your instruction and to improve student learning?

If you are already familiar using Pixie as a student learning tool, using it for instruction with an interactive whiteboard is easy. Using Pixie on your interactive whiteboard helps you model its effective use to communicate ideas and information. Having students interact on the whiteboard gives them the chance to practice using the tools and locating resources in Pixie before embarking on their own projects.

Assess for Understanding

The easiest way to begin using Pixie on your whiteboard is with an activity. You can use Pixie activities to assess prior knowledge on a topic or assess for understanding after you have completed a unit of study. For

example, if you open the Living or Nonliving activity, you can work together as a class to sort the objects into the correct category. Start by asking one student to come up to the board to sort an object into the correct category and then explain his or her choice. A student might respond, "We learned that living things breathe, eat food, and make noise. A dog barks, pants, and eats treats."

Pixie contains a wealth of activities you can use in this way. You can open a life-cycle activity and have students drag stickers into each box to show the life cycle of an animal and use the text tool to add labels to each stage in the life cycle. Some activities allow for a

more open-ended approach. For example, using the Trees in Season activity, you can have students use their hands on the board to paint what a tree looks like in each season.

Build Knowledge as a Class

You can also begin projects from a blank screen. If you are studying insects, work with the entire class to brainstorm and define the characteristics of an insect. Open a blank Pixie document and add a text box. Ask students to think about the characteristics of an insect. You may even want to start by adding a few stickers. The class can participate by adding words to the text box or by drawing several different insects and comparing them.

In a slightly different approach, ask students to list characteristics such as three body parts, six legs, hard exoskeleton, or antennae; add it to the list; and then draw it on the whiteboard. Ask another student for an additional characteristic, add it to the list, and have them draw it on the
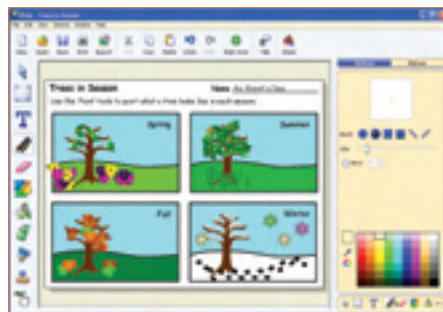
existing insect. At the end, the entire class will have created a new insect species they can color and give a scientific name. You might even have the class work together to write a descriptive paragraph to introduce this new insect species to the scientific world.

The same process works great for learning to make maps. Open a map of your state. Have students think about all of the food, materials, and services in your state. For example, in the Upper Peninsula of Michigan you will find mining and lumber, while the Lower Peninsula produces cars, corn, and cattle. Students each come up to the whiteboard and drag one good or service produced in the state to the location in the state where it is produced.

Explore the World Together

You can use photographs students have taken with a digital camera or found online to connect with your curriculum. If you are learning about angles, you can have students use a digital camera to capture examples of angles in the classroom, school, or sports fields. Use Pixie to open the images on your whiteboard and have students use the paint tools to draw the angles on the image. To determine whether the angles are acute, obtuse, or right, add the protractor sticker to the picture. Size it to fit the angle and take the angle's measurement.

Publish Class Literature

Work on writing together to build literacy skills. In the early grades, create a
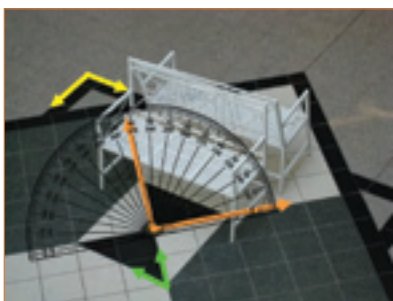
class ABC book. First, brainstorm all of the words and objects students know that begin with the letter A. One at a time, have students use the paint tools or stickers to add that object to the picture. Then, create a text list of all of the objects that begin with this initial sound and record student voices reading the list. You can print out the pictures to create printed booklets or trading cards.

If you are reading a story to the class, you can have students illustrate while you are reading. Before each section is read for the entire class, assign one student to read it ahead of time. Work with this student to make sure he or she can summarize the chapter and can focus in on an important event in this part of the story. Then, when you are reading in class, have this student paint an illustration of an event from the chapter while you read it to the rest of the class.

When the book is complete, open all of the student illustrations. In Share mode, have students drag the pictures in the order they occurred in the story. This is a great time to focus on beginning, middle, and end. If you also want to focus on retelling, have each student who illustrated record a sentence that summarizes the chapter. Then, export the story as a video, podcast, or web storybook.

Pixie can help make your whiteboard truly interactive, engaging your students in the curriculum.

Pixie™
Working with Interactive Whiteboards

You can change the view and preferences of Pixie to make it easier to use on your interactive whiteboard.

View Whiteboard Tools

You can show a whiteboard toolbar below the editing panel. This places all the common Pixie tools on one side of the screen to make it easier to use with an interactive whiteboard.

Go to the View menu and choose Show Whiteboard Tools.

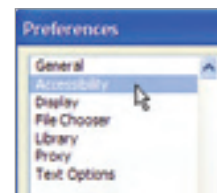You will see a toolbar below the editing panel.
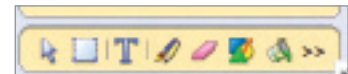
Adjust Handle Size

You can change the size of the handles around stickers and text objects to make them easier to use on an interactive whiteboard.

Go to the Edit menu and choose Preferences.

You will see the Preferences dialog.

Click the Accessibility item.

You will see the Accessibility preferences.

Click and drag the Handle Size slider to the right.

Click the OK button.

You will now see larger handles around stickers and text objects.

Field of View

WebBlender Complements your Content Management System

As a teacher and technology trainer, I frequently heard from other teachers complaining about the lack of creativity and options in the content management systems (CMS) their schools use to develop and host their teacher web sites. As I worked in these systems to help teachers create classroom sites, I found that the CMS rarely includes resources for teachers to use to create superb sites, such as pictures, buttons, and graphics. Even if a teacher had quality content, many of the programs were hard to use, causing some teachers to give up after their initial training.

Many teachers are now learning to use other software tools to develop exciting and creative web pages to add to their CMS web-hosting service. Many CMS programs will accept HTML pages, so teachers can use almost any web-authoring tool to develop their pages offline and then upload them at their convenience. This allows teachers to express themselves effectively, while district IT departments continue to reap the management benefits of using a CMS.

MacFarlane Park Elementary School in Tampa, Florida showcases how teachers can successfully use a standalone authoring tool to create content they can add to their CMS. The teachers at MacFarlane Park use WebBlender to create their sites and then upload them to a RapidWeb® CMS built

into their email application. "Before WebBlender, less than half of our teachers had a web presence, and they were frustrated by trying to create web sites in the CMS system we were using. Now 90% of the faculty has a web site, and they rave about how easy WebBlender is to use," shares Principal Denyse Riveiro. MacFarlane also uses WebBlender for their school web site, which the secretary updates weekly. "I constantly get calls and emails from other principals asking what we use to create our great-looking web site!" enthuses principal Riveiro.

Macfarlane Park: **macfarlanepark.mysdhc.org**

Using WebBlender for authoring content has allowed Macfarlane Park to reduce their web site training time requirement from six hours to just two. The teachers at Macfarlane are now fearless, thanks in part to WebBlender's easy-to-use interface. The number of teachers at Macfarlane who are actively strengthening the home-to-school connection using a web presence has more than doubled. Using WebBlender to create content has actually strengthened their investment in the CMS by dramatically boosting the number of teachers fully utilizing the system.

The ability to add content created in WebBlender to a CMS for classroom web pages also extends to showcasing student work. Natalie Muthersbaugh, Technology Specialist for Savannah-Chatham Public Schools, regularly uploads student WebBlender projects into their eChalk® CMS. "With a few simple clicks, I am able to showcase students' WebBlender projects to their school, their community, and the world."

At Coastal Academy, which fosters a learning environment for students with autism, Natalie showed students how to use WebBlender. One student was able to share his dreams and aspirations using WebBlender. His site was posted to the district's CMS, allowing him to share his dreams with family members in a way that was never before possible.

Though CMS's are sweeping though many school districts from Oregon to Florida, all is not lost for the creative educator. By combining WebBlender with their CMS, teachers can easily create top-notch classroom web sites. Using programs like WebBlender allows them to add innovation, imagination, and individuality to their web presence, all while modeling effective communication techniques for their students.

Biography

Jeremy Jackson has taught seventh grade for five years, eventually developing a "paperless classroom" featured in several education periodicals. He worked for three years as a site-based technology specialist and spent four years as a technology trainer for Hillsborough County, before becoming the Southeast Regional Manager for Tech4Learning.

Making Literature Connections

Inspiring young authors with Pixie

by Linda Oaks

Can every student be an author? You bet! Whether they're just starting to write or are already accomplished writers, the motivation to write better and write more grows exponentially with the promise of a published product. Luckily, your students don't have to wait for a publishing house to come calling. They can use Pixie to write, illustrate, and publish original works of literature.

As adults, we seem to shy away from things with blank pages, whether in a journal, a notebook, or on a computer screen. The blankness requires us to provide the input and our first response is "What do I do now?" Kids, on the other hand, view the blankness as an opportunity—no rules, no numbered sequences, just a vast area to explore, create, and show us what they really know and understand.

Your first decision when creating a book is whether the finished product will be a class book, where each member or group contributes a page or a section, or a book with individual authorship. Individual books can use the same rubric and instructions for each student. You can make desired content and length decisions based on your time and instructional requirements. Class books will necessitate a division of labor and topics, and more time for collaboration. Here are a few of my favorite projects.

A-B-C Books

You can use an ABC book for learning and reinforcing the sounds of the alphabet, of course. Beyond that, alphabet books are a great way to reinforce vocabulary for any science or social studies concept and a great way to further explore a chapter
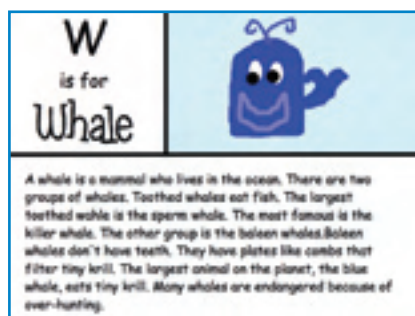
book. For example, after studying the ocean and marine habitat, each student in my class created a letter page explaining one topic we had covered in the unit.

Adapt Your Favorite Book

If your class has a favorite book, especially those with a repeating pattern, challenge your students to come up with their own variations (see sidebar on page 22 for suggestions). You'll notice that some emphasize particular parts of speech or a particular rhythm. Part of the challenge is in having students recognize the various aspects to determine how they can create their own. This is the fun of playing with language and is also a terrific activity for English Language Learners. As a class, students can generate lists of possibilities, so everyone has the opportunity to contribute to every page. It is also very important to credit the original author, which opens discussions about copyright, even at a young age.

Life Isn't All Fiction

Your classroom books can also be the culmination of nonfiction studies. Your students' writing and illustrations will demonstrate the depth of their learning and show any gaps they may have in their knowledge. With very large topics, it will be necessary to split the content up between individuals or groups to ensure you cover all content standards for that topic.

Time to Take a Test

Perhaps your classroom or school uses a structured reading program such as Reading Counts (Scholastic) or Accelerated Reader (Renaissance). If so, you have the ability to write your own test questions for books, including books your class has written. It is unbelievably empowering for young authors to have a student earn points for reading his or her book! Just imagine the question "Who is the author of this book" and seeing his or her name on the screen along with Dr. Seuss and J. K. Rowling!

21st-Century Publishing

Today's digital kids love the idea of creating their own podcasts. With Pixie, they can share their original literature as an electronic book, a podcast, or a video to share with parents or other classes. Publishing electronically gives the added dimension of sound. Students can add music to set the mood, sound effects to provide suspense, and even record their own narration. Recording their own voices for their books is yet another way to motivate even the most reluctant learners. It also provides an excellent example of their reading fluency, perfect for a digital portfolio.

Let's Print!

While Pixie can export student work as online storybooks and video podcasts, my students still enjoy creating printed publications. My students have printed their stories in booklet form to simply fold up and share. When students have written more than four pages, we have also cut the images out and placed them in 4 x 6 photo sleeves and bound them together into more formal books. To avoid using too much ink when their stories are really long, students print their stories as thumbnails—12 pictures to 1 printed page. Then, they cut out the pictures and share them in credit card sleeves and Altoid® tins!
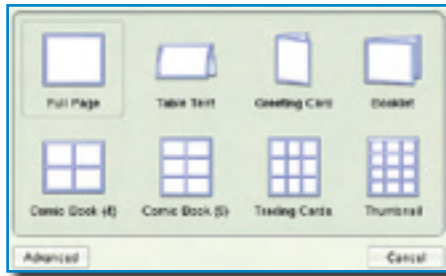
The trading card format produces a size that will fit into the sleeves used for baseball-card collectors. These sleeves act as lamination, making the books durable, so they can be used again the next year with a new group of students. Other ways of binding includes stapling, brass fasteners, plastic sheet protectors and binders, duct tape, electrical tape, yarn, and ribbon. More professional looking binding can be achieved with self-binding kits such as those available from Lintor Publishing (www.lintorpublishing.com) or Bare Books (www.barebooks.com).

A Book of Words

Before and during units of study, we generate class lists of writing words to be used both for spelling and inspiration. The word list is printed, and students can place it in their own vocabulary folders. I share an ocean example as an introduction to guide words. My students need to place this page in the correct place in their folders, a good practice for the use of guide words. We also create single-page illustrations and definitions for new vocabulary words and then print them as trading cards.

By having your students write, illustrate, and publish their own books, you can tap into their innate desire for recognition as they learn to connect to literature, play with language, and beam with pride at their accomplishments.

Biography

With 25 years of experience, Linda Oaks brings a creative view to the integration of technology to meet educational standards. A 2008 Tech4Learning Innovative Educator and CUE Gold Disk Award winner, Linda also the writes the Tips and Tricks column for OnCUE Magazine.

Linda Oaks

Curriculum Connections
Literature suggestions for student adaptation

Brown Bear, Brown Bear/Polar Bear, Polar Bear *by Eric Carle*

Use the repetitive text to describe an environment, habitat, community, or holiday.

Caps, Hats, Socks and Mittens *by Louise Borden*

"Winter is caps, hats, socks and mittens" could be "Math is...," "Desert is..., America is..."

Diary of a Worm *by Doreen Cronin*

Make up a diary of an animal, a famous person, a life cycle, or a landmark. Tell from first-person narrative.

It Looked Like Spilt Milk *by Charles G. Shaw*

Fill the background with color and paint shapes. "It looked like a cat but it wasn't" At the end, "It was just a cloud."

This is the Way We Go To School *by Edith Baer*

This is the way we (do an activity). Show drawings or photos of the correct way to do something.

The Important Book *by Margaret Wise Brown*

Practice descriptive writing. "The important thing about grass is that it is green. It's soft and feels squishy. But the important thing..."

Mary Wore Her Red Dress *by Merle Peek*

Students draw pictures of themselves and write descriptively about their Halloween costumes and more.

Things That Are Most in the World *by Judi Barrett*

Use imaginative adjectives to define superlatives. "The smelliest thing in the world is a skunk convention."

Cloudy with a Chance of Meatballs *by Judi Barrett and Ron Barrett*

Forecast the weather with strange items falling from the sky, such as elephants or candy bars.

SNACKS

Pixie® 2
Publish to Print, HTML, and Video

You can share your original creations through various print options, as an online storybook, or even as a video podcast!

Open the images you want to share.

Click the **Share** button on the toolbar.

You will see a storyboard of your open pictures.

Click and drag the thumbnails to arrange the pictures in the order that you want them to be displayed.

Print
To print a publication, click the **Print** button on the *toolbar*.

You will see the Print Pictures dialog.

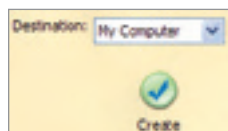Click a format for how you want the pictures to print.

The pictures will print.

HTML Storybooks
To share your pictures as an HTML storybook, click the **Web** button on the *Options* panel.

Use the **Destination** pull-down menu to select a place to save your site.

Click the **Create** button.

You will see the Publish to Local dialog.

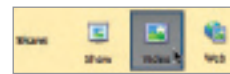Type the name of the web site in the File Name/Save As field.

Click the **Save** button.

When the site is finished publishing, you will see the Finished Publishing dialog.

Click the **View** button to see your site in a web browser.

Videos
To share your pictures as videos or podcasts, click the **Video** button on the *Options* panel.

Click and drag the **Timing** slider to set the timing for the pictures.

If pictures include recorded audio, the sound duration will override this timing setting.

Click a **Transition** button to choose a transition.

Click the **Create** button to export the movie.

You will see the Create Video dialog.

Choose the video format you want to use.

Click **Podcast** to create a movie you can share as a podcast in iTunes. Click **Web** to create a movie you can share on a web site. Click **Presentation** to create a large movie to play on your computer. Click **Flash** to create an Adobe Flash animation.

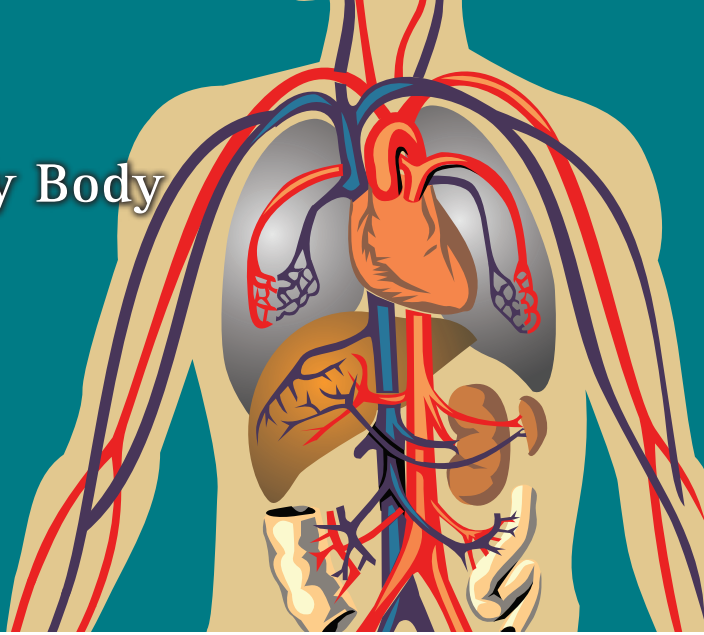After making your choice, you will see the Save Movie As dialog.

Type a name for the video in the File Name/Save As field.

Click the **Save** button.

When the video has been saved, you will see a Finished Exporting dialog.

Click the **Launch** button to watch the video.

It's My Body

Identifiers

Grade Level
4–5

Subject
Science, Language Arts

Duration
2 weeks

Objective
Students will learn about the systems of the human body.

Description
Students will create a public service web site that informs the public about a system in the body. The service announcement will discuss the functions of the body and stress the importance of taking care of your body.

Applications
Twist™, WebBlender™ 2

Process

Authentic Task
The local museum has selected your class to create an interactive student exhibit where students can come and learn about each part of the human body, including the nervous system, respiratory system, circulatory system, and digestive system. Your team's task is to create a web site to inform other students about the importance and function of one of these body systems.

Procedure

Step 1: Introduction
Ask students how many of them have a bike. Ask students to name the parts of the bike, such as handlebars, seat, and wheels. Record students' answers on chart paper. Ask students to think about how the parts of a bike work together to help you create movement. For example, if one part of the bike is not working, is it still possible that bike will work? Will the bike work as efficiently? Continue to write students' responses on chart paper.

Ask students whether the bike would still work properly if they didn't treat it properly. Discuss with students that each part of the bicycle plays an important function in making the bike work as a whole.

Ask students to think about how the organs in a body system, such as the digestive system, work together. Hold up an apple and take a bite. Ask students what body system you are using to eat the apple. Record students' answers on chart paper. Ask students how each part of the digestive system works together to help digest the apple.

Ask students how the bicycle system is analogous to the digestive system in the human body.

Step 2: Research
Divide students into small groups and assign each group one of the six body systems:

1. Digestive
2. Circulatory
3. Respiratory
4. Skeletal
5. Muscular
6. Nervous System

The group can use online and print resources to answer the following questions about its body system.

1. What is the name of your body system?
2. Where is the system located?
3. What is the role of the system?
4. What organs make up this body system?
5. What are the main functions of this human body system?
6. What is each organ's function in the body system?
7. How do the organs perform these functions?

Step 3: Create a Diagram
Have students work together to create a diagram of their body system using Twist. The diagram, or illustration, should include major organs, correct terminology in the labeling, and a brief text description of how each part contributes to the system's role in the human body.

Step 4: Create a Body System Web Site
Students should use the information from their research and their diagrams to help them create a web site about the body system.

You might suggest that their web site include:

Title Page: Name of the body system
Twist Diagram

Page 2: Function—
   What is the role of your system?

Page 3: Problems and Diseases—
   What problems can occur?

   What diseases are associated with your system?

Steps for Students

Creating a Web Site in WebBlender™

Once you have created your illustrations and have done your research, you can use WebBlender to combine it all together.

1. Launch WebBlender.

2. You will see the first page in your Web site.

3. Click the Text tool on the tool palette. Double-click the text box to add a title.

4. Type the title of your Body System.

5. Change the text format by using the font options on the **Options** panel.

6. Click the page outside of the text box.

7. You will see the Fill options on the Editing panel. Click the color box to choose a color for the page.

8. Click the **Image** button on the tool palette to insert an image.

9. Click the Library tab on the editing panel. Double-click the Buttons folder.

10. Double-click a folder, choose the type of button you want to use, or customize your own. Click and drag a home button from the library onto your page.

11. Click the **New Blank Page** button on the left side of the storyboard.

12. Repeat steps 3–11 for each page.

13. Use the library to choose additional buttons to complete the navigation.

14. Click the **Save** button on the toolbar. Choose where you want to save your web site and click **Save**.

15. To test the navigation of your web site, click the **Browse** tool on the tool palette.

16. When you are satisfied that your web site is complete, click the **Publish** button and save your web site.

17. To view your web site, find the place where you saved it and double-click the index.html file.
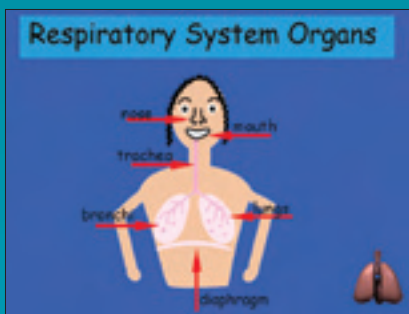
Page 4: Staying Healthy—
  What can people do to keep this system healthy?
  Why is this system important for good health?

Page 5: Author's names and bibliography

Invite community members, parents, and students to a Human Body Open House. During this open house, various student groups will present their projects on the human body and answer questions from the audience about their projects. The presentation should include a detailed explanation of the human body system, as well as why taking care of the system is important for good health.

Assessment

Assess your students' prior knowledge based on the introductory bike activity as well as their class participation. You will be able to assess their research abilities and knowledge through their research questions, and you can evaluate comprehension using the diagram they create of the body system. Their web site will help you evaluate writing skills, creativity, and design skills. You will also be able to assess their problem-solving, team work, planning, and time management skills as each team works through the process.

Resources

Cole, Joanna and Degan, Bruce. *The Magic School Bus: Inside the Human Body*. ISBN: 0590726331

Weiner, Esther. *The Incredible Human Body*. ISBN: 0590599283

Human Anatomy Online
http://www.innerbody.com/htm/body.html

Virtual Body
http://www.medtropolis.com/vbody.asp

Standards

National Science Education Standards
CONTENT STANDARD C:
As a result of their activities in grades 5–8, all students should develop understanding of structure and function in living systems

NETS for Students—2007
1. Creativity and Innovation
Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

Students:
  b. create original works as a means of personal or group expression.

  c. use models and simulations to explore complex systems and issues.

2. Communication and Collaboration
Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
Students:
  b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.

Get More!
Find more lessons, templates, samples, and rubrics at:

www.recipes4success.com/lessons

Fantastic Fractions

Process

Authentic Task

After seeing Wallace & Gromit, the people at your local public access television station think it might be a good idea to add clay animation to their animated short films that play on Saturday mornings. They want to see some samples before they make their decision. To help them, you will create a sample clay animation that teaches kids about fractions.

Procedure

Step 1: Explore Fractions

Discuss the concept of fractions with your students. Help them understand the concept of less than 1, but greater than 0. Provide everyday examples of fractions, such as slices of pizza, orange segments, or squares of a chocolate bar. You can have students work along with you as you read *The Hershey's Milk Chocolate Bar Fractions Book* by Jerry Pallotta and Rob Bolster.

Show how you can divide one object into many objects and how this translates into a written fraction. For example, when 1 chocolate bar is separated into 4 pieces, each piece equals ¼ of the chocolate bar.

Step 2: Brainstorm Objects

Have students work with their parents, or other family members, to brainstorm a list of foods and household objects that can easily be divided into fractions. Have students share their ideas as you create a master list of objects. Have students bring the objects to school and work as a class to discuss how the whole object can be divided into pieces that represent fractions.

Step 3: Brainstorm and Plan

Divide students into small groups of 3–5. Have student teams choose a common object from the list that the class brainstormed. Student teams should choose the object that they think will best help other kids learn about fractions.

Have students complete a print storyboard before beginning to build their animations. Their storyboards should demonstrate how they will show the object as a whole, how it will be divided into fractions, and how these fractional parts will be labeled. This will help you evaluate for comprehension before they begin working.

Step 4: Build the Objects and Create an Animation

When the storyboards are complete, provide clay and other materials for the students to create the object they will divide into fractions, as well as a background or any other props their animations will need.

Each team should take between 15 and 40 still pictures of their objects dividing into various fractions.

On the computer, students can use Frames to combine the still images into an animation. Be sure to have them create a title screen, label the different fractions, and add their names to a credits page.

If students finish a basic animation early, have them write a School House Rock style song to go with their fraction animations. You might suggest a rap-style song, with lyrics that rhyme.

Step 5: Share the Animations

When students are finished creating their animations, celebrate their success

Creating Animated Fractions in Frames™

Once you take pictures of your fractions object, you can use Frames to combine them into a Fantastic Fraction animation.

1. Open Frames.

2. Click the **Add Frames From a Folder** button in the preview area.

3. Navigate to the folder of images, click the folder to select it, and click the **Open** button.

4. You will see all of the images in the Frame list.

5. Click and drag the frames into the correct order.

6. To adjust the duration of each frame, click and drag the duration slider bar in the Options panel.

7. Add a text object and type in the verse for each frame of the movie.

8. You may want to add a frame at the beginning for a title and a frame at the end for closing credits.

9. Click the **Audio** button and choose From File to add music run through the entire movie.

10. Click the **Audio** button and choose *Record Sound* to record narration for the animation.

11 Click the **Save** button to save the Frames files, so you can work on it later.

12. Click the **Make** button to export the animation for use in a presentation, on the web, or as a video podcast!

by having each team present its animations to the rest of the class or to another class learning fractions. As they present, ask team members to share what they learned about fractions as they built their animations. You may also want to share the completed animations on your web site or during school video announcements. You could also give copies of the animation to your local access television station to help young television viewers learn this important math concept!

Assessment

Begin assessing student understanding as you work with manipulatives and explore fractions. See how many fraction ideas students come up with on their own, with family help, and then create a class list of objects.

The objects students choose can indicate comfort with the topic. Are they choosing only objects you have already worked with? Is everyone in the group comfortable with the choice? You may want to have them write an argument about why they think a given object will be the best way to teach someone else about fractions.

Be sure to check the storyboards before students begin taking pictures. This allows you to correct any misconceptions before the project proceeds too far.

As students present the final animation, ask each team member for feedback about the process and what he or she learned during it.

Resources

Adler, David. *Fraction Fun.*
ISBN: 0823413411

Cummings, Alyece. *Painless Fractions* (Barron's Painless Series).
ISBN: 0764104454

Pallotta, Jerry and Bolster, Rob. *The Hershey's Milk Chocolate Bar Fractions Book.*
ISBN: 0439135192

Math Forum: Fractions, Decimals, and Percents
http://mathforum.org/library/topics/fractions

No Matter What Shape Your Fractions Are In
http://math.rice.edu/~lanius/Patterns/

Standards

NCTM Math Standards—Numbers and Operations
Understand numbers, ways of representing numbers, relationships among numbers, and number systems.

Grades 3–5: All students should develop understanding of fractions as parts of unit wholes, as parts of a collection, as locations on number lines, and as divisions of whole numbers.

NETS for Students—2007
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Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
Students:

   b. create original works as a means of personal or group expression.

   c. use models and simulations to explore complex systems and issues.

2. Communication and Collaboration
Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
Students:

   b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.

Symbolism Bookmarks

Process

Authentic Task

Throughout literature and poetry, authors use symbolism to create various effects and to evoke emotion. Symbolism helps us visualize events in a story and understand a character's feelings. You are probably familiar with many symbols: the rose often represents love, and the cross symbolizes Christianity.

"In a White Rose," by John Boyle O'Reilly, the color of rose is also symbolic:

> THE red rose whispers of passion,
> And the white rose breathes of love;
> O the red rose is a falcon,
> And the white rose is a dove.
> But I send you a cream-white rosebud
> With a flush on its petal tips;
> For the love that is purest and sweetest
> Has a kiss of desire on the lips.

Procedure

Step 1: Explore Symbolism

Hold a class discussion about the role of symbols in literature. Why do authors use symbols? What do symbols convey? Ask students why they think symbols are a powerful literary device.

Next, have each student read the Edgar Allen Poe poem "The Raven." Then, read the poem out loud to the entire class and discuss the symbolism in it.

1. What does Poe want the reader to believe has happened to the author before the beginning of the poem?

2. Why did Poe use a raven instead of another bird?

3. How does the raven impact the feeling of the poem?

4. Does this poem appeal to students? Why?

Share with students that the loneliness and hopelessness in the poem are felt by everyone at some time or another. The raven helps us feel empathy for the subject of the poem.

Step 2: Introduce the Project

Let students know that they will create a bookmark that explains the symbolism found in a poem or literary work. Share the sample bookmark with students.

Read the complete version of Paul Lawrence Dunbar's *Sympathy*. You may also want to read Maya Angelou's *I Know Why the Caged Bird Sings*, and the lyrics to Alicia Key's *Caged Bird*. Ask your students to share their explanations of why the author used the "caged bird" symbolism.

Step 3: Create the Bookmarks

Have students choose a symbol in a poem or literary work that they have studied this school year. If you are confident in their skills, have them explore online resources to find symbolism in a new piece of literature.

Have students choose one part of the literary work that best represents the use of symbolism. Have them write an explanation of what the symbolism means and how it affects the work.

The front of the bookmark should include:

1. a pictorial representation of the symbol or symbolism

2. the title of the work

3. a quote from the work

4. the author's name

The back of the bookmark should include an explanation of what the symbolism means and how it affects the work.

Have each student print a copy of his or her bookmark without his or her name. When students turn them in, be sure to log which student created which bookmark.

Steps for Students

Creating a Bookmark in Twist™
You can use Twist to illustrate a bookmark.

1. Open Twist.

2. Click the **Canvas** button on the toolbar. Click the *Edit* button in the Dimensions area. Change the Units pull-down menu to inches. Then, change the Width to 8.5 and the Height to 11. Click the *Go Back* button.

3. Use the Rectangle tool to draw vertical and horizontal bars.

4. Use the Line tool to draw lines. Change the **Stroke** options on the editing panel to change how the line looks.

5. Use the Pencil tool to draw freehand shapes.

6. Use the other drawing tools to complete your bookmark.

7. Click the **Save** button on the toolbar. Give the Twist file a name and choose a place to save it.

8. Click the **Export** button on the toolbar to export the bookmark as an image file.

9. At the Export Image As dialog, choose BMP from the Format pull-down menu. Click the **OK** button.

10. Give the bookmark file a name and choose a place to save it.

11. Click the **Print** button on the toolbar to print a copy of the bookmark.

12. Close Twist.

Step 4: Evaluate the Bookmarks
Divide students into small groups. Give each group a small collection of completed bookmarks. Have each team work together to complete one Bookmark It Evaluation for each example. Collect their responses and add them to your assessment before returning the bookmarks to students.

Step 5: Share the Bookmarks
Have students print several copies of their bookmarks on card stock, cut out each side, and glue them together. Then, place them in the library as giveaways for other students to use.

Assessment

As you complete a summative assessment on the bookmark design, evaluate (1) the appropriateness and effectiveness of their pictorial representations of the symbol, (2) the appropriateness of their quotes as a representation of the symbolism, and (3) the explanation of how the symbolism is used in the work.

Resources

Bierderman, Hans, and Hulbert, James. *Dictionary of Symbolism: Cultural Icons and the Meanings Behind Them.*
ISBN: 0452011183

Gibson, Michael, and Neret, Gilles. *Symbolism.*
ISBN: 3822850322

Symbols and Symbolism
http://www.fiu.edu/~morriss/bookword/symbols/symbolism1.html

The Gutenberg Project
http://www.gutenberg.org/

Bartleby Poetry
http://www.bartleby.com/verse/

Standards

IRA/NCTE—Standards for the English Language Arts

7. Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources (e.g., print and nonprint texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience.

8. Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to relate and communicate knowledge.

NETS for Students—2007 Refresh
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Students:
   b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.

What Matters?

Building collaborative problem-solving skills with technology

by Terry Gibbons and Paula Yezak

For 21st-Century learners, what matters most is the ability to think critically and communicate effectively within a team environment. Practicing higher-level cognitive skills is fun for students using a "Web Quest" model and Tech4Learning's ImageBlender and WebBlender software, as demonstrated by gifted and talented fifth grade students at Western Hills Elementary in Temple, Texas.

Mixing science curriculum with technology, these students participated in a pilot project that creatively integrated online research with digital cameras, image editing, and Internet publication. The steps for this collaborative learning unit could be applied to any area of study and completed in a period of just a few days.

Step 1: The Task

With the help of Western Hills Gifted and Talented Teacher Lanelle Holbrook and Computer Lab Assistant Rika Talasek, students are introduced to the project from an instructional web site where they are directed to form crews of three or four members for an imaginary space mission.
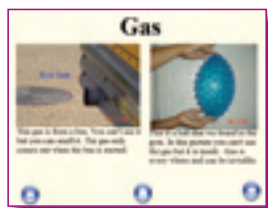
Each crew is tasked with the exploration of a make-believe planet where they must find and catalog objects representing each state of matter. Members determine who will be assigned the roles of team leader, recorder, and photographer. With school staff supervision, crews embark on walking expeditions.

Students are instantly engaged shooting photographs, collecting information, and recording data. Following this discovery activity, each crew returns to a computer lab where members work together to expand their knowledge of solids, liquids, and gases by conducting research, synthesizing information, and organizing their collection of pictures into shared networked folders.

Step 2: The Process

After a brief software demonstration, crew members learn to use ImageBlender to resize, embellish, and label each picture. Sharing their edited images, they use WebBlender to develop individual web pages that illustrate the states of matter and chronicle their explorations. Cooperation is the key element as teams assemble web pages into an interesting and informative web site that they publish online.

Step 3: The Conclusion

Following the completion of each web site and a self-evaluation rubric, crew members practice communication and presentation skills through the use of a classroom video projector. Students critique the effectiveness of the publications and reflect on the efforts of their teams. Discussion centers on how crews resolved conflicts and managed time constraints to successfully meet goals.

To learn more about this project and utilize this web quest site, please visit:

www.tisd.org/webquest/matterquest

Biography

Terry Gibbons *is an instructional technologist for Temple Independent School District. Terry enjoys all kinds of creative endeavors and specializes in graphic design and multimedia publication.*

Paula Yezak *enjoys developing, implementing, and supporting innovative technology programs for Temple Independent School District. She motivates educators with new ideas for teaching and learning with technology each year.*

Spring 2008
INVENTION
Contest

As the end of the school year gets closer, we are looking for your students to show off the skills they have learned this year to design an invention that will make the world a better place.

Design the most creative, original, and effective invention and you could win an iPod or a pizza party!

Deadline:
Thursday, May 8, 2008

For more details on judging and requirements, please visit:
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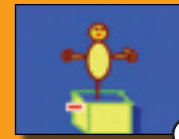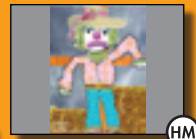
Is your Tech4Learning software up-to-date?

frames

ImageBlender 3

pixie 2

twist

WebBlender 2
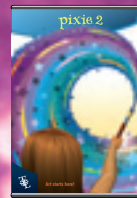
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