Summer 2008 | Volume 14, No. 9

Classroom Connect®

Connected Newsletter™

The K-12 Guide to Technology & Data

Differentiated Instruction

Using technology to spark student learning

ASSESSMENT
Communicating results to parents

TOP 10 MATH SITES
Interactivities to bookmark

TECHNOLOGY INFUSION
Accessible classroom tools

FINAL ISSUE

Harcourt Connected Learning

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How to Connect with Us

- To contact our customer service representatives, please email **help@classroom.com**, or phone **(800) 638-1639**.
- Our new company is **Houghton Mifflin Harcourt Learning Technology**. Learn more about our professional development programs and online instructional materials for K-12 education at **hmlt.hmco.com**.

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Connected Newsletter

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Before going to press, we do our utmost to check the safety and validity of the websites in this issue. But due to the ever-changing nature of the Internet, we cannot be responsible for address changes or inappropriate content on these sites.

CAUTION This icon indicates a site that contains excellent information but may link to content that is unsuitable for students.

A Big *Thank You* to Our Writers!

As the school year draws to a close, the *Connected Newsletter* staff would like to thank all of our outstanding contributing writers: Cara Bafile, Emily Beck, Jim Cornish, Mary Cupito, Domenic A. Grignano, Christopher Mautner, Rita Riebel Mitchell, Ladd Skelly, and Joe Todaro. Each month, these educators presented the best interactive websites and software applications for integrating technology into your curriculum.

In addition, we were fortunate to publish inspiring articles by technology experts from around the country: Tony Brewer, Donald Hawkins, Erin K. Head, Chris Hofer-Borror, Alec MacKenzie, Arnold Pulda, Mark Pullen, Elyse Kurzon Quill, Lane D. Rankin, Linda Ricchiuti, Kathy Schrock, Grace Smith, Helen Teague, Stephanie Throne, Harry Grover Tuttle, and Tony Vincent. Each feature story was chosen to help you meet professional development goals and give you the latest information on Web 2.0, differentiated instruction, data-driven decision making, community connections, standards-based learning, and much more.

The *Connected Newsletter* Bids Farewell

This is the final issue of Classroom Connect's *Connected Newsletter*. First published 14 years ago in Lancaster, Pennsylvania, this unique publication offered readers a hands-on technology guide and access to hundreds of dynamic Internet resources. We hope the *Connected Newsletter* helped you to create authentic learning experiences, improve student achievement, and collaborate with teachers around the globe.

To our many subscribers, we thank you for your support and worthwhile feedback. For new ideas and products, please visit **Houghton Mifflin Harcourt Learning Technology** at **hmlt.hmco.com**. Our new company provides extraordinary online solutions, services, and resources to help you use the power of technology to educate K–12 students.

Sincerely,
Sharon Wheeler
Managing Editor

TechToon

Flag Day Lessons
Grades 2–6

Ten years ago, I applied for a job writing for this newsletter. Asked to write a sample article on a topic of my choice, I selected Flag Day in honor of my friend and colleague, Chris, whose birthday happens to fall on June 14th. So, as the *Connected Newsletter* goes to press for the last time, it seems only appropriate to include a site on Flag Day, since that is where this all began for me. These two lessons for Flag Day were designed by educators at the National Endowment for the Humanities. The instructions and bibliography are comprehensive and include extension activities. Thanks for a terrific ten years!
edsitement.neh.gov/view_lesson_plan.asp?id=338

NASA IMAGE Lesson Plans
Grades 1–12

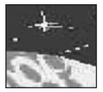
IMAGE is the acronym for Imager for Magnetopause-to-Aurora Global Exploration. This specialized spacecraft uses neutral atom, ultraviolet, and radio imaging to study the astronomical areas affected by magnetic fields. Don't worry if that seems complicated—the lesson plans are clear and comprehensible. Developed by interns at the Goddard Space Center, there are more than 100 teacher-tested activities. Students in grades 1–5 explore solar flares and how to design a rocket payload. Students in grades 7–10 build a soda bottle magnometer to monitor changes in Earth's magnetic field. Click Exploring Space Mathematics for a great middle school unit that provides real-life math connections using decimals, scientific notation, time calculations, and scale drawings.
image.gsfc.nasa.gov/poetry/activities.html

TeachKind
Grades K–12

The education branch of PETA, People for the Ethical Treatment of Animals, TeachKind offers "free high-quality lesson plans and teaching materials that will help your students develop critical-thinking skills, empathy, compassion, and civic responsibility while empowering them to take compassionate action for animals in their own communities." Lessons are organized by subjects such as biology, creative arts, current events, ethics, health, history, language arts, life skills, math, reading, science, and social studies. For extended activities, try the interdisciplinary lesson packs. For example, Share the World discusses the amazing world of animals. Just Choices explores the history of social justice and inspires high school students to become positive change agents. Both include companion videos and worksheets.
www.teachkind.org/

Live Links
If you would like a PDF containing all of the live URLs from this Newsletter, send an email to **links@classroom.com**

Texas Center for Educational Technology: SCOPE
Grades K–12



These Super Collider Opportunities for Public Education (SCOPE) collaborative lessons review astronomy, electrostatics, geology, lasers, and radioactivity. In Sunspots Spotted, students collect and analyze data to calculate the sun's rotational period. In the Coca-Cola Lab, students use calculators to compare the pH values of various liquids. Dropping Marbles asks students to film marbles as they fall into various viscous liquids and then use the videos to collect data. A Positively Negative Experience lets students discover how Gauss's law applies to conductors. And in Laser Eyes, they'll observe the speckled pattern produced by a laser projected upon a wall or screen.
www.unt.edu/scope/Lesson%20Plans/activities.htm

Texas Department of Health Services Lessons
Grades K–5

From Picky Eaters to Lyme Disease, these thorough lessons cover nutrition, illness and prevention, and anatomy. They teach the basic structures and functions of the human body and how they relate to personal health. Students will also learn to identify health behaviors that transmit or prevent the spread of disease. Many of the lessons incorporate children's literature by familiar authors Marc Brown, Eric Carle, and Lois Ehlert. To wrap up your health unit, click Kid's Corner for games, puzzles, quizzes, and coloring pages. Materials are available in Spanish.
www.dshs.state.tx.us/kids/lessonplans/

HotChalk: LessonPlansPage.com
Grades K–12

You'll want to take some time to browse these 3500 free lesson plans that have been rated on a five-star system. Search for specific topics by keyword or click Choose Your Subject, Recent Additions, or Seasonal Lesson Plans by Date. This site also explains how to customize your math worksheets, select worthwhile science projects, and develop a quality lesson plan. Join the teacher discussions or sign up for the newsletter. In addition, read a collection of inspirational stories submitted by teachers.
www.lessonplanspage.com/

by Emily Beck
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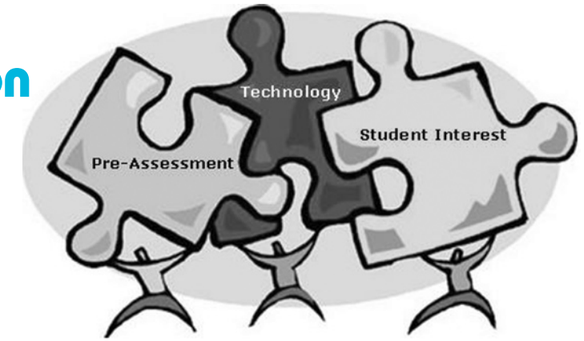
Differentiated Instruction

Connecting technology, pre-assessment, and student interest



The mind is not a vessel to be filled but a fire to be kindled.
— Plutarch

In many classrooms, teachers continue to overlook the importance of "knowing" the students they teach. A glimpse into any classroom immediately shows the physical differences of children and their individual preferences for clothing, hair styles, colors, and expressions. A closer look reveals the uniqueness and preferences of each learner and the similarities and differences among them.

So, why should today's teachers employ state-of-the-art strategies to more effectively learn about the interests of their students? And how can teachers capitalize on student interest for differentiating instruction? How can they use technology to help?

Today's students are very different from students of the past. These days, students come from a complex assortment of cultural, academic, and family backgrounds, bringing with them an array of multidimensional learning styles. As *digital natives*, many students outshine teachers in technical expertise because technology tools play a major role in their daily lives. Marc Prensky writes in "Digital Natives, Digital Immigrants," "Today's students are no longer the people our educational system was designed to teach."

The Importance of Student Interest

Teachers are often able to read their students, particularly in the areas of readiness and learning preferences. Of course, most of our assessments are those that involve evaluation of our students' progress toward local, state, and federal benchmarks. Where we tend to spend less time is in the area of appraising students' interests: their personal passions, curiosities, and even their dislikes. While we may inquire about them at the beginning of the school year, we tend to view students' interests as static, so we don't re-evaluate them. Here's where we fall short.

If we truly believe in encouraging our students to develop their weaker intelligences (as prescribed by Howard Gardner) as well as develop alternative learning strategies that fall outside their preferred styles, then we need to provide activities that enable them to do so. Further, we should attempt to assess whether they have cultivated new passions that were nonexistent at the beginning of the school year, via classroom activities and interaction with others who have different interests. New interests develop and others fade, so periodic interest-taking is essential in a differentiated classroom. Some students who were at first reluctant to share information about themselves may feel more comfortable doing so as time progresses.

It's not difficult to understand why pre-assessing our students' levels of readiness (and even learning profiles) is beneficial for both parties involved. If we recognize what our students have mastered and what they have yet to grasp, pre-assessment affects the content we present, as well as how and when we communicate it. It's a bit harder to convince ourselves why we should take the time and energy to assess students' interests if the resulting data really doesn't seem to impact the content that we are *required* to present. However, mandated curriculum does not totally eradicate the possibility of exploring students' interests. Instead of feeling overwhelmed by what "must be covered," we may look upon the challenge as a way to better reach our students' diverse passions. If possible, we might allow students to share and teach one another about a particular theme that really intrigues them (which might not be one of our favorites). Most importantly, we must remember that students who are curious about our topics of study are more highly motivated and tend to perform more successfully in our classrooms.

Pre-assessment Technology Tools to Gauge Student Interest

Pre-assessment is sometimes referred to as *diagnostic assessment* because it assists us in the effort to detect learners' entry levels, specifically in the areas of readiness, learning profiles, and interests. Not only does pre-assessment help us determine our students' familiarity with specific content, but it also helps us establish accurate, flexible grouping assignments, select a variety of appropriate teaching strategies, and adjust activities to meet learners' needs and curiosities. We've tried a number of traditional and alternative methods such as the 13 listed here.

1. **Coat of Arms:** Students can create their own coat of arms, using color and symbolism to make a statement about their own identity (including interests), then share their artifacts, and tell or write about them.
   Personal Coat of Arms (printout)
   www.storyboardtoys.com/gallery/coat-of-arms-lesson-plan.htm
   Alnwick Castle (create online and print)
   www.alnwickcastle.com/flash/heraldry.html
   Victoria and Albert Museum Design a Coat of Arms (create online and print/e-mail)
   www.vam.ac.uk/vastatic/microsites/british_galleries/designa/coat_of_arms/coat_of_arms.html

2. **Quilt Patches:** Students can learn about quilts in history, then create their own quilt blocks that make a statement about personal identity (including their individual passions).
   Instructor: Quilt Square Master for Family Member (printout)
   teacher.scholastic.com/lessonrepro/lessonplans/theme/fam23quilt.htm
   Entire Family Square (printout)
   teacher.scholastic.com/LessonPlans/family_square.pdf
   Old State House Museum Design a Quilt Square (patterns and printable quilt grid to design your own)
   www.oldstatehouse.com/educational_programs/activities_games/quilt_patterns.asp

3. **Collages:** Students can craft wonderful designs using draw or paint software, but be sure to experiment with these two sites. Students can share their products and then tell or write about them as a reflection of themselves and their interests.
   National Gallery of Art: Kids Collage Machines (create online, print and/or capture screenshot)
   www.nga.gov/kids/zone/collagemachine.htm
   www.nga.gov/kids/zone/collagemachine2.htm

4. **Surveys and Inventories:** Customized surveys can be generated in a word processing or desktop publishing program, but we like these online, user-friendly links that automatically collate data.
   SurveyMonkey
   www.surveymonkey.com/Default.aspx
   Zoomerang
   info.zoomerang.com/signup/signupnow.htm
   Free Online Surveys
   freeonlinesurveys.com/
   PollDaddy (can insert in blogs and Web pages)
   www.polldaddy.com/
   Interest Inventory for Late Elementary & Middle School Students (printout only)
   www.bloomington.in.us/~cape/intinv.html
   Scholastic Interest Inventory (printout only)
   teacher.scholastic.com/LessonPlans/unit_roadtosuccess_invent.pdf
   If I Ran the School (printout only)
   www.gifted.uconn.edu/3summers/pdf/ifiran.pdf

5. **Checklists and Pre-tests:** These can be designed and printed using a word processing program, a spreadsheet, or a survey/inventory tool listed above. However, you may wish to use some ready-made Web-based resources.
   At this unit on **Weather and Climate**, you'll find a pre-test and pre-assessment writing prompts created for middle and high school students.
   www.msu.edu/~ehlendtc/Group%20Project/pre_test_interviews.htm
   Project-Based Learning Checklist Creator allows you to create printable checklists that can be used to quickly identify interests. Students can tabulate checklist data, graph it, and discuss it.
   pblchecklist.4teachers.org/checklist.shtml

6. **Entrance Cards:** These warm-up questions and writing prompts can be generated and printed using a word processing or desktop publishing software.
   As a variation, ask your students to respond physically instead of in writing. You could produce large signs placed in various spots in your classroom to direct your students. They then move to the location with the sign that reflects their knowledge of the content or their particular interests. Use the **Web Poster Wizard** to help with the signs for your classroom.
   poster.4teachers.org/

7. **KWL Charts:** These may be produced and printed using a word processing or desktop publishing program, but here are some quick links if you prefer to use an online resource.
   KWL Generator
   www.teach-nology.com/web_tools/graphic_org/kwl/
   KWL Chart (printout)
   www.eduplace.com/graphicorganizer/pdf/kwl.pdf
   KWL Chart (printable)
   www.readwritethink.org/lesson_images/lesson924/kwl.pdf

8. **Autobiographical Products:** Reflect on important family and personal milestones with these sites.
   Graphic Organizer (first grade example)
   www.gpschools.org/ci/images/autobi21.GIF
   Autobiographical Timeline (fourth/fifth grade example)
   www.northcanton.sparcc.org/~elem/kidspiration/anderson/autobiographytimeline.htm
   The **Bio-Cube** at Read-Write-Think can be used to generate a mini-bio. Students can produce, then discuss their cubes.
   readwritethink.org/materials/bio_cube/
   The **Flip Book** at Read-Write-Think can be used to generate an autobiography. Students can produce, then discuss their books with each other.
   www.readwritethink.org/materials/flipbook/
   Older students can use the **Profile Publisher** at Read-Write-Think to generate their profile, then share it.
   www.readwritethink.org/materials/profile/
   At **OurTimeLines** students can generate a timeline about the events that have happened in their lives, then research the events that interest them.
   www.ourtimelines.com/

9. **Quiz Generators:** **QuizStar and Quia** both offer teacher-friendly tools to generate quizzes. We especially like the Quia site tools that allow users to create, share, and store quizzes and activities. Short quizzes can trigger interest in learning.
   quizstar.4teachers.org/
   www.quia.com
   Essential Tools for Teachers, a Tom Snyder product, is six great products in one software package. Create worksheets for language and math including bingo, puzzles, crosswords, and flashcards. Students can compile word lists and create puzzles to stump their classmates.
   www.tomsnyder.com/products/product.asp?SKU=ESSCLA

continued➜

At **Personal Educational Press**, you can create free educational worksheets such as flashcards, game boards, and quizzes to print directly from your browser. Students can use the materials to quiz each other, track progress, and share with the entire group.
www.educationalpress.org/

10. **Portfolios of Student Work Samples:** A portfolio is a purposeful collection of student work that displays students' efforts, progress, and achievements in one or more areas of the curriculum. These can be physical or entirely digital using PowerPoint, the Web, or other software. Students organize artifacts, write about the process of constructing them, share their collection with an audience, and reflect on learning. While teachers often use portfolios strictly as formative or summative means of assessment, we allow them to serve as interest generators for future inquiry and as displays of current passions.

11. **Teacher- or Student-Made Games in Digital Format:** While games can be used with individuals, pairs, or triads, they are quite effective with whole-class or split-class teams, and especially so when pre-assessing content knowledge. Create a score card so teams can compete against each other.
The **Oswego City School District's Interactive Games** offers an outstanding array of fun games for students.
oswego.org/staff/cchamber/techno/games.htm
Free PowerPoint game templates abound on the Web. Check out **Jeff Ertzberger's Game Page**.
people.uncw.edu/ertzbergerj/ppt_games.html
Try ***Jeopardy*** from Hardin County Games.
www.hardin.k12.ky.us/res_techn/countyjeopardygames.htm
We especially like the commercial game templates available at **FTC Publishing**.
www.ftcpublishing.com

12. **Student Artifacts:** PowerPoint informational shows, brochures and pamphlets, spreadsheet analyses, graphs, and charts can all express what students have learned and what intrigues them. Student products do not always have to be created by individuals. As in the work world, teams, pairs, or triads can collaborate to produce a product. We have found that student research, based on interest, produces powerful products that students are eager to share with their peers. If your school doesn't have PowerPoint or brochure software, try these free tools.
My Brochure Maker
www.mybrochuremaker.com/
PhotoStory 3
microsoft.com/windowsxp/using/digitalphotography/photostory/default.mspx
Create A Graph
nces.ed.gov/nceskids/createagraph/

13. **Investigation Sites:** Exploring relevant topics is sure to stimulate discussion. Ask students to investigate three topics of interest, then report on them using a note-taking or word processing program. We like these versatile sites.
Curious Kids
www.gpschools.org/ci/depts/library/ckids.htm
The El Paso Public Library Kids Zone
www.elpasotexas.gov/kidszone/kidszone_library/index.htm
Kids.gov
www.kids.gov/
American Library Association's Great Sites for Kids
www.ala.org/gwstemplate.cfm?section=greatwebsites&template=/cfapps/gws/default.cfm
NoteTaker
interactives.mped.org/view_interactive.aspx?id=722&title=

Spark Learning

We find that students are usually eager to show us what they know, while they are fairly candid about what they don't know. Use these starter links and technology-rich ideas for pre-assessing student interest to spark learning and get them to share their curiosities.

References

Prensky, Marc. "Digital Natives, Digital Immigrants." *On the Horizon* 9.5 (2001): 1-6.

Smith, Grace E., and Stephanie Throne. "Differentiating Instruction with Technology in K-5 Classrooms." Eugene, Oregon: ISTE, 2007.

Smith, Grace E. and Stephanie Throne. "Using I-Search to Differentiate by Interest." *Leading & Learning with Technology*, December 2007-January 2008): pp. 33-34.

Smith, Grace E. and Stephanie Throne. "Tech-Enhanced Instructional Strategies That Capture Student Interest." Texas Elementary Principals and Supervisors Association: *Instructional Leader*, March 2008: pp. 3-5, 10.

Everything DI
www.everythingdi.net/

by Dr. Grace E. Smith, Instructional Technology Curriculum Coordinator and Social Studies Curriculum Specialist for a school district of 10,000 students, where she writes and teaches professional development workshops for classroom teachers, models lessons, and coaches teachers in integrating technology into their content areas.
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JUNE 2008

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
2 **Blue Angels** Where is the flight team stationed? www.blueangels.navy.mil/index.htm	**3** **Tennessee** What is the origin of this state's name? www.tennesseeanytime.org/homework/index.html	**4** **Finland** What is the capital of this European country? worldatlas.com/webimage/countrys/europe/fi.htm	**5** **World Environment Day** What is the slogan for the 2008 observance? www.unep.org/wed/2008/english/About_WED_2008/index.asp	**6** **Frank Lloyd Wright** What is the *Taliesin Fellowship*? www.franklloydwright.org/
9 **Michael J. Fox** This actor's foundation seeks a cure for what disease? www.michaeljfox.org/about_aboutMichael.cfm	**10** ***The Simpsons*** Who created this cartoon classic? www.thesimpsons.com/bios/bios_creators_index.htm	**11** **Cling Peaches** How many pounds are harvested in California each year? www.calclingpeach.com/html/nav/industry.html	**12** **Anne Frank** Where did this young writer hide from the Nazis? www.galegroup.com/free_resources/whm/bio/frank_a.htm	**13** **Trooping the Colour** Whose birthday is marked during this celebration? www.army.mod.uk/ceremonialandheritage/household/trooping.htm
16 **Glassblowing** How old is this form of art? www.glassblowing.com/hotglass/history.php	**17** **M. C. Escher** How many lithographs did this artist create? www.mcescher.com/Biography/biography.htm	**18** **Uruguay** What is the *Sun of May*? www.crwflags.com/FOTW/flags/uy.html	**19** **Mongoose** How many species of this small mammal exist? nationalzoo.si.edu/Animals/SmallMammals/fact-bandedmongoose.cfm	**20** **Peregrine Falcon** How fast can these birds dive? www.defenders.org/wildlife_and_habitat/wildlife/peregrine_falcon.php
23 **Grace Hopper** What did this programmer help invent? www.women-inventors.com/Dr-Grace-Murray-Hopper.asp	**24** **Contact Lenses** When was the first plastic lens made? www.contactlenses.org/timeline.htm	**25** **Manta Ray** What do these sea creatures eat? www.oceanlight.com/html/manta_birostris.html	**26** **Philippines** What three seas surround this island nation? www.philippines.hvu.nl/maps.htm	**27** **Death Valley National Park** How have plants adapted to this desert? www.nps.gov/deva/naturescience/index.htm
30 **Children's Bureau** Who was the bureau's first chief? www.ssa.gov/history/childb1.html	**Visit us online for this month's live link calendar—perfect for a computer lab, classroom, or media center activity!** **www.classroom.com/community/connection/calendar.jhtml**			

This Month: The Pollinators

Imagine walking into a supermarket and seeing about a third of the food gone. That's the amount that depends on pollinators, the 200,000 different species of animals that transfer pollen from flower to flower to produce the fruits and vegetables we eat. Of the pollinators, about 1,000 are vertebrates (such as birds, bats, and small mammals) and the rest are invertebrates (flies, beetles, butterflies, moths, and bees). Worldwide, of the estimated 1,330 crop plants grown for food, beverages, fibers, spices, and medicines, approximately 75 percent are pollinated by these creatures. Today, bees, the most widespread of the pollinators, are disappearing and no one is quite sure why. Use this month's Destinations to learn about the plight of these insects and what their disappearance means to the world's food supply.

Pollinator Partnership

Sponsored by the North American Pollinator Protection Campaign and the Coevolution Institute, the Pollinator Partnership website presents a series of projects to help consumers, gardeners, educators, resource managers, and farmers work together to implement a continent-wide action plan designed to protect the health of resident and migratory pollinating animals of North America. Teachers can use the six curriculum modules for grades 3–6. Each module includes a lesson plan complete with background information, pre- and post-assessment activities, and student worksheets. The modules cover topics on pollination, pollinators, plants, and creating pollinator-friendly habitats.
www.nappc.org/curriculum/

Canadian Wildlife Federation

Pollinators was the theme of Canada's April 2008 National Wildlife Week. The Learning Centre includes a 20-page teachers guide (available in PDF format) filled with dozens of classroom-ready activities. The guide begins with a primer on pollination and is followed by a full-page color diagram of the pollination process and then by illustrations of the life cycle of a bee. Activities identify materials, background information, learning outcomes, and extensions.
www.nationalwildlifeweek.ca/home.html

Entomology for Kids and Teachers

The Department of Entomology of the University of Kentucky is on a mission to enhance the quality of human life and to sustain our environmental resources through a better understanding of insects and related arthropods. This site is a great support for a study of pollinators. The entomology resources include state standards-based lesson plans for grades K–12, teacher resources (field guides, trade book lists, and recommended websites), and fact sheets on critters and insects, especially ones common in and around the school yard. If you live in a rural area, the page describing how to create a honeybee hive will help to involve students in a variety of pollinator protection activities.
www.ca.uky.edu/entomology/dept/youth.asp

TheKidsGarden

Gardening has become a popular pastime for both adults and children. Schools are creating gardens to encourage students to participate in the scientific processes and to learn the importance of caring for the environment, including the school grounds. Today, gardening addresses another concern: the protection of the pollinators. TheKidsGarden includes a myriad of resources to help parents and educators teach children about gardening at home and at school. Topics covered include pollination, flower anatomy, propagating plants, garden wildlife, composting, and weeds and wildflowers.
www.thekidsgarden.co.uk

Rodale Institute: KidsRegen.org

Kidsregen.org is part of the Rodale Institute's Youth Educational Program and is located in Kutztown, Pennsylvania. Its approach and purpose is similar to TheKidsGarden but most of the resources are written for children. Go to Educators for projects that connect soil, food, and health. Use the Search function to find a theme called Healthy Plants, People, Pollinators, and Ecosystems. All curriculum materials are free and are in PDF format for easy downloading and printing.
www.kidsregen.org

Additional Websites

The Great Plant Escape
www.urbanext.uiuc.edu/gpe/index.html

Little Giants: The Show About Bees
www.generationscience.co.uk/dyn/1193309735632/Little-Giants-Teachers-Notes.pdf

Wildlife Habitat Council: Pollinator-Friendly Practices
www.wildlifehc.org/pollinatorpractices/

The Pollinators: Activities for Elementary and Middle School Students

At least 75 percent of all flowering plants depend on animal pollinators such as birds, mammals, and many insects. Scientists are speculating that habitat loss, poisoning, disease, and competition from non-native species are triggering the demise of pollinator populations and endangering the planetary food supply. The protection of these pollinators is in our hands. These activities will help your students learn about pollination and pollinators.

1 Pollination

FOCUS
What is pollination?

OBJECTIVES
- Define the term *pollination*.
- Determine the role insects play in the process.
- Identify the creatures important in pollination.

Biology of Plants: Pollination
www.mbgnet.net/bioplants/pollination.html

USDA Forest Service: What Is Pollination?
www.fs.fed.us/wildflowers/pollinators/whatispollination.shtml

Pollination
www.nbii.gov/portal/community/Communities/Ecological_Topics/Pollinators/Learn_About_Pollination/

What Is Pollination?
www.pollinator.org/

2 Flowers

FOCUS
What is a flower?

OBJECTIVES
- Draw and label a typical flower.
- Describe the purpose of each part of a flower.
- Identify the importance of pollination in plant reproduction.

Flower Anatomy
www.enchantedlearning.com/subjects/plants/printouts/floweranatomy.shtml

Flower Parts
www.naturegrid.org.uk/qca/flowerparts.html

Flower Diagram
teachart.msu.edu/pila/images/flower.jpg

Celebrating Wildflowers Coloring Book
botanicgardens.org/coloringbook/flowers.htm

3 Problems

FOCUS
What problems threaten pollinators?

OBJECTIVES
- Explain the specific threats to pollinators.
- List the crops affected by declining numbers of pollinators.

What's Buzzin' in My Garden?
www.pollinator.com/identify/whatsbuzzin.htm

Plight of the Honeybee
weeklyreader.com/featurezone/bees/

Where Have All the Bees Gone?
www.sciencenewsforkids.org/articles/20070613/Feature1.asp

Pollinators at Risk
www.pollinator.org/multimedia.htm

Honeybee Die-Off Threatens Food Supply
www.livescience.com/animals/070502_bees_food.html

4 Survival

FOCUS
What can we do to help pollinators?

OBJECTIVES
- Identify ways we can help pollinators survive.
- Create a pollinator protection plan for home, school, and community.

Pollinator Gardens
museum.nhm.uga.edu/kidsclub/htmldocs/pollination/kids/poll_kia_garden.htm

North American Pollinator Protection Campaign
www.nappc.org/

North American Pollinator: Bear Family
www.fs.fed.us/wildflowers/pollinators/documents/factsheet_bear.pdf

Saving Pollinators
nationalzoo.si.edu/Publications/ZooGoer/1999/1/savingpollinators.cfm

Your Urban Garden Is Better with Bees
www.pollinator.org/Resources/Better%20with%20Bees.pdffactsheet_bear.pdf

by Jim Cornish · Fifth Grade Teacher, Gander Academy, Newfoundland, Canada · jim.cornish@warp.nfld.net

iMovie HD Lesson: Advice for a New Student

Grades 3–5

Introduction

Students produce a video for the following year's students to watch at the beginning of the school year. They share advice on how to make an easy transition into a new grade. Each group contributes a segment to the video.

Objectives

- Determine advice that will be helpful to new students.
- Work collaboratively in a small group.
- Storyboard a video.
- Use a digital video camera.
- Use transitions and other effects to edit a video.
- Publish a video.

Time Estimate

Three or four 45-minute class periods

Procedure

1. Since students are experts on how things work in your classroom, facilitate a group brainstorm on advice they can share with next year's class. They might suggest topics such as classroom rules, the procedures for borrowing books, and where supplies are kept.

2. Each group will share one piece of advice by creating a short digital video segment. They can decide how to use a digital video camera to share their advice. *Consider talking directly into the camera or interview another person or group of people on the subject.*

3. Have students draw storyboards (a rough sketch for what will happen for each scene). Students should write a script: what will be said, who will say it, and list any props that are needed. When their storyboards are complete, students can begin using the digital video cameras.

4. Review these tips for shooting video footage.
   - Power check: Make sure the camera's batteries are charged or a power outlet is available.
   - Sound: If possible, use an external microphone. Otherwise, make sure the camera is as close as possible to the subject and that the subject speaks loudly. Avoid areas with background noise.
   - Images: Make sure the camera stays as still as possible; a tripod will help.
   - Lighting: Shoot footage in a well-lit place.

5. Let each group shoot their footage one scene at a time, referring to their storyboards along the way. Encourage students to preview their footage to make sure it was successfully recorded.

6. Help students upload and connect the video footage into one video file. Alternatively, each group can create individual video files to be compiled later. To enhance the video, groups can add transitions between clips, music, and special effects.

7. Have students delete any footage they don't want to use. Using their storyboards as guides, they should place the video clips in order. Each group can insert a text title to introduce their segment. Add credits at the end of the video.

Assessment

As a class, preview the video on a large screen. Ask students the following questions.

- *Is the digital video camera an input or output device?* (input device)
- *How does the input make its way to the computer?* (usually by loading the camera's disk into the computer or by connecting the camera to the computer with a cable)
- *In what format is the input provided?* (input is a picture file)
- *What is the output?* (the picture displayed on the monitor)

At the end of the year, share the video with incoming students and ask for their comments.

Extensions

Have students work in pairs and use a digital still camera to capture an image related to a piece of advice for new students. Students insert the images into presentation software and explain their advice through bullet points and their recorded voices. Compile all slides into one presentation.

Helpful Tips for Using iMovie HD

Share these guidelines with students to help them build skills with multimedia programs.

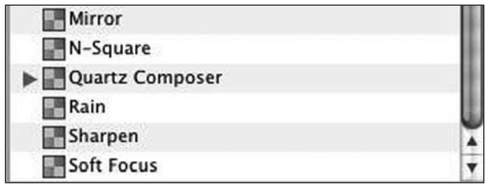
How to Apply Special Effects to Images in a Movie

Jazz up your iMovie!

1. Go to the clip viewer and click a clip.

2. Click the Video FX button to go to the Effects pane.

3. Click an effect in the list.



4. To adjust the timing of the effect, use the Effect In and Effect Out sliders.

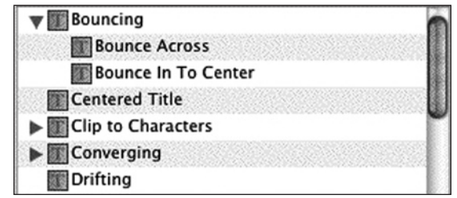
5. When you have the effect that you want, click the Apply button.

How to Add Text to Clips to Use as Movie Titles

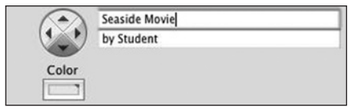
Get creative with your titles.

1. Click the Titles button to go to the Titles pane.

2. Click a text effect from the list. You'll see a preview of the title effect in the preview window.



3. Click the text box at the bottom of the Titles pane. Type a title for the movie. Enter text in both fields if desired.



4. Go to the Font pull-down menu. Use the Font Size slider to change the size of the text. Click the Over Black check box to have the title appear over a black background. Click the Color box if you want the text in color.

5. When you are finished, click and drag the title effect to the clip viewer. When you release the mouse button the title will become a clip. It may take a moment for the title clip to appear.

The software applications lesson and helpful tips are excerpts from Connected Tech, a Web-based instructional program from Harcourt Connected Learning that enables K–8 teachers to integrate critical technology skills. For a free trial, or to learn more about Connected Tech, visit **www.harcourtcl.com** *or call (800) 638-1639.*

A+ WEB GALLERY
Sites That Get Our Highest Recommendation

Site of the Month!

Art Institute of Chicago
Grades K–12
The Art Institute of Chicago has a world-class collection and website. Among its works is Georges Seurat's 1884 masterpiece *A Sunday on La Grande Jatte*. To view more astounding pieces, click the Collection tab. Browse artists by last name or by themes such as Art Institute Icons or African-American Artists. Works are also organized by topics such as Architecture and Design, European Painting and Sculpture, Indian Art of the Americas, Photography, and Textiles. One unique exhibit is called Cleopatra: A Multimedia Guide to the Ancient World, a review of Egyptian, Greek, and Roman art. In addition, the education section offers lesson plans and an opportunity to borrow materials.
www.artic.edu/aic/

Beyond the Fire
Grades 7–12
This Independent Television Services production tells true stories of 15 teenagers (all now U.S. residents) and their experiences in seven war zones. If you had to leave your home in five minutes, what would you take? Where would you go if your country was no longer safe? Click a photo on the world map to hear each teen share his or her personal story. For more materials, go to Resources for a list of references, agencies that work with refugees, and ideas for community involvement. Finally, lesson plans, timelines, and transcripts are available in For Educators.
www.itvs.org/beyondthefire/index.html

Department of Justice Kids Page
Grades 2–8

Begin with Inside the Courtroom, a fascinating glimpse of the law in action. Read a description of a federal prosecutor's job. Do students know there are 93 U. S. Attorneys? Learn how the selection process moves from presidential appointment to Congressional approval to Senate confirmation. Read about an actual FBI case that involves bullied children. Follow the federal prosecutors' responsibilities through the nine steps from the initial investigation to the final appeal. There is also a glossary and a section that describes courtroom staff.
www.usdoj.gov/usao/eousa/kidspage/index.html

Energy Quest
Grades 2–8
An award-winning site by the California Energy Commission, Energy Quest explores how electricity, coal, oil, natural gas, and hydropower work. Study alternative energy sources such as biomass, geothermal, nuclear, solar, and wind. Click Movie Room to view a vintage 1953 animated classic *A Is for Atom. Behind the Bright Lights* is a 1935 piece that explains how the giant electric Chevrolet sign in downtown Chicago works. Energy Vampires provides an interactive investigation of the appliances that suck the most energy out of the grid. Take a trip in the Time Machine to explore the history of electricity. Finally, learn what can be done to conserve power and save energy through the Change a Light, Change the World campaign.
www.energyquest.ca.gov/

Figure This!
Grades K–12

Developed by the National Council of Teachers of Mathematics, this site provides weekly math challenges. Find intriguing titles such as Beating Heart, Grape Juice Jungle, Movie Money, Gone Fishing, and Fire Hydrant. Each challenge contains a getting started explanation, a problem-solving hint, interesting facts, extensions, and an illustrated answer. The Teacher Corner has a PowerPoint presentation, math standards, and handouts for families. The Family Corner offers ideas on how to help students with math and reading homework. Some problems are appropriate for more advanced students, but others can be adapted for kids of all ages. The materials are also available in Spanish.
www.figurethis.org/index.html

Florence Art Guide
Grades 5–12

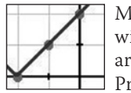
Take your students on an amazing virtual field trip. Click the interactive map of one of Italy's most famous cities and explore the Uffizi Gallery, the Strozzi Palace, and Piazzale Michelangelo. Students will learn that the remarkable Duomo took six centuries to build. The Pitti Palace contains eight different museum collections filled with work by artists who made Florence famous. In addition, read about the Renaissance, the Florentine Republic, and the Dominican Order.
www.mega.it/eng/egui/hogui.htm

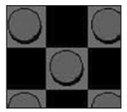
Games Magazine
Grades 5–12

At the end of a school year and throughout the summer, it's important to find activities to keep kids learning. The Puzzler Sampler challenges kids with a trivia question, wordplay, and an Eyeball Bender (mystery photo). Solve crosswords online or play a Pic-a-Pix paint-by-numbers game. Go to Game Reviews for a list of non-electronic and electronic award-winners. Click Links for an impressive collection of game organizations, reference sites, and events.
www.gamesmagazine-online.com/

MysteryNet: Kids Mysteries
Grades 3–8

Can Max solve the case of the Snack Shack? This collection of mysteries and magic tricks is especially entertaining. Read solve-it stories, chillers, and mysteries written by kids. For teachers who want to integrate this genre into their curriculum, click the Lesson Plans link at the bottom of the page. There is also a section devoted to fans of super sleuth Nancy Drew. Use this site to help students hone their reading comprehension and logic skills.
kids.MysteryNet.com/

Purple Math
Grades 6–12

Math educator Elizabeth Stapel created this award-winning, comprehensive site. Her algebra tutorials are perfect for students who need extra help. Preliminary Topics reviews absolute value, negative numbers, and number properties. Beginning Algebra covers the basic rules of exponents, slope and graphing, polynomials, and inequalities. Intermediate Topics introduces quadratic equations, symmetry, and function transformations. Advanced Algebra presents inverse functions, logarithms, and rational expressions. There's also a study skills survey and links to quizzes and worksheets.
www.purplemath.com/

SuperKids: Educational Software Reviews
Grades K–12

This independent, free service helps parents and teachers identify the best software that helps kids learn. The SuperKids staff reviews software based on strict criteria. Search by review, title index, bestsellers, what's new, or price. Also available are math worksheets, vocabulary builders, logic games, and puzzles. Sign up for the SuperKids Newsletter, check out the jokes in Humor, or browse the teacher resources in Links. This is a great resource for tech coordinators planning to purchase new software.
www.superkids.com/

Youth Leadership Institute
Grades 7–12
Empower teens to create social change through community-based projects. YLI uses teen-adult partnerships and real-world experiences in the areas of policy, prevention, and philanthropy to develop a sense of social responsibility. As the organization grows, they are sharing their knowledge and resources via the YLI website. The best way to find and access these resources is through the site map. Go to Philanthropy Resources for a variety of YLI publications such as *Planning for Action: a Workbook for Youth*, which helps students seek funding for philanthropy projects.
www.yli.org/

Live Links
If you would like a PDF containing all of the live URLs from this Newsletter, send an email to
links@classroom.com

by Emily Beck
Preschool Music and Middle School Math Teacher
ebeck512@gmail.com

To: Harcourt Connected Learning
From: Jennifer Vilenski,
Roger Ludlowe Middle School
Fairfield, Connecticut
Re: Life Science Connections
Date: Summer 2008

Q: For which grade levels is the site designed?
I developed it for my seventh-grade life science class. But it could be used for other grades. I've had responses from teachers around the world who use it for grades 5-9.

Q: Can you describe the features of the site?
Along the top of the home page you will see the main sections. There's an Online Notebook with lessons and review materials for each unit in my seventh-grade curriculum. The next main section is Human Body Adventure. It opens with a Flash video my husband did for me years back.

Life Science Safari has interactive lessons. In this section, I discuss five types of living things—basically, the five kingdoms. (Now there are six, so I grouped the two kingdoms of bacteria together.) It is an inclusive piece where you can learn about classification and the cell structures of living things.

I was always frustrated that no websites or texts unified the life sciences from cells to organisms. There wasn't anything inclusive that presented the types of living things, the types of cells they have, and the types of organelles in the cells. This site defines a living thing, and it covers DNA, genetics, and the diversity of life.

I really intended the Human Body Adventure to be a virtual dissection. I wanted students to think about a body from the outside in. What is the first layer? The first thing you'd see is the skin. If you cut away the skin, the next layer you'd see are the muscles. And if you were to cut underneath the muscles, you'd see the ribcage and the internal organs.

Q: Are there online tests?
Yes. In the Life Science Safari, there's a question at the bottom of the page: *Are you ready to take your own expedition (self-test) of living things?* I have five different interactive tests. In the Human Body Project there is a quiz for each of the body systems.

Q: What is the My Residency project?
It's found in the Human Body Project. Once students have learned all the body systems, I use it as a culminating activity. Students act as resident doctors. They each have a patient with a different type of disease or disorder that they need to research. I wanted to create a project that was similar to the rotations that a medical student completes before they receive a degree. In Rotation A, kids are assigned the patient's disease or disorder to research. In Rotation B, they explain their diagnoses as they are videotaped in a public service announcement format. Rotation C is an online quiz I've put together about human organs. Finally, Rotation D is where teachers can pick up the body system quiz sheets. A teacher designed the quizzes based on my website, and I use them as part of this project.

Q: How do teachers obtain the quiz sheets?
Teachers email me and I give them a link for the resources related to the project.

Q: The opening screen of the Human Body site is impressive. How much time did this site take to create?
When we first began the website in 1999, my husband wrote it in HTML, which not many people use now because simpler Web design software is easily available. A lot of animation you can't do with FrontPage software so we designed it with Dreamweaver. My husband did the Flash programming. It's basically a site in the making. It's very different from the original version. It started as one page and then it grew. Life Science Safari was first. It took weeks.

Q: Do you think students who use this site learn more?
They're more motivated to learn if the content is a bit more engaging. If they get to click on things, see the animation, hear the sound, it's more related to their world. It's what they're used to, in terms of the whole interactive video game mentality. But this site is all I've ever used. Can I say my students learned more than others? I haven't compared standardized tests versus other classes, so it has never been measured.

Life Science Connections
vilenski.org/science/index.html

Life Science Safari
vilenski.org/science/safari/index.html

Human Body Adventure
vilenski.org/science/humanbody/index.html

Human Body Project: My Residency
vilenski.org/science/humanbody/project/instructions.html

Jennifer Vilenski <jvilenski@fairfield.k12.ct.us> *was a seventh-grade life science teacher and is now a technology resource teacher in Fairfield, Connecticut.*

by Mary Cupito
Assistant Professor of Journalism
Northern Kentucky University
cupito@fuse.net

Kids World
Grades K–6

What's the best way to avoid the "bad bugs" associated with food? How are dairy cows raised? What 16 chemical elements are important to a plant's growth and survival? From the North Carolina Department of Agriculture and Consumer Services, this site teaches facts about nutrition, food safety, and agriculture. Students can learn to decipher the labels on food products by checking the percentage of key nutrients as well as the amounts of salt and sugar. Also available are coloring books, games, quizzes, and puzzles.
www.agr.state.nc.us/cyber/kidswrld/index.htm

Panwapa
Grades PreK–2

Designed for early learners by the experts at *Sesame Street*, Panwapa uses friendly animal and monster characters to convey the qualities of good citizenship. After joining the site, kids can create their own Panwapa personality and home, without sharing private information. As they explore the countries of the world and meet virtual kids, they'll learn about other languages, lands, and cultures. There are enlightening videos and simple, enjoyable games. Teachers will find printable magazines and activities to extend learning beyond the keyboard. Materials are also available in Spanish, Japanese, and Chinese.
www.panwapa.com/

Wise Pockets Clubhouse
Grades 3–6

Who couldn't use a little advice when it comes to money? A koala named Wise Pockets helps kids with saving, spending, earning cash, and other financial matters. The Center for Entrepreneurship and Economic Education at the University of Missouri-St. Louis explains these practices in original stories about imaginary kids who want to spend their allowances on new toys. The tales are supported by additional lessons based on familiar books such as *From the Mixed-up Files of Mrs. Basil E. Frankweiler* and *Stone Fox*. Teachers will appreciate that each activity contains detailed steps, handouts, assessment suggestions, and extension recommendations.
www.umsl.edu/~wpockets/clubhouse/clubhouse.html

Live Links
If you would like a PDF containing all of the live URLs from this Newsletter, send an email to
links@classroom.com

The GREENS
Grades 2–8

This PBS TV program first made its debut online as a sustainability and green-living resource for families. From conserving energy to reducing emissions, the site's cartoon characters guide kids to making informed choices about the health of the planet. Access a carbon footprint calculator, study global warning, or read a travel blog. Flash animations offer humorous presentations that are backed up by games and printables. With its hip attitude and useful information about composting, hydroponics, and recycling, The GREENS is an asset to any environmental unit.
meetthegreens.pbskids.org/

Florida Power and Light Kids' Korner
Grades K–6

Light up your lessons on energy! Kids can read about electricity, hydropower, nuclear power and alternative energy such as fuel cells, wind, solar, geothermal, and biomass. Discover ways to conserve energy, a glossary, and useful safety tips. The Energy Fun Factory offers pages to print and color. If a ready-made booklet of energy information is what you need, click Teacher Feature for plentiful printables!
www.fplforkids.com/

Maya & Miguel
Grades 1–6

The PBS TV program *Maya & Miguel* "gives children the opportunity for open-ended exploration with language-building activities and presents a variety of cultures and perspectives within its activities." Maya, Miguel, and their friends encourage children to apply their knowledge of their primary language while learning a second language. The engaging characters present crafts, recipes, coloring pages, and sign language printables. Most of the content is available in both English and Spanish.
pbskids.org/mayaandmiguel/flash.html

by Cara Bafile
Educational Writer & Former
Kindergarten Teacher
carabafile91@hotmail.com

Communicating Assessment Results to Parents and the Community

Teachers have an important responsibility to communicate to parents the meaning of their child's test scores and to explain the full picture of the child's achievement using other assessment data from the classroom. It is important to remind parents that standardized tests do not measure many important characteristics of students such as motivation, creativity, curiosity, ability to cooperate, and completion of in-depth, long-term projects. These are all important characteristics that will influence a child's future in education and life in general. The teacher is in a unique position to explain the importance of the standardized test while also balancing it with a view of the whole child.

Steps to Good Communication

The first step to good communication is to put yourself in another person's place. What do parents really want to know about assessment in the school? They are interested in their child and what the assessment will mean for their success or failure in school. They want to know ways they can help their child succeed. Parents want to be able to interpret test results so they understand what they reveal about their child.

The second step is to create opportunities to listen to the parents in your school or district. What questions do they have? Online resources for parents regarding testing can also be helpful. Here are three sites to help teachers understand how a parent may view standards and accountability.

PBS Guide for Parents
www.pbs.org/wgbh/pages/frontline/shows/schools/etc/guide.html

Testing: Myths and Realities
www.wrightslaw.com/info/test.myths.reality.htm

Communicating Assessments and Accountability Standards to Parents
www.mde.k12.ms.us/Extrel/pub/guide2.htm

Informed parents may ask some difficult questions. They should be respected, and a thoughtful answer should be given. Because tests will be influencing the lives of their children and their school experience, you have a responsibility to give to parents honest answers to these questions.

- *Does our district use high-stakes testing? If so, what are the stakes that are involved? How will they be measured?*
- *Do these test results have an impact on my child? Or is it the school or district that is being measured?*
- *How much class time is devoted to test preparation and practice?*
- *Are the results given to teachers so they can improve instruction?*
- *Will the test results be shared with students, parents, and the community?*
- *Are other types of assessment such as portfolios or rubrics used?*
- *Does a machine or person score the tests? How accurate is the machine-scoring?*
- *What is the budget for outside testing in this district?*
- *Does the test influence the curriculum? In what way?*

There are many resources available online to help educators communicate to parents about standards and accountability. One of the most helpful is **Achieving Standards** (www.publicengagement.com/resources/engagement/index.htm). Created through a collaborative effort among several school districts and organizations, this site offers practical suggestions for back-to-school night, open house, and other occasions to meet with parents and the community.

Information prepared for parents should explain how assessment is tied to school quality and the curriculum. They need to be reassured that the tests are not biased. Parents also want to know how they can help their child succeed. This U.S. Department of Education site includes tips for parents on ways to help their children.

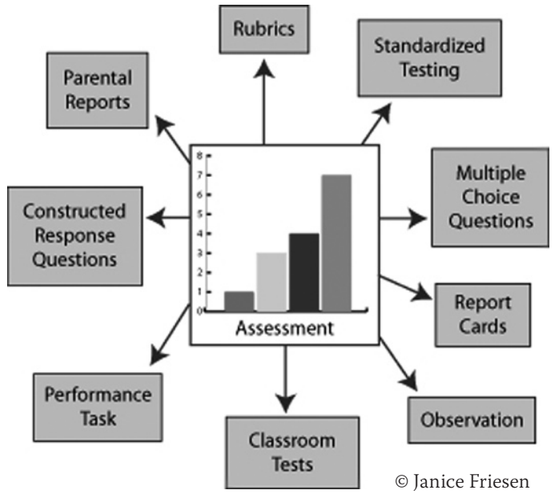
Involvement in My Child's Education: My Child's Academic Success
www.ed.gov/parents/academic/involve/edpicks.jhtml?src=ln

Specialized Vocabulary in Assessment

Is assessment the same as testing? Do you know what *standardized* means? What is the difference between a *norm-referenced test* and a *criterion-referenced test*? How is a constructed response question different from an essay question? So many terms are used when it comes to testing that it is difficult sometimes to be sure that we are all talking about the same things. Review the glossary at **The Literacy Dictionary** (www.nde.state.ne.us/READ/FRAMEWORK/glossary/assessment.html) and the definitions here.

Assessment vs. Test

The terms *assessment* and *test* are often used interchangeably. The word assessment can be an umbrella term that refers to the larger group. As shown in this diagram, there are several different types of testing, but they are all considered assessment:



© Janice Friesen

Achievement Test

This test measures students' learning to help place them in the right programs.

Aptitude Test

This test measures students' capacity to learn in the future. These are often used for college entrance applications.

Criterion-Referenced Test

This test shows student results in comparison with a benchmark or standard of acceptable performance. Many achievement tests created and administered at the state level—such as the Massachusetts Comprehensive Assessment System (MCAS), the Texas Assessment of Academic Skills (TAAS), and the Virginia Standards of Learning (SOL) Assessments—use criterion-referenced scoring.

High-Stakes Test

This standardized test is used to make important decisions such as student promotion in school, professional advancement for teachers, and school funding or restructuring. If you have an interest in high-stakes standardized exams, read **Where There Is a Will There Is a Way** (veronicalisastark.wordpress.com/2007/07/06/where-there-is-a-will-there-is-a-way/). This blog-hosted article discusses how some students in Texas who failed the TAKS mandated exam are skirting the rule by enrolling in private schools.

Norm-Referenced Test

This test measures students in comparison with a "norm" group. It does not measure how much they know but how they compare with a peer group. Most national achievement tests—including the California Achievement Test (CAT), the Comprehensive Test of Basic Skills (CTBS), the Iowa Test of Basic Skills (ITBS), Tests of Academic Proficiency (TAP), Metropolitan Achievement Test (MAT), and the Stanford Achievement Test—use norm-referenced scoring. Aptitude tests such as the SAT and "IQ" tests are also norm-referenced.

Standardized Test

This test has specific tasks and procedures so that testers working in different geographical areas may make comparable measurements. It can provide norms on a reference group ordinarily drawn from many schools or communities.

Standards

Standards are the content and performance descriptions of what a student should learn in each grade. A successful assessment program includes many types of assessment that are aligned with standards. Few schools or districts have developed such a unified approach to assessment. Often teachers are left to assess and interpret the results in the classroom in the way they see fit. Then the annual or semiannual standardized test covers different material from what has been measured all along in the classroom. Teachers are torn between covering what they assume will be on the standardized test and covering the usual topics for their grade to a depth that requires higher-level thinking. The challenge of aligning these two approaches is central to using assessment well in our schools.

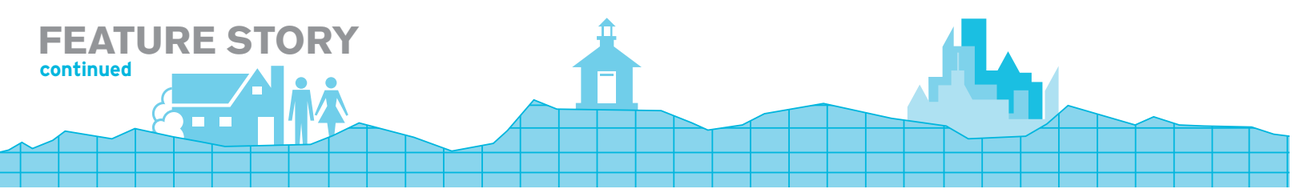
Successful Assessment Techniques

The Watch and Learn section from **George Lucas Educational Foundation: Assessment** (www.edutopia.org/assessment) features an 11-minute video that describes performance-based assessment. The video sets up a conflict between standardized testing and performance assessment. It shows some excellent examples as well as students interacting with experts from the community. In this video, you will see several professional educators with expertise in assessment: Grant Wiggins, who wrote *Backward Design*, and Dr. Linda Darling-Hammond, a faculty sponsor with the Stanford Teacher Education Program. Review the alternate assessments here.

Portfolio Assessment

With a collection of appropriate pieces of student work, it is possible to observe measurable growth. For examples, see **Portfolio Assessment** (ag.arizona.edu/fcs/cyfernet/cyfar/Portfo~3.htm). Many schools have developed paper portfolios that are passed on from year to year. **The Digital Portfolio: A Richer Picture of Student Performance** (www.essentialschools.org/cs/resources/view/ces_res/225) tells more about collections of student work that are digitized so that they can be viewed online.

continued→



Constructed Response

Go beyond multiple choice questions. **Constructed Response Questions** (www.edteck.com/dbq/testing/const_resp.htm) are open-ended and provide time for thoughtful responses. These questions require the test-taker to be able to communicate his or her thoughts rather than select from provided answers. They are more challenging to the test-taker and difficult to score. Most constructed response questions have a rubric-type guide to help the scorer develop a number score.

Parental Reports

Many advocates of alternative assessment recommend using parental observations as a source of information that a teacher may not learn from the classroom. Some schools include parental reports as an integral part of their assessment program. Parents can give unique insights on children's talents and interests, children's comments about schoolwork and their experiences with homework (e.g., is it too easy or difficult for them?), and their perceptions of children's concerns and level of confidence in different subject areas.

Classroom Tests Resulting in Report Cards

Most schools use report cards as a way to report to parents how a student is doing in school. Often it is left up to the teacher to design classroom assessments and collect grades. In many schools, not every teacher grades his or her students in a similar fashion. Sometimes these grades are aligned to the goals of the standardized tests, and sometimes they are not. Most teachers have not been instructed in this area as part of a teacher education program and are left to devise their own strategies with the help of mentors or more experienced teachers in their schools. Several states have started posting scores online. To find out about your state, check out the **Education Report Card** (www.uschamber.com/icw/reportcard/default).

Rubrics

Project-based learning requires a different type of assessment than what many teachers use in their classrooms. Teachers often use rubrics, or scoring guides, for projects or in performance assessment. Often, teachers design a rubric with their students or give out a teacher-created rubric as part of the introduction to an assignment. That way both teachers and students are clear on what is expected in the assignment. This sort of assessment helps teachers think through their goals for each project and clearly communicate them. To assist teachers in writing rubrics, go to **Rubrician.com** (www.rubrician.com/).

Self and Peer Review: Student Assessment

Self-assessment is becoming a more important piece of the assessment puzzle. Educators have realized that if students do not have a realistic view of their own strengths and weaknesses, they will be less likely to choose effective improvement strategies. In the past, it was only the teacher who had the power to decide the quality of one's work. This left the student passive in the whole process. Students need to become more accountable for their own learning. Assessment needs to be taught to students. **Teaching Assessment Criteria** (mathforum.org/sum95/ruth/elem.assess.html) describes an adaptation of a writing workshop activity that helps students learn about assessing their own and their peers' work.

Communicating Assessment Results to the Community and Beyond

Finally, involving the community in the changes a district is making is essential. Some districts have a regular newsletter or a website with school information. If that is the way you communicate, use language that does not contain jargon and include graphs and charts that illustrate the information you are sharing. A district website is an important way to communicate about your school. Review these examples.

Chillicothe R-II School District
www.chillimoschools.org/
Wichita Public Schools
www.usd259.com/default.htm
Kansas School Building Report Card
online.ksde.org/rcard/
Perry Public Schools' Strategic Plan
www.perry-lake.k12.oh.us/district/strategic/

Other forms of communication with the community are open forums, focus groups, town hall meetings, and study groups. Whatever form of communication you use, remember that school employees will be the first line of communication. Review the scenarios in **Communicating Academic Progress to Parents** (www.gse.harvard.edu/hfrp/projects/fine/resources/teaching-case/progress.html). Helping your staff understand and have pride in the way your district is using standards will make a big difference in how the community perceives your school.

Additional Resources

Scoring Guide for Student Products
www.ncrtec.org/tl/sgsp/index.html
A Collection of Assessment Strategies
www.eed.state.ak.us/tls/Frameworks/mathsci/ms5_2as1.htm
Portfolio Assessment
www.pgcps.pg.k12.md.us/~elc/portfolio.html
National Center for Education Statistics
nces.ed.gov/

This article is an excerpt from *Assessment Results: Analysis, Application, and Communication*, a Connected University course.
To learn about Connected University visit **cu.classroom.com**.

The Ten Math Sites You Absolutely Must Bookmark

Longtime readers of the *Connected Newsletter* will not be surprised to learn that there are a handful of mathematics websites that educators turn to again and again for interactivity, insight, and inspiration. In this last issue of the *Newsletter*, it seems appropriate to pull together a master list of the very best online resources that no math classroom should be without.

National Library of Virtual Manipulatives

Developed at the University of Utah under a grant from the National Science Foundation, this repository offers everything from algebra blocks to integer chips to geoboards. Included among the dozens of online manipulatives are several unique tools for exploring classic problems, such as the Towers of Hanoi, that are sure to capture students' interest.
nlvm.usu.edu/en/nav/vlibrary.html

Illuminations

How does hands-on learning connect to a standards-based curriculum? This site from the National Council of Teachers of Mathematics (NCTM) goes a long way toward answering that question by presenting 100 activities with interactive applets for every grade level. Especially interesting are the Factor Game and Paper Pool, but educators are sure to find their own favorites. In addition, most activities are supported by in-depth lesson plans and standards correlations.
illuminations.nctm.org/

Shodor Interactivate

The Shodor Foundation is a nonprofit organization dedicated to furthering math and science education through online simulations. The Interactivate portion has some of the most effective hands-on tools on the Internet. The Activities link gives direct access to all of the applets. However, you may want to head straight to the Lessons link for detailed lesson plans built around the applets. The Discussion link provides model classroom dialogs that can help teachers and students debrief their learning experiences.
www.shodor.org/interactivate/

PBS Mathline

Looking for a new way to introduce students to box-and-whisker plots? Tired of the same old approach to decimals? The videos at Mathline can be a source of inspiration! Watch a diverse group of educators teach math lessons to actual students in actual classrooms. Enjoy the videos with colleagues and you'll be sure to have a stimulating discussion about the ideas you can use, the ones you might need to adapt, and the ones you should leave in cyberspace. To get started, choose a math category and/or your grade level, then click Go.
www.pbs.org/teachers/mathline/lessonplans/search_k-2.shtm

Cyberchase Games Central

Few math-oriented sites are more fun than Cyberchase. This is one place where students will be eager to spend time investigating concepts and practicing skills. Among the dozens of games, the Cyber-Pattern Player is a particularly addictive (and tuneful!) introduction to pattern recognition and algebraic thinking. The tool makes it easy for students to create and modify their own drum patterns using a variety of funky sounds. As a follow-up, ask students to describe their patterns using words and symbols.
pbskids.org/cyberchase/games.html

Ambleweb

Ambleside Primary School involves "children in all parts of the process of designing and creating content for our website. Many of these games have been designed by, or with, children." The math resources that Ambleside students created would work especially well in classroom demonstrations. For example, the Decifractator sports a simple interface for converting fractions to decimals. Have a volunteer use it in front of the class while other students predict the results and look for patterns.
www.amblesideprimary.com/ambleweb/numeracy.htm

Educational Java Programs

Although this site only contains about a dozen Java applets, they are all well designed and easy to use. Among the best is the Fraction Bars tool. It's a perfect way to experiment with and visualize the connections among fractions, decimals, and percents. Note that the site includes complete instructions on how to use the applet, but this is one case where you may want to encourage students to discover for themselves how to work back-and-forth among the various representations.
www.arcytech.org/java/

Three Places for Practice

AAA Math is one of the most extensive sites for skills practice. Start by choosing a topic, such as equations, and then choose a subtopic, such as multiplication equations. You'll see a brief review of the topic, followed by several options for practice. Students may enjoy racing against the clock to see how many problems they can solve correctly before time runs out. Math.com supplies reviews and quizzes, as well as a worksheet generator. The Quia site houses more than 1000 educator-created activities in the form of popular TV game shows. Don't be surprised to see students sneaking off to this site on their own time!

AAA Math
www.aaamath.com/
Math.com
www.math.com/students/practice.html
Quia Shared Activities
www.quia.com/shared/math/

by Joe Todaro
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Technology Infusion: Best Websites

Infusing technology into the daily curriculum of K–12 classrooms is a tool that can enhance the total learning process. According to the International Society for Technology in Education (ISTE), "Effective integration of technology is achieved when students are able to select technology tools to help them obtain information in a timely manner, analyze and synthesize the information, and present it professionally. The technology should become an integral part of how the classroom functions—as accessible as all other classroom tools."

By infusing technology into your curriculum, your students will benefit from engaging learning experiences they'll never forget as they become immersed in a multidisciplinary educational adventure.

Free Sites for Educational Technology

Here is a compilation of some of the best free sites that were published in the *Technology Tips* column during the past three years.

Web 2.0

Pageflakes: A personalized desktop that allows users to set up their favorite Internet applications, blogs, news feeds, bookmarks, calendar, word processing, email, and numerous other Web services and applications. One can add over a hundred widgets or "flakes" to enrich a customizable desktop with rich Web-based applications. (April 2007)
pageflakes.com/

Picnik: An online photo editor that allows users to quickly and easily edit, enhance, share, and print photos from any Internet browser and with any computer platform. Picnik delivers one-click auto fixes, basic editing tools, and special effects that your staff and students will love, as well as sophisticated photo tools. (February 2008)
picnik.com

BibMe: A Web-based bibliography tool with a streamlined automated interface to create a properly formatted bibliography. It's fast, easy, and intuitive. (March 2008)
bibme.org

Creating a Web Site

Weebly: A Web design and hosting system that lets you create a professional site quickly with unlimited pages and no file restrictions. Weebly's WYSIWYG editor interface lets you choose a theme (template), plus drag and drop content widgets that control the content layout. (September 2007)
education.weebly.com

Online Gradebook

GradeConnect: A free Web-based gradebook that is integrated with a robust course management system, which provides pages to post assignments and announcements, a calendar, links for websites, an email system for effective communication, and a database to manage student textbooks. (December 2007)
gradeconnect.com

Webinar

Vyew: A web-conferencing service that allows users to host live conferences and work collaboratively on content. It is the only webinar product that provides online educational tools to enhance the online conference. (October 2007)
vyew.com

E-Newsletter

The Big Deal Book: This newsletter is free to educators and published twice a month. The e-newsletter includes Grants and Other Funding Opportunities, Free and Inexpensive Resources, Technology Solutions, Professional Development, and more. To sign up, go to the home page and click on the Free Newsletter graphic. (February 2007)
bigdealbook.com

Electronic Field Trips

Ball State University Electronic Field Trips: Experience an incredible online field trip without ever leaving your school. Ball State University's Electronic Field Trips combine live interactive broadcasts with fun and imaginative Web content. Participate by registering via the "Best Buy Children's Foundation." (Summer 2006)
www.bsu.edu/eft
www.bsu.edu/eft/home/41register.php (Registration)

Content and Information

Answers.com: A leading information site that includes over four million topics. The database comprises 180 trusted titles from prestigious reference publishers in conjunction with its own patented database technology. The search results are viewed on a comprehensive fact-finding page of reference content for students. (November 2007)
www.answers.com/

Internet4Classrooms: A great site that provides teachers with links to high-quality and free Internet resources. It includes hundreds of links for each grade level and subject area, assessment assistance, and online practice modules. (May 2005)
internet4classrooms.com/

Just for You!

I created a special website for all my loyal readers. It includes the above sites and articles for easy access in one location. Additional information on K–12 technology journals, useful lesson plan sites, and standards are included.
technologyinfusion.weebly.com

That's All, Folks!

It has been a pleasure writing my technology articles for Classroom Connect and the *Connected Newsletter*. As a tribute, a special video was created on the above site to thank all the staff and readers of this newsletter. (I asked my dear friend Porky Pig to say some final words in the video—even he had difficulty.)

by Domenic A. Grignano
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MyBytes
Online correspondence

Sponsored by Microsoft, MyBytes teaches older students about intellectual property and property rights in a friendly, hip manner. Listen to new tunes in Showcase or read about artists and other teenagers in Interviews. Students can also create and share ring tones using the Music Mixer and share their thoughts in Viewpoints.

Subject Areas: Multidisciplinary
www.mybytes.com/

Blogs in Education
Online research

Looking for a way to incorporate blogs into your classroom projects? This handy online reference guide can assist. It's a nice collection of links to writing tools, helpful articles, aggregators, sample educational blogs, and other sites that should have you up and posting with the best of them in no time flat.

Subject Areas: Multidisciplinary
awd.cl.uh.edu/blog/

Class2Class
Online research

Be sure to bookmark Class2Class for its repository of math-oriented projects and related materials. Examples include collaborative projects, data-collecting experiments, peer tutoring, and keypal exchanges. Sign up for the mailing list!

Subject Areas: Science, Math
mathforum.org/class2class/

Global Education Collaborative
Online correspondence, online research

This large social networking site is designed to provide an online community for teachers who want to incorporate new technologies into their classrooms. Educators can post videos or photos, and share their own collaborative project ideas via the site's message board or their own blog.

Subject Areas: Multidisciplinary
globaleducation.ning.com/

by Christopher Mautner
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Water, Water, Everywhere
Grades 1–4

About 70 percent of Earth is covered with water. From oceans and seas to lakes, rivers, ponds, and streams, there's even water underground. Have students find out more about the precious liquid that supports life.

Learning Goals
- Understand the water cycle.
- Create a glossary of bodies of water.
- Use maps to locate rivers and lakes.
- Conduct online research to learn facts about the ocean.
- Study microscopic pond organisms.

Activities


The water on our planet is constantly recycled. As a class, visit the websites below to find out how water is recycled. Then have students draw a diagram of the water cycle.

Water Cycle
www.kidzone.ws/water/

Thirstin's Water Cycle
www.epa.gov/OGWDW/kids/flash/flash_watercycle.html

Water Cycle
ga.water.usgs.gov/edu/watercycle.html

How Much Water Is There on Earth?
science.howstuffworks.com/question157.htm

Students can probably name the basic bodies of water: ocean, sea, lake, and river. Have them use the online glossary to learn more about *gulfs*, *canals*, and *lagoons*. Students can create picture dictionaries by folding a piece of drawing paper into six sections and drawing small pictures to illustrate the bodies of water. Or, have each child draw one large picture and combine them to make a bulletin board glossary.

Landforms and Bodies of Water Glossary
www.enchantedlearning.com/geography/landforms/glossary.shtml

The United States boasts thousands of lakes and rivers. Give each student a list of three rivers and three lakes. Using online maps, have them locate the rivers and lakes and write a set of clues to help classmates find them. Then play a guessing game: one student reads the name of the river and the first clue as teams search a map. If no one finds the river within one minute, read the second clue. The first team to find the river earns a point.

Rivers of the United States
www.factmonster.com/ipka/A0001800.html

U.S. Lakes
en.wikipedia.org/wiki/List_of_lakes_in_the_United_States

U.S. Map Collections
geology.com/state-map/

Map Maker
nationalatlas.gov/natlas/Natlasstart.asp

Oceans cover about 140 million square miles (362 million sq km). Learn more amazing facts by using the websites to answer the six questions. Then have students write new questions for the class to research.

1. *What is a continental shelf?*
2. *What is the world's largest ocean mammal?*
3. *Why are oceans salty?*
4. *How fast does giant kelp grow?*
5. *Where is the deepest part of the ocean?*
6. *What animals live in tide pools?*

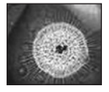
Oceans Alive!
www.mos.org/oceans/planet/features.html

Welcome to Life in the Ocean
www.calstatela.edu/faculty/eviau/edit557/oceans/norma/onfrm.htm

Why Are Oceans Salty?
www.enchantedlearning.com/subjects/ocean/Salty.shtml

Deepest Part of the Ocean
geology.com/records/deepest-part-of-the-ocean.shtml

Planet Ocean
school.discoveryeducation.com/schooladventures/planetocean/bluewhale.html



Pond water is full of creatures that can't be seen with the naked eye. Bring in a sample of pond water in a clear plastic container. Have students write down what they see without a microscope. Then place a few drops on a slide. As students examine the drops under a microscope, they can use the websites to try to identify one or more of the tiny animals. If you have access to a microscope attachment for your computer, project the image on a large screen for the whole class.

Microscopy-UK: Smallest Page on the Web
www.microscopy-uk.org.uk/mag/wimsmall/smal1.html

Virtual Pond
www.naturegrid.org.uk/pondexplorer/pond3.html

What's It Like Where You Live?
www.mbgnet.net/

Assessment
- Could the students explain the water cycle?
- Did the class create a glossary of bodies of water?
- Did students use maps to locate rivers and lakes?
- Did they conduct online research to learn facts about the ocean?
- Were they able to study microscopic pond organisms?

Live Links
If you would like a PDF containing all of the live URLs from this Newsletter, send an email to **links@classroom.com**

On Top of the World: Mountains
Grades 3–6

Lace up your hiking boots, grab a backpack, and let's go! The world's mountain ranges can be found on every continent and in about 75 percent of all the countries. Have students go online to examine older mountain ranges for signs of erosion and younger ranges for the highest peaks.

Learning Goals
- Understand how mountains are made.
- Take a virtual mountain expedition.
- Estimate how long it might take to hike to the top of a mountain.
- Locate specific information on a website.

Activities


Can you imagine Switzerland without the Alps? Mountains take a long time to form. Have partners use the Internet to find out how mountain ranges develop and list the sequence of events. Then use a drawing program such as KidPix to illustrate each event. Print the drawings and have students create a storyboard poster to show what they've learned. Then play the games that describe Rocky Mountain National Park.

How Mountains Are Made
www.mountain.org/education/subexplore/explore02.cfm

Mountains: Face of the Earth
www.edu.pe.ca/southernkings/mountainmm.htm

The Mountain Environment
www.woodlands-junior.kent.sch.uk/Homework/mountains.htm

Rocky Mountain National Park Games
www.jorn.com/ssc/romo/campground.htm

Prepare students for a mountain expedition to the Andes, the Appalachians, or the Himalayas. Ask students to locate these mountain ranges on a world map and estimate the distances of the highest peaks from your school. How would you travel to the base of a mountain in order to climb it? What supplies would you need? Follow the Mountain Adventures modules and review the information in the other websites.

Mountain Adventures Modules
www.kidsgardening.com/TMI/module1/m1p1.htm

Andes Mountains
www.letus.northwestern.edu/projects/esp/top10/andespage/andes.html

Appalachian Mountains
www.peakbagger.com/range.aspx?rid=16

Birth of the Himalayas
www.pbs.org/wgbh/nova/everest/earth/

The highest peak in the world was finally conquered in 1953 when Sir Edmund Hillary and Tenzing Norgay ascended to the summit of Mount Everest. Have students follow the adventure of Hillary and Norgay on the Web. Provide a worksheet with these questions.

1. *How did Mount Everest get its name?*
2. *Who are* Sherpas*?*
3. *What flags did Hillary and Norgay take to the top of the mountain?*
4. *When was the first Everest expedition?*
5. *Who were Mallory and Irvine?*

Imaging Everest
imagingeverest.rgs.org/Concepts/Imaging_Everest/-1.html

Measuring a mountain's height from sea level makes Mount Everest, at 29,035 feet, the tallest mountain on Earth. Use OnlineConversion.com to convert the height of this mountain to meters and miles. How long would it take students to walk that distance on flat ground? Clock them for a mile around the playground or track. Now imagine walking up a mountain, climbing over rocks, through snow and ice, up steep cliffs, and across deep crevasses. How long do students think it would take? Convert the heights of the tallest peaks on other continents.

OnlineConversion.com
www.onlineconversion.com/length_common.htm

Highest Mountain Peaks
www.peakware.com/highest.html?list=8000

Volcanoes are also mountains. Volcanic eruptions force hot ash and molten lava through the earth's crust. The lava and ash pile up to create a mountainous crater. Students can visit several of the world's volcanoes online and answer these questions.

1. *Which volcanoes are most active?*
2. *How many volcanoes are in the United States?*
3. *Which are the tallest volcanoes in the world?*
4. *What are the different types of eruptions?*
5. *Can an eruption be predicted?*

Volcano! Mountain of Fire
www.nationalgeographic.com/ngkids/0312/main.html

Volcano World
volcano.und.edu/

When Will a Volcano Erupt?
vulcan.wr.usgs.gov/Outreach/AboutVolcanoes/when_will_a_volcano_erupt.html

Assessment
- Can students explain how mountains are made?
- Did they take a virtual mountain expedition?
- Could they estimate how long it takes to hike to the top of a mountain?
- Could they answer specific questions using information from a website?

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