

Great Technology Infusion Ideas for ESE and Struggling Students!



Join us for the sessions below, and don't forget to come by the **Hands-On Assistive/Instructional Technology Lab (Rm. 210A)** and get your free CD version of this handout with lots of additional resources. Check at www.fdlrstech.com under "Handouts" for the online version of this booklet.

Thursday - Room 210B

Session 1 - **Simple Digital Tools to Support Reading Comprehension** – David Davis - Strategies and tools that scaffold text to build reading comprehension.

Session 2 - **The Incredible Teacher Resource Kit: Great Ideas for the Classroom** – David Davis - Free CD with tools and resources in reading, writing, math, universal design for learning, and accommodations.

Session 3 - **The Amazing Math Toolbox for Teachers** – Ian Prietz - An amazing selection of digital tools for math, including calculators, virtual manipulatives, simulations, intervention software, and homework support.

Session 4 - **Read It! How Many Ways?** – Tami Folke and Dianne Mathews - Resources for modifying text to provide universal access for all students.

Session 5 - **Effective Technologies that Support Inclusive Science Instruction** – Matthew Marino - An overview, with strategies, on how technology can enhance secondary science for struggling readers.

Session 6 - **Using the iPod as an Assistive Technology** – Luis Perez with Tina Hohlfeld and Allison Papke - Examples of how to use the iPod to deliver assessments to students with special needs in regular education classrooms.

Friday - Room 210B

Session 7 - **Internet Resources for English Language Learners** - Maria Torres - Strategies for engaging English language learners in meaningful and creative learning using the Internet.

Session 8 - **Chew the P.H.A.T.: Procedures and How-to's in Assistive Technology** - Christopher Bugaj with Sally Norton-Darr and Cynthia Feist - Successful resources and strategies for developing a successful district-wide assistive technology team. Includes an evaluation process, lab, website, staff development models, training videos, and more!

Session 9 - **LoTTIE (Low Tech Tools for Inclusive Education) Kit** - Peggy Harter - Over 50 simple, inexpensive tools to help students increase independence and performance in reading, writing, and math.

Session 10 - **Students with Emotional Disorders Experience Success with Technology** - Natalie Muthersbaugh with Carl Muthersbaugh and Lynn Bigbie - Case study (with example strategies and modifications) on how a teacher used technology to increase reading scores by 80% in eight months.

Session 11 - **Universal Design for Learning: Differentiating through Technology** - Susan Saunders - An overview of UDL that provides an effective and innovative way to differentiate instruction using technology.

Graphics / Videos

Because of the popularity of online graphics and video, providing access to digital graphics and video tools can quickly infuse technology into the classroom. Teachers can give a classroom presentation and then have it saved to video and uploaded to the Internet in only a few minutes (flexibility in representation). Students can create video reports (flexibility in expression). And all students can choose a method of content engagement that best fits their individual needs.

Flip . an inexpensive video camera that is user friendly and includes built-in software to email videos or publish them online to YouTube or AOLvideo . http://www.theflip.com/index_flip.shtml

Jing Project (Win . Mac) . currently a free set of software tools and online video hosting space . you can record images on a computer and record what you are doing on a computer as a video, then email it or upload it so others can view . <http://www.jingproject.com/>

CamStudio (Win) . free open source screen recording software to record to an avi file any computer activity . <http://camstudio.org/>

SnapzProX (Mac) . extensive set of screen recording to video tools . <http://www.ambrosiasw.com/utilities/snapzprox/>

Camtasia (Win) . excellent set of screen recording to video tools with extensive choices for final video format . <http://www.techsmith.com/>

Internet Tools

Internet based tools provide a great starting point to design UDL in the classroom. For example, have you considered letting struggling readers search by images instead of text? Several search engines offer this feature. To help visually organize text, view the cached web pages. All the search terms will be highlighted. Add text to speech tools and students can hear the information on the web pages read aloud. The entire Internet becomes a talking book!

Google . be sure to look at the special search features, such as news.google.com and scholar.google.com . <http://www.google.com/>

schoolr . one-stop shop for searches, thesaurus, translators, and conversion tools . <http://www.schoolr.com/>

SCIRUS . searches only science articles and information . <http://www.scirus.com/srsapp/>

netTrekker d.i. . a search engine with built-in text-to-speech and readability levels . <http://ntdi.nettrekker.com/>

Script-O . a free online quiz making service . add text-to-speech tools and students will have audio support on their quiz along with audio support to check their responses . <http://www.readingmatrix.com/quizmaker/index.php>

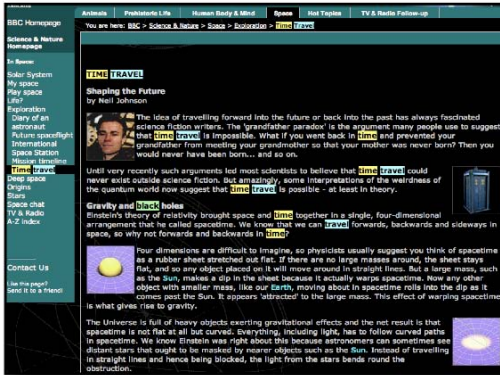
Read . Write . Think . online resource of highly interactive lessons and engaging student materials from the international reading association . <http://www.readwritethink.org/>

vRoom . a free distance learning tool that gives up to three users at a time interactive audio, video, virtual whiteboard, and application sharing . students can use a vRoom to collaborate on projects together . students who are homebound can use vRoom to “join” a classroom in real time . <http://www.illuminate.com/vroom/>

Reading

How do you know when a student can read? When she can go on a journey with an author. Students who struggle with reading seldom get to enjoy that journey. These tools can help.

Visually Mapping Information



Instant Web Page Visual Mapping

Visually mapping information is a scaffolding technique that supports pattern recognition, information organization, and memory. Tools found in programs like WORD and Adobe Reader include highlighters, comments, stamps, and font attributes. For information on how learning disabilities can affect cognitive processes see the NICHCY brief on Reading and Learning Disabilities. <http://www.nichcy.org/pubs1.htm>

Mapping strategies may need to be customized to specific student needs, though most strategies work with most students.

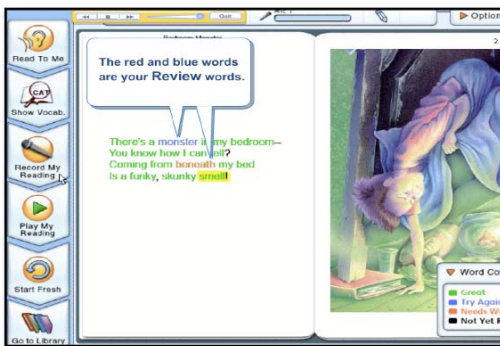
Scaffold connections by color coding connections to self (past experience, prior knowledge), media (familiar books, songs, movies, articles), and events (familiar people, issues, news).

Scaffold organization by color coding people, places, dates, and vocabulary.

Scaffold ideas by color coding connections to senses (I can taste, smell, visualize, etc.). www.scholastic.com . hand-out

Instant scaffold ideas: Google a topic and look at the cached page, or use the FireFox add-on HighlightAll (<https://addons.mozilla.org/en-US/firefox/addon/4240>) where you can click on any word on a web page and all occurrences are highlighted.

Active Reading Strategies (view the manual) . excellent resource of strategies for students to use to visually organize text . http://www.savvyknowledge.com/products/great_teacher/greatteacher.html



Soliloquy

Reading Software

Many students benefit greatly from being able to practice an instructional activity repeatedly. Having a variety of reading software available also benefits students who have problems engaging in instruction by giving them choice in their learning activities.

Simon S.I.O. . training in phonics and reading . http://www.donjohnston.com/products/simon_sio/index.html

Soliloquy . listens to students as they read and provides correction and support when they have problems . <http://www.soliloquylearning.com>

Start to Finish Books . provides high interest topics on a variety of reading levels to support fluency, comprehension, and critical thinking. includes printed and electronic versions of each book .

http://www.donjohnston.com/products/start_to_finish/index.html

Use graphic organizers to support reading comprehension by providing visual scaffolds for thinking processes like story plot, character analysis, event timelines, compare/contrast, concept maps, brainstorming, and information synthesis. Graphic organizers can also be used to help keep students on task and scaffold longer periods of engagement. For ideas, see the Computer-Based Study Strategies at <http://cbss.uoregon.edu/> . Tools include:

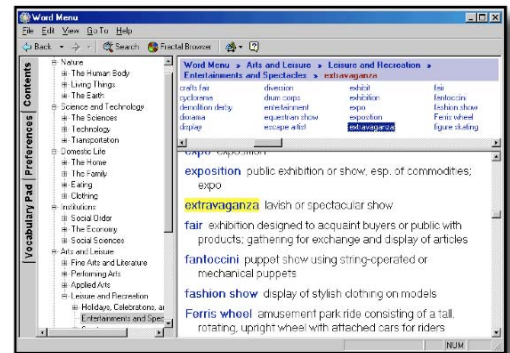
Graphic Organizers . free online source of printable graphic organizers in a wide variety of cognitive supports . <http://www.teachervision.fen.com/graphic-organizers/printable/6293.html?s2>

bubbl.us . free online mapping software. very basic, simple, and works . <http://www.bubbl.us/>

Mindomo . free online mind mapping software. supports additional graphics and shapes . <http://www.mindomo.com/index.php>

Inspiration (Win . Mac) & Kidspiration (Win . Mac) . commercial concept mapping with extensive image libraries and writing support tools . <http://www.inspiration.com>

WordMenu (Win . Mac) . a text-based visual organization of words by subject matter. 14 day trial . <http://www.wordmenu.com/>



WordMenu

Online Books & Reading Support

LeapFrog Talking Books . highly popular LeapFrog products. the talking books are portable and easy to use . <http://www.leapfrog.com/en/shop.html>

StarFall . the ABC's of getting ready to read. extensive materials and resources for early literacy development . <http://www.starfall.com/>

Timmy Books . from Riverdeep . these are digital books from the Travel the World with Timmy program. students can make choices to customize each book, hear the book, and print a paper copy . <http://www.riverdeep.com>

BookBox . inexpensive digital books in a wide variety of languages. many of the books can be read in one language with subtitles in a different language . <http://www.bookbox.com/>

StoryPlace - Children's Digital Library . the children's digital library. includes a spanish version . <http://www.storyplace.org/storyplace.asp>

Florida Electronic Library . log in with a library card bar code number for access to electronic magazines, newspapers, almanacs, encyclopedias, and books . <http://www.flelibrary.org/index.cfm>

Bookshare.org . free access to digital textbooks for students with print disabilities . <http://www.bookshare.org/web/Welcome.html>

Tip - Some students struggle with information management and comprehension on large chunks of text but are successful readers with smaller chunks. Use the Auto Summarize tool in Microsoft WORD to rechunk passages of text. <http://www.microsoft.com/education/autosummarize.mspx>

Writing / Publishing

Start with the basics: lined paper for young writers. Then add productivity tools like online collaborative word processors, word prediction and graphic enhanced writing tools. Finally publish to the web or print beautiful books and photo albums.

Lined Paper Tools



Free Online Graph Paper Generator

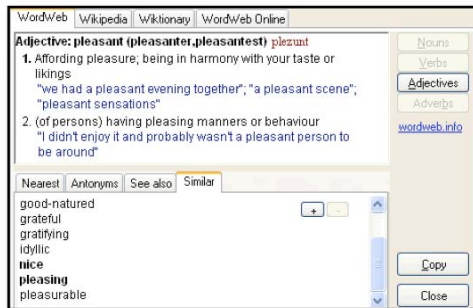
StartWrite (Win . Mac) . inexpensive program for creating a variety of visually lined papers and writing guides. excellent program .

<http://www.drawyourworld.com/strtwrt.html>

Stationery Studio (Win . Mac) . software for creating a variety of visually lined papers and writing guides. includes an extensive graphics library. highly engaging . <http://www.fablevision.com/stationerystudio/product.htm>

Free Online Graph Paper . free online PDFs of various graph papers. includes online generators so you can create customized graph papers and print them out . <http://incompetech.com/graphpaper/>

Productivity



WordWeb

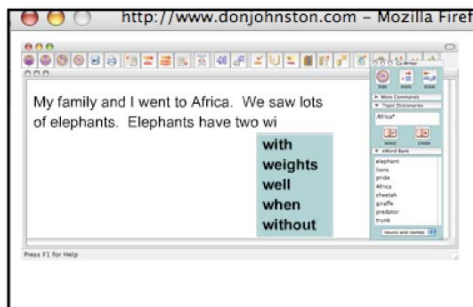
OpenOffice . free Microsoft Office compatible software for several platforms, including Win and MacX . www.openoffice.org

Docs and Spreadsheets . free online word processing and spreadsheet. online collaboration features are also included . www.google.com

Zoho . an extensive set of free online productivity tools, including word processing, spreadsheets, presentations, and database. online collaboration features are also included . www.zoho.com

WordWeb . a free English thesaurus and dictionary that works with most Win programs . <http://wordweb.info/free/>

Word Prediction



Co:Writer

Co:Writer (Win. Mac) . adds quality linguistic word prediction to any software program or word processor a student is using. use with a talking word processor to get full audio feedback .

<http://www.donjohnston.com/products/cowriter/index.html>

Classroom Suite (Win. Mac) . provides word prediction, speech feedback, and extensive writing support tools . <http://www.intellitools.com>

WordQ (Win) . provides word prediction and text-to-speech to any writing software program. the company also has a plug-in called SpeakQ for voice-to-text . <http://www.wordq.com/>

Graphic Enhanced Writing

Clicker 5 . write with words, phrases, or pictures. correlates pictures to words and includes text-to-speech .

<http://www.cricksoft.com/uk/products/clicker/>

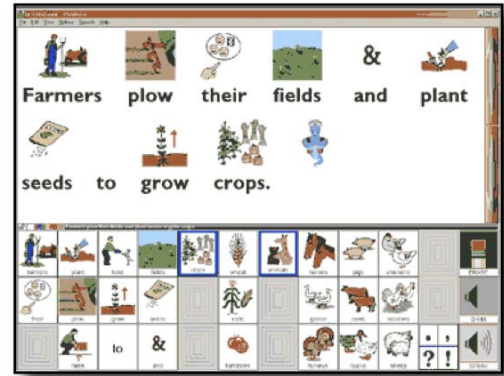
Classroom Suite . write with words, phrases, or pictures. includes text-to-speech . . <http://www.intellitools.com>

PixWriter . write with words, phrases, or pictures. correlates pictures to words and includes text-to-speech .

<http://www.slatersoftware.com/pixwriter.html>

Communicate: In Print 2 . a symbol-based desk top publishing program . great for creating symbol-rich print materials .

<http://www.widgit.com/products/inprint/index.htm>



PixWriter

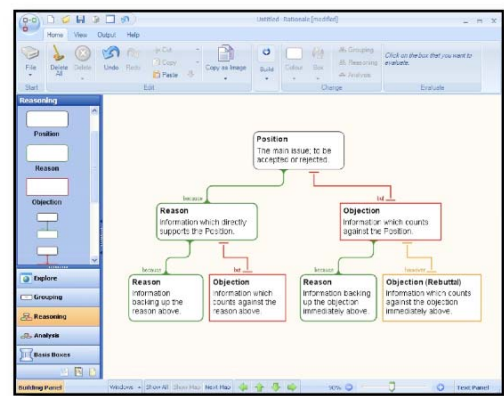
Graphic Organizers

Inspiration (Win . Mac) & Kidspiration (Win . Mac) . commercial concept mapping with extensive image libraries and writing support tools . <http://www.inspiration.com>

Rationale . guided reasoning and argument thinking diagramming software for Windows. requires .net2 which may be on current XP machines . <http://www.austhink.com>

Draft:Builder (SOLO) . build planning, organizing, and draft writing skills and abilities. includes text-to-speech .

http://www.donjohnston.com/products/draft_builder/index.html



Rationale

Digital Publishing

Stapleless Books . online tool for children to create simple stapleless books . http://www.readwritethink.org/student_mat/student_material.asp?id=10

Pocket Mod . more ideas for stapleless books . <http://www.pocketmod.com/>

ClickBook (Win) . utility that paginates writing done in just about any software program so it can be printed as a book or booklet . <http://www.bluesquirrel.com/products/clickbook/>

TIP - Check out the print-to-booklet feature for instant pagination in Microsoft Publisher.

flickr toys . amazing online publishing tools with flickr integration . <http://bighugelabs.com/flickr/>

Shutterfly . online photo book publishing . http://www.shutterfly.com/shop/product_c10010/Photo_Books

TIP - Check out the publishing tools in iPhoto on the Macintosh.

Lulu . online book publishing service . <http://www.lulu.com/>

Blogger . free blogging service that includes posting by email, a great way for students to turn in writing assignments electronically or share writing with others . <https://www.blogger.com/start>

Wikispaces . free wiki service with great online collaborative tools . <http://www.wikispaces.com/>

Math

Some of the best resources for math are the FCAT practice tests which can be found at <http://fcat.fldoe.org> . These practice tests are great curriculum guides; providing concrete examples of the types of math problems students must solve at each FCAT grade level. Formula reference pages are provide for grades six and up.

Instructional Support

FASTT Math . software that targets the development of fluency in addition, subtraction, multiplication, and division . <http://www.tomsnyder.com>

Go Solve . uses graphic organizers to help students plan for solving word problems in addition, subtraction, multiplication, and division . <http://www.tomsnyder.com>

InspireData (Win . Mac) . applies proven strategies of visual learning to data literacy; supports strong critical thinking . <http://www.inspiration.com>

Calculators

Big Calculator (Win) . free basic calculator that can be adjusted for really big buttons . <http://www.sensorysoftware.com/bigcalculator.html>

Metacalc (Internet) . free basic calculator that can be adjusted for large buttons . <http://www.metacalc.com/>

KoalaCalc (MacOSX) . free simple and scientific mode calculator . <http://www.macropodsoftware.com/koalacalc/index.html>

Calc Thingy (MacOSX) . simple interface but fairly powerful calculator . <http://liquidbinary.com/software/>

MoffSoft FreeCalc (Win) . great basic calculator with adjustable size and color schemes along with a simulated paper tape display . <http://www.moffsoft.com/freecalc.htm>

Virtual Manipulatives

Virtual rulers/protractor

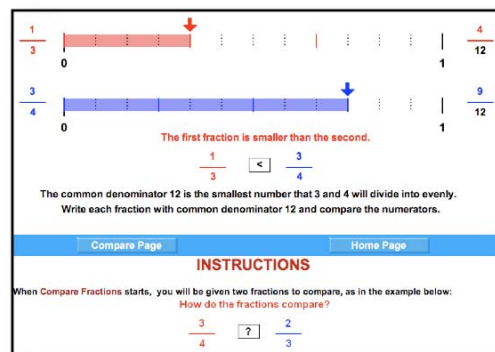
- <http://www.desktopruler.com/products-dr.htm>
- <http://www.svet-soft.com/ruler.shtml>
- <http://www.spadixbd.com/freetools/>
- <http://www.downloadjunction.com/product/store/15482/index.html>

Classroom Suite (IntelliMathics) . includes animation, manipulatives, text-to-speech, and multimedia to demonstrate basic math concepts . <http://www.intellitools.com>

Virtual Geoboards

- <http://nrich.maths.org/content/id/2883/circleAngles.swf>
- <http://illuminations.nctm.org/LessonDetail.aspx?ID=L554>

Visual Fractions . includes online tools for learning fractions, PowerPoints to help teach fractions, downloadable worksheets, and downloadable software for creating circle fractions . <http://www.visualfractions.com/>



Visual Fractions

Illuminations . a collection of online, standard-based virtual manipulatives and lessons to make math come alive in the classroom and at home . <http://illuminations.nctm.org/>

Crickweb . a collection of online interactive math and geometry activities . <http://www.crickweb.co.uk/ks2numeracy.html>

BlockCad . a free Win virtual Lego land . <http://web.telia.com/~u16122508/proglego.htm>

Lego Factory . free online virtual Lego land .
<http://factory.lego.com/>

NLVM . collection of online manipulatives and visualizations for all grade levels .
<http://nlvm.usu.edu/en/nav/vlibrary.html>

Visualizations / Simulations

Virtual Pencil . simulated “paper and pencil” arithmetic and algebra software for students who need to use a computer to write with . <http://www.hentermath.com/>

Broken Calculator . online simulation of a broken calculator. Students must think through how to solve problems using the keys available .
http://seeingmath.concord.org/broken_calculator

Algebra Tiles . model and solve equations .
http://go.hrw.com/hrw.nd/gohrw_rls1/pKeywordResults?keyword=Mb1+Tools

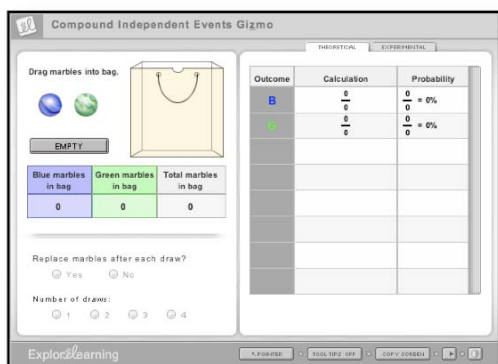
ExploreLearning . extensive online set of mathematic simulations and visualizations .
<http://www.explorelearning.com>

SELECT Math . aligns virtual manipulatives and visualizations with standards .
<http://boston.k12.ma.us/teach/technology/select/index.html>

GeoGebra . virtual tools for geometry, algebra, and calculus . <http://www.geogebra.org/cms/>

Algebrus (Win) . a comprehensive visualization tool for higher mathematics. the trial version has some features disabled .
<http://www.astrise.com/software/algebrus>

EduScapes . includes links to a variety of simulations and visualizations .
<http://eduscapes.com/sessions/smartboard>



ExploreLearning

Homework Helpers

GraphTablet (Win) . free program for creating custom graph paper .
<http://www.graphtablet.com/graphtablet.html>

Free Online Graph Paper . free online PDFs of various graph papers. includes an online generator so you can create customized graph paper and print it out .
<http://incompetech.com/graphpaper/>

A Math Dictionary for Kids . great interactive math examples .
<http://www.teachers.ash.org.au/jeather/maths/dictionary.html>

Translating Word Problems . keywords to help with word problem translation .
<http://www.purplemath.com/modules/translat.htm>

WebMath . online tool that helps students solve math problems, showing step-by-step solutions. general math through calculus . www.webmath.com

Algebra Help . online tool that helps students solve math problems. can be read aloud by screen readers .
<http://www.algebrahelp.com/calculators>

GoMath . online tool that helps students solve math problems. includes algebra and geometry calculators .
<http://www.gomath.com/>

Hot Math . provides online help and guidance for math problems in most text books . <http://hotmath.com/>

Conversion Tools . basic online collection of conversion tools . <http://www.convertit.com>

Algebra Solver . interactive, algebraic problem solver and graphing tool .
<http://www.algebrasolver.com/index.shtml>

Microsoft Math (Win) . all-in-one math homework solution. solve equations, graph functions, use a fully-functional graphing calculator, solve triangles, and convert standard units .
<http://www.microsoft.com/math/default.msp>

WebGraphing . online equation-graphing environment, from simple to advanced calculations .
<http://www.webgraphing.com/>

Equation Wizard (Win) . algebraic equation solver software. trial version good for 30 equations .
<http://www.equationwizard.com/>

Science

Online science information, simulations, and virtual labs are particularly helpful for students with disabilities. Text-to-speech tools (check out the UDL section) provide audio support for students struggling to read scientific text. Many students with learning disabilities benefit from the ability to easily repeat experiments using visual simulations and virtual labs. Students with physical limitations often have to use a computer for all their work, including science experiments.

Getting Started

Steps of the Scientific Method . basic overview of the scientific method with a nice visual diagram of the process . http://www.sciencebuddies.org/mentoring/project_scientific_method.shtml

Planning a Science Project . an in-depth look at the basic scientific method and guide for planning a science project . http://www.sciserv.org/isef/primer/scientific_method.asp

Science Fair Project Guide . comprehensive set of resources to help students plan and complete a great science project . http://www.sciencebuddies.org/science-fair-projects/project_guide_index.shtml

Experiments

M&M Survival Challenge . simple and fun experiment that demonstrates the concept of camouflage and the “survival of the fittest” using M&Ms . http://www.sciencebuddies.org/mentoring/project_ideas/Zoo_p012.shtml

Science Experiments / Project Ideas . extensive list of science experiment and project ideas . http://www.sciencebuddies.org/mentoring/project_ideas.shtml

Physical Science

Motion Basics . an overview of the basics of motion . don't forget that students can use text-to-speech tools to hear this content read aloud . http://www.physics4kids.com/files/motion_intro.html

How Stuff Works . targets acoustics, energy, forensic science, nuclear science, optics, and physics . <http://science.howstuffworks.com/physical-science-channel.htm>

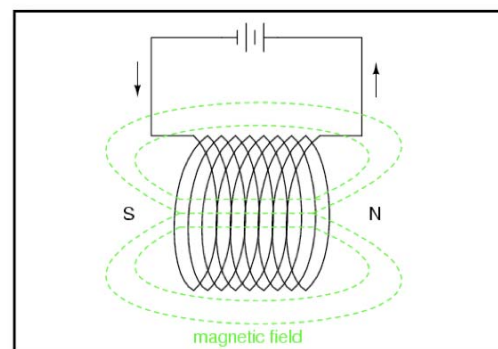
Frank Potter's Science Gems . broad collection of links to physical science web resources . <http://www.sciencegems.com/physical.html>

Soda Play . a collection of applets for building online working models with motion based on the control of friction, gravity, and muscle energy . <http://www.sodaplay.com/create>

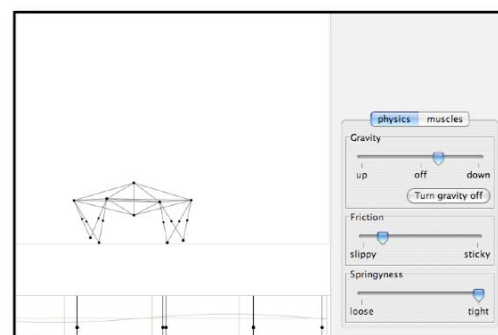
Life Science

DNA From the Beginning . an animated primer on the basics of DNA, genes, and heredity . <http://www.dnafb.org/dnafb/>

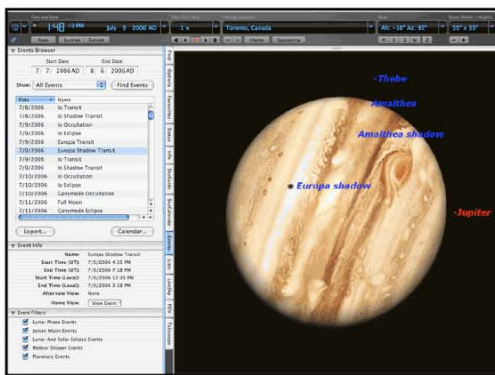
DNA Interactive . lesson plans and classroom activities . free registration for teachers . <http://www.dnai.org/>



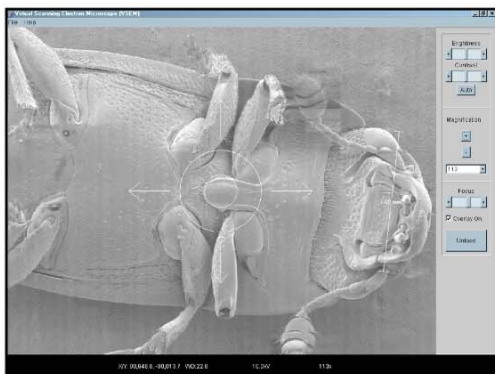
Science Experiments / Project Ideas



SodaPlay



Starry Night



NASA Virtual Electron Microscope



Froguts

Earth & Space Science

Windows to the Universe . content lessons on our planet, solar system, and the universe. each lesson is available in 3 different reading levels and in English or Spanish . <http://www.windows.ucar.edu/>

Starry Night . extremely realistic astronomy simulation software with activities for K-12 . <http://www.starrynightstore.com/>

Virtual Labs / Simulations

NASA Virtual Scanning Electron Microscope . a complete simulation of a scanning electron microscope that enables the user to zoom in and focus on a variety of built in microscopic samples . <http://learn.arc.nasa.gov/vlab/index.html>

Virtual Chemistry Lab . select from hundreds of standard reagents and manipulate them just like in a real lab . <http://www.chemcollective.org/applets/vlab.php>

Sunburst Virtual Labs : Electricity & Light . excellent software virtual labs for doing electricity and light experiments . students can build circuit boards and watch changes in the flow of electricity as they make changes in the circuit board . <http://www.ccvsoftware.com>

NOVA Interactives . a wide variety of online interactive activities that can be used to demonstrate principles in the areas of space science, earth science, technology, and other areas of interest . <http://www.pbs.org/wgbh/nova/hotscience/>

Online Technology Exploration Activities . fun online activities that explore technology, such as robotics and how computers work . <http://www.oms.edu/visit/tech/activities.cfm>

ExploreLearning . extensive online set of science simulations and visualizations . each simulation can be used for free for up to 5 minutes per session . <http://www.explorelearning.com>

Froguts . virtual frog dissection software with an online interactive demo . http://www.froguts.com/flash_content/index.html

Technology

Digital QX5 Computer Microscope . USB microscope for viewing microscopic organisms on a computer screen or projected on a large screen . includes software for capturing still images as well as time-lapse video . students can also use the presentation software included to create multimedia presentations . http://digiblue.com/digital_blue/qx5.html

Tip - Need a quick way to enlarge small objects, plants, insects, etc.? Use a regular photo scanner. Place a transparency on the glass surface to protect it from any scratches and then place the object on the transparency. Leave the lid open and lay a sheet of paper over the object you are scanning. Scan it into an image editing program at 300 to 600 dpi. You will then be able to view on screen, project, or print out a very large version of the scanned object.

HOBO Data Logger . portable data collection probes that can be programmed while connected to a computer then disconnected to be used to record changes in temperature, light, and other stimuli . recorded data can be transferred back into a computer and converted into colorful, easy to read graphs . <http://69.16.224.70/>

Fine Arts

The studies of art, color, music, and sound provide amazing opportunities for many struggling students and students with disabilities. Using inexpensive software a student can work with digital oils and water colors and experiment with new ideas without having to worry about mistakes. It is easy to record and master a complete audio CD, start a digital radio station, or become a podcast master. The possibilities are endless.

Technology Additions

There are a few technology additions you may want to consider adding to your classroom to support the creation of art and music using a computer.

Graphics Tablet . a graphics tablet provides a drawing style computer interface and is especially useful with natural media style software . <http://www.wacom.com/index2.cfm>

Wide Screen Monitor . the more “real estate” your monitor has the easier it will be to work with, and large monitors are getting cheaper every day .

Small USB Keyboard . these keyboards plug into the computer and integrate well with various music and audio recording software .

<http://www.rolandus.com/products/productlist.aspx?ParentId=114>

Photography

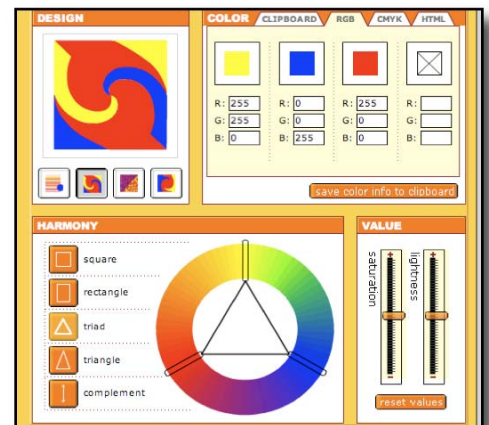
Picasa (Win . Linux) . free image editing software that includes photo library management, slide show, email photos, and post to blogs .

<http://picasa.google.com/>

iPhoto (Mac) . image editing and publishing software included on the Macintosh . create web pages, cards, calendars, and more .

<http://www.apple.com/ilife/iphoto/>

flickr . upload, organize, and share your photos with the world . images can also be posted to flickr by email . don't forget to check out the flickr toys mentioned in the writing and publishing section . <http://www.flickr.com>



Color Wheel Color Calculator

Color

Color Wheel Color Calculator . free online tool for creating a variety of HTML, RGB, or CMYK color palettes .

http://www.sessions.edu/career_center/design_tools/color_calculator/index.asp#

What is Color . Pantone is the absolute color authority (with apologies to Crayola :) and this section of their website provides an overview of what color is . <http://www.pantone.com/pages/pantone/Pantone.aspx?pg=19356&ca=29>

Painting & Drawing

Tux Paint (Win) . free paint software for children . <http://www.tuxpaint.org/>

Sketch Studio (Win) . inexpensive “sketch and smudge” software emulation that includes drawing tutorials . great interface and works well with graphics tablets . <http://www.drawinghand.com/Sketch/SketchStudio.php>

Art Rage (Win . Mac) . excellent free natural media painting software that includes various “paper” types . upgrade to the inexpensive full version for more tools . <http://www.ambientdesign.com/artrage.html>

3D Rendering

Cosmic Blobs . 3D rendering software for kids . <http://www.cosmicblobs.com/>

Sketch Up . free 3D modeling software that targets architectural models . <http://sketchup.google.com/>

Bryce . premiere software for designing virtual worlds and 3D landscapes . works well with mouse emulators . <http://www.daz3d.com/i.x/software/bryce/>

Audio Editing

Audacity (Win . Mac) . free audio editing software . <http://audacity.sourceforge.net/>

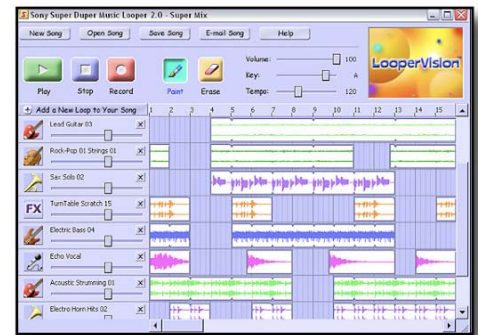
Sound Forge Audio Studio (Win) . or WaveLabs Essentials (Win) . two full featured and inexpensive audio editing programs . they also come in professional versions . do a search at <http://www.ccvsoftware.com>

Music Creation

NotePad (Win . Mac) . a free music notation program that supports the creation of complex musical arrangements that can be printed or played by the computer . <http://www.finalemusic.com/notepad/>

GarageBand (Mac) . a great loop-based audio program that also includes the ability to record voice and other instruments as well as interfacing with a keyboard to control digital synthesizers, making it a full digital studio . comes on the Macintosh . <http://www.apple.com/ilife/garageband/>

Super Duper Music Looper (Win) . an extremely inexpensive loop-based program with the friendliest interface on any music creation software . <http://www.sonycreativesoftware.com/products/showproduct.asp?PID=535>



Super Duper Music Looper

Acid (Win) . professional grade loop-based music creation software that comes in several versions, from free (AcidXpress) to the top Acid Pro (which works in stereo as well as surround sound) . includes extensive recording features in addition to the loops as well as the ability to control digital synthesizers with MIDI keyboards . <http://www.sonycreativesoftware.com/products/acidfamily.asp>

Digital Audio Workstations (DAW)

Mixcraft (Win) . inexpensive multitrack audio recorder that includes loops . <http://www.acoustica.com/mixcraft/>

Project 5 (Win) . multitrack recording environment with digital instruments and effects . <http://www.project5.com/>

Reason (Win . Mac) . extremely sophisticated digital workstation with emulations of mixers, synthesizers, effects units, and more . it does not include audio recording but what it does with synths is amazing . be sure to check out the educators' resources . <http://www.propellerheads.se/index.cfm>

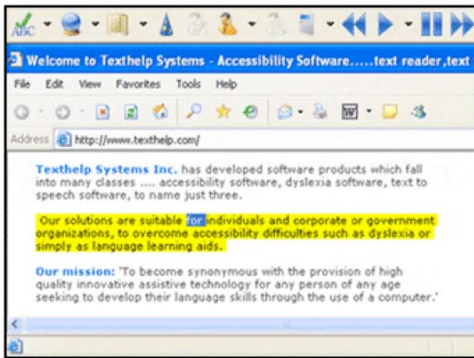
Logic Express & Logic Pro (Mac) . high-end digital recording studios with multitrack recording, audio editing tools, digital synthesizers and effects . <http://www.apple.com/logicexpress/>

Sonar Home Studio & Sonar Producer Edition (Win) . home and high-end digital recording studios with multitrack recording, audio editing tools, digital synthesizers and effects . <http://www.cakewalk.com/Products/DAWs.asp>

Cubase SE & Cubase 4 (Win) . home and high-end digital recording studios with multitrack recording, audio editing tools, digital synthesizers and effects . <http://www.steinberg.net/>

Accommodations

Students with disabilities can use a variety of accommodations and assistive technology tools, depending on their challenge. Some have print disabilities and need text converted into digital format to be read aloud or altered in presentation. Some have fine and gross motor limitations and need alternate keyboards or switch access to control a computer. Others may have visual impairments and require screen readers or screen magnification.



Read and Write Gold

Converting Print to Digital Formats

Kurzweil 3000 (Win . Mac) . a feature rich program that will scan printed text into the computer, retaining the original format and graphics, and then read the text aloud to the student . <http://www.kurzweiledu.com/>

Read and Write Gold (Win . Mac) . provides text-to-speech support across applications, scanning from printed to digital text, and study tools. <http://www.texthelp.com/>

Key to Access (Win) . a USB flash drive with accessibility software loaded so that it will run from the flash drive without having to install software . <http://www.readingmadeez.com/KeyToAccess.php>



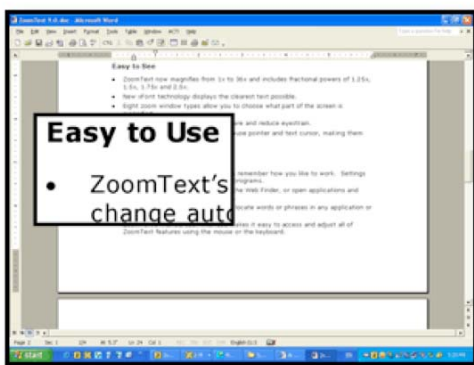
IntelliKeys

Alternate Computer Access

IntelliKeys (Win . Mac) . a popular alternative keyboard with a completely customizable surface . <http://www.intellitools.com/>

FrogPad (Win . Mac) . a mobile one-handed keyboard . <http://www.frogpad.com/>

ScanBuddy (Win) . provides complete computer control using single or dual switch systems . demo is available . <http://www.ahf-net.com/Product%20List.htm>



Zoomtext Lens Mode

Magnification / Screen Readers

BigShot & Zoomtext (Win) . magnification & screen reading tools . <http://www.bigshotmagnifier.com/Products/index.cfm>

MAGic (Win) . magnification software . http://www.freedomscientific.com/fs_products/software_magic.asp

JAWS (Win) . premiere screen reading software . http://www.freedomscientific.com/fs_products/software_jaws.asp

Magnifiers.org . online resource for a wide variety of magnification tools and utilities . <http://www.magnifiers.org/>

Tip - Look in the system preferences on a Mac under Universal Access for the Zoom feature. Use this to quickly double the size of the text and graphics on a computer screen. Check the graphics card utilities on a Windows system for similar tools.

FCAT Accommodations

Many students with disabilities benefit from accommodations in the classroom that they can continue to use when taking the FCAT. Without accommodations those students' FCAT scores reflect the impact of their disability rather than what they have learned or know. Here are some resources along with a few examples of allowable FCAT accommodations.

Resources

Accommodations: A Guide for Educators . 64 page ebook on accommodations in the classroom . any approved accommodations for the FCAT must also be a part of that student's instruction so the classroom is the place to start .

http://www.cpt.fsu.edu/ese/pdf/acom_edu.pdf

FCAT Accommodations for Students with Disabilities: For Parents and Teachers . a basic guide and overview of allowable FCAT accommodations .

<http://www.fl DOE.org/ese/fcat/fcat-tea.pdf>

The IEP Team's Guide to FCAT Accommodations . an ebook on FCAT accommodations .

<http://www.fl DOE.org/ese/pdf/fcatteam.pdf>

Presentation Accommodations

Presentation accommodations can include large print versions of the test, braille versions of the test, the use of color transparencies, altered spacing of items, visual navigation cues, tabbed pages, highlighter tape to assist in focus, verbal encouragement, and auditory accommodations such as reading or signing, except in the case of the reading assessment items.

Responding Accommodations

Responding accommodations can include written, signed, and verbal responses; special paper with raised or colored lines; dictation to a proctor; text-to-speech technology to indicate an answer; switch systems; alternative keyboards to generate letters or words; pointing devices; communication devices; abacus for students with visual impairments; and math grids.

Scheduling Accommodations

Scheduling accommodations can include the time of day a test is taken, break schedules, and extended time.

Setting Accommodations

Setting accommodations can include special lighting, adapted furniture, special acoustics, the use of an FM personal amplification system, noise buffers, reduction of distractors, increased or decreased opportunities for movement, and the administration of the test in a familiar setting.

Assistive Devices

Assistive devices allowed include alternate keyboards, adapted calculators (such as having large numbers or speech output), non-sentence based devices for oral or written responses, visual magnification devices, and auditory amplification.

Section 504 Implications

To ensure that all qualified students with disabilities in our public education system are provided necessary aids, services, or accommodations during the administration of a test, districts must ensure that students with disabilities who are not currently receiving special education services or who do not have a current IEP are considered for and, if appropriate, provided test accommodations. In this case, testing accommodations must be listed on the student's 504 plan. (from FCAT Accommodations for Students with Disabilities)

For all students who request accommodations on the FCAT, those accommodations must be a part of that students' curriculum and be noted on their IEP or 504 plan.

Check with you local FDLRS Center (www.fdlrs.com) for more information on accommodations for students with disabilities.

Do technology tools make a difference? Absolutely! The more a student can self-customize a variety of technology tools and strategies in a problem solving activity, the higher the chance of success, and the more intelligent that student will be perceived to be.

Spreadsheets are just one example, providing tools that support data analysis and decision making in real world and simulated environments. Graphic organizers can help students follow a decision making process in conducting a scientific experiment. Word prediction software can help struggling writers complete a project paper. Effective technology tools are important for all students, especially students with disabilities.



Florida Instructional Technology Training & Resource Unit
(FDLRS TECH)

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Professional Development Activities

The Florida Diagnostic & Learning Resources System (FDLRS) provides services throughout Florida. Check with your local FDLRS Center (www.fdlrs.com) for more information and training opportunities on technology for students with disabilities. Visit FDLRS/TECH at www.fdlrstech.com and sign up to participate in an online, interactive class. Or contact us to set up an online training specifically for a group in your school.

We also provide professional development activities in Second Life on FDLRS Island. Search the educational events to see what is being offered and visit FDLRS Island to view the technology resources available there.



FDLRS/TECH, part of the Florida Diagnostic and Learning Resources System (FDLRS), is funded as a Specialized Statewide Center by the Florida Department of Education, Bureau of Exceptional Education and Student Services, through federal assistance under the Individuals with Disabilities Act (IDEA), Part B funds.