FREE LESSON PLANS AND OTHER EDUCATIONAL RESOURCES FOR EDUCATORS AND STUDENTS: by Stephen Perry

PART ONE: GENERAL LESSON PLANS:

NEW YORK TIMES LESSON PLANS based on their content:

http://learning.blogs.nytimes.com/category/lesson-plans/

(covers the entire curriculum; some very inventive lesson plans here)

Example of how a School Teacher incorporates New York Times content into her school's Lesson Plans:

 $\frac{http://learning.blogs.nytimes.com/2010/11/22/reader-idea-a-school-librarian-helps-teachers-with-the-times/$

LESSON PLANS: PBS Teachers http://www.pbs.org/teachers

Lesson plans, multi-media files and more for all grade levels and subjects.

TOP MARKS: SEARCH ENGINE FOR EDUCATIONAL RESOURCES:

http://www.freetech4teachers.com/2009/03/top-marks-educational-search-engine.html Also searches for Lesson Plans.

TOP 25 WEBSITES FOR TEACHING AND LEARNING: http://www.ala.org/aasl/bestlist/ (from the American Association of School Librarians, a division of ALA)

TOP 20 EDUCATION WEB SITES: http://www.top20education.com/

LESSON PLANS FROM THE LIBRARY OF CONGRESS:

http://myloc.gov/Education/Lessonplans/Pages/default.aspx Includes lesson plans for U.S. History.

FREE TECHNOLOGY FOR TEACHERS: A WEB SITE DEVOTED TO LESSON PLANS and the real-world applications of new technologies for educators and teachers:

http://www.freetech4teachers.com (A daily blog)

OPEN EDUCATIONAL RESOURCES: http://www.oercommons.org/

A clearinghouse of free teaching and learning resources – from K-12 lesson plans to college curriculum to free e-resources, includign free textbooks and texts.

EDSITEMENT: Detailed Lesson Plans on the Web

http://edsitement.neh.gov CLICK ON THE CURRENT CALENDAR FOR CURRENT LESSON

PLANS: http://edsitement.neh.gov/calendar.asp

To use **EDSITEMENT**, Go to SUBJECT CATEGORIES

(http://edsitement.neh.gov/subject_categories_all.asp)

Then (as one example) POETRY LESSON PLANS

http://edsitement.neh.gov/tab lesson.asp?subjectArea=4&subcategory=45

And, as a further example, consult, **POETRY OF LANGSTON HUGHES LESSON PLAN**) at: http://edsitement.neh.gov/view lesson plan.asp?id=405

CURRIKI: GLOBAL EDUCATION AND LEARNING COMMUNITY

OFFERS CURRICULUM GUIDES AND LESSON PLANS FOR HUNDREDS OF DIFFERENT TOPICS: A GREAT RESOURCE FOR EDUCATORS AND STUDENTS AND TEACHERS FUNDED IN PART BY THE US DEPARTMENT OF EDUCATION: http://www.curriki.org/xwiki/bin/view/Main/WebHome (registration necessary, but registration is free.)

CAN ALSO BROWSE BY SUBJECT IN CURRIKI:

http://www.curriki.org/xwiki/bin/view/Main/Browse

CNX: Connexions is:a place to view and share educational material made of small knowledge chunks called modules that can be organized as courses, books, reports, etc. Anyone may view or contribute: authors create and collaborate instructors rapidly build and share custom collections http://www.cnx.org:

Example: Introduction to researching Oriental Cairo:

http://cnx.org/content/m12590/latest/

MERLOT: http://www.merlot.org/merlot/index.htm

(MERLOT stands for Multi Media Educational Resources for Learning and Online Teaching.)
Resources submitted by professional educators from a variety of institutions. See especially the what's new section for the latest educational resources:

EXAMPLE USING MERLOT: Go to HUMANITIES ON THE LEFT and then VALLEY OF THE SHADOW What's New in Merlot: http://www.merlot.org/merlot/whatsNew.htm

POWERPOINT PALOOZA: http://pptpalooza.net/ (Over 220 Powerpoints at present.) Free Powerpoints serving as inspiration for ideas for Lesson Plans.

Related Web Sites are: http://www.sitesforteachers.com/index.html and http://www.sitesforteachers.com/index.html

TEACHING WITH HUMOR:

http://www.freetech4teachers.com/2009/08/museum-of-humor-offers-fun-lesson-plans.html

SCHREYER INSTITUTE FOR TEACHING EXCELLENCE: TOOLS FOR TEACHING AND LEARNING: http://www.schreyerinstitute.psu.edu/Tools/

Colleges and universities around the world have embarked on a new era of assisting teachers with their classroom manner and organization. The Schreyer Institute for Teaching Excellence at Pennsylvania State University has created this site to give educators access to a wide range of excellent teaching and learning tools. The materials and resources here are divided into the following sections: "Course Design and Planning", "Teaching and Assessment Strategies", "Tools for Course Evaluation", "Tools for University Assessment", and "Scholarship of Teaching and Learning". Within these sections, users can read and

download specific activities geared towards syllabus improvement, writing effective and meaningful tests, lesson plans and incorporating problem-based activities into the classroom.

CIVICS LESSONS FOR ESL STUDENTS: http://www.freetech4teachers.com/2008/06/civics-lessons-for-esl-students.html

CIVICS LESSON PLANS FROM SHMOOP WEB SITE:

http://www.shmoop.com/civics/

TEACHER LINX- CREATE AND SHARE LESSON PLANS: http://www.teacherlinx.com/

Have to create a password to see lesson plans or upload your own, but access to the site is absolutely free and registration takes just minutes. One can search for Lesson Plans in Teacher Linx by Subject and then by Grade Level: highly convenient for the teacher on the go.

TEACHING WITH PRIMARY RESOURCES: LESSON PLANS from the LIBRARY OF CONGRESS: http://www.loc.gov/teachers/tps/quarterly/

TEACHERS' DOMAIN - 100'S OF PBS-BASED LESSONS

teachers'domain NOVA, Frontline, and American Experience are

three of PBS' hallmark series. Quite a bit of the content from those three programs is available online on the PBS website as well as on Snag Films. Teachers' Domain is another place to find great video content from PBS. But the real purpose of Teachers' Domain is to provide lesson plans and activities to match the media content from PBS and their content partners. Teachers Domain offers lesson plans and activities divided into five content categories. To help you narrow your search for lessons, the five categories, arts, language arts, science, mathematics, and social studies are divided into subcategories. http://www.teachersdomain.org

TIPS FOR NEW TEACHERS: http://www.freetech4teachers.com/2010/09/131-tips-for-new-teachers.html

RESOURCES FOR TEACHERS (from U.S. CONSULATE, KRAKOW):

http://krakow.usconsulate.gov/studyus/resources-for-teachers.html

FEDERAL RESOURCES IN EDUCATION: LESSON PLANS IN ALL SUBJECT AREAS: http://www.free.ed.gov/

FREE LESSON PLANS: http://www.teachersfirst.com/index.cfm (registration necessary)

Lesson Plans for K – 8 TEACHERS: http://thefilecabinet.pbworks.com/

U.S. DEPARTMENT OF STATE: FREE LESSON PLANS FROM THE DEPARTMENT OF STATE: http://www.freetech4teachers.com/2009/04/lesson-plans-from-us-department-of.html

HOTCHALK: IDEAS FOR TEACHING ABOUT DIFFERENT CULTURES AND COUNTRIES:

http://www.lessonplanspage.com/SSLAOCICountriesandCulturesIdeas18.htm

CLOUDNET: MULTICULTURAL LESSON PLANS AND RESOURCES:

http://www.cloudnet.com/~edrbsass/edmulticult.htm

COVERDELL WORLD WISE SCHOOLS: http://www.peacecorps.gov/wws/educators/lessonplans/

CALIFORNIA STATE UNIVERSITY: LESSON PLANS WITH A MULTICULTURAL FOCUS (INCLUDES ESL LESSON PLANS):

http://www.library.csustan.edu/lboyer/multicultural/lesson2.htm

IDEAS: UNIVERSITY OF WISCONSIN EXTENSION SERVICE:

http://www.ideas.wisconsin.edu/# (LESSON PLANS IN ALL AREAS)

This source has many useful ESL materials, such as printable worksheets on Adjectives and Adverbs (http://english-zone.com/index.php?ID=20)

KODAK LESSON PLANS:

http://www.kodak.com/US/en/digital/edu/lessonPlans/

LIBRARY OF CONGRESS FREE WEBCASTS IN ALL SUBJECT AREAS:

<u>http://www.loc.gov/today/cyberlc/</u> (A useful <u>Browse</u> function is available towards the top left)

EXAMPLE OF A WEBCAST ON THE POETRY OF LANGSTON HUGHES:

http://www.loc.gov/todav/cvberlc/feature_wdesc.php?rec=3352

TEACHING WITH HUMOR: POSSIBLE LESSON PLAND AND IDEAS FOR TEACHERS:

http://www.museumofhumor.com/ForTeacher.htm

YALE UNIVERSITY: Free Online courses offered at YALE UNIVERSITY

(http://open.yale.edu/courses/):

As an example, consult this free seminar at YALE UNIVERSITY on the American Novel since 1945: http://oyc.yale.edu/english/american-novel-since-1945/

OTHER FREE UNIVERSITY COURSES OFFERED AT MIT: (http://ocw.mit.edu, UC BERKELEY (http://youtube.com/ucberkeley), and the JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH (http://ocw.jhsph.edu/) and many others.

The Directory at OCW CONSORTIUM (http://ocwconsortium.org) will have a complete list of these. Click on the TAB "MEMBERS" on the very top right hand side once you click on the MEMBERS TAB to see that list.

100+ Online Education Websites that are transforming Education 2011 version

http://mashable.com/2011/01/07/online-education-websites/?utm source=feedburner&utm medium=feed&utm campaign=Feed%3A+Mashable+%28Mashable%29&utm content=Google+Reader

Youtube Channels Useful for Teachers:

http://www.onlinecollegecourses.com/2010/10/20/100-incredibly-useful-youtube-channels-for-teachers/ "100 Incredibly Useful YouTube Channels for Teachers" – annotated list compiled by Online College Courses website

PART TWO: <u>LESSON PLANS FOR SPECIFIC AREAS:</u>

AREA STUDIES:

THE NATIONAL ARCHIVES ARCHIVES.GOV

LESSON PLANS FOR AREA STUDIES: http://www.outreachworld.org/index.asp

AMERICAN HISTORY AND AMERICAN STUDIES:

African-American Studies:

Lesson Plans About Rosa Parks: http://tinyurl.com/ykrx4ca

Today's <u>document from the National Archives</u> is a sketch of where Rosa Parks was seated on the day she refused to give-up her seat. Along with the sketch, the National Archives has posted a <u>lesson plan</u> using the sketch. The National Archives also posted lesson plans about Jackie Robinson and the Civil Rights Movement. The Lesson Plan may be found here: http://www.archives.gov/education/lessons/rosa-parks/

<u>Learning to Give</u> has a <u>lesson plan</u> about Rosa Parks that is appropriate for elementary school use. http://learningtogive.org/lessons/unit37/lesson3.html

<u>Teaching Tolerance</u> has <u>lesson plans</u> about Rosa Parks that are appropriate for middle school and high school students. http://www.tolerance.org/kit/mighty-times-legacy-rosa-parks

History.com has an <u>interactive timeline of the Civil Rights Movement</u>. In that timeline is a good section about Rosa Parks and the bus boycott.

http://www.history.com/genericContent.do?id=61688&milestoneid=15

LESSON PLANS FROM THE LIBRARY OF CONGRESS:

http://myloc.gov/Education/Lessonplans/Pages/default.aspx Includes lesson plans for U.S. History.

LESSON PLANS ABOUT THE U.S CONGRESS:

http://congress.indiana.edu/learn_about/launcher.htm

LESSONS PLANS ON THE U.S. CONSTITUTION:

http://www.sunnylandsclassroom.org/ShowPage.aspx?PageId=12

LESSON PLANS FOR TEACHING ABOUT THE U.S. SUPREME COURT:

http://www.freetech4teachers.com/2009/05/lesson-plans-for-teaching-about-supreme.html

LESSON PLANS FOR TEACHING AMERICAN HISTORY FROM THE SMITHSONIAN MUSEUM:

http://americanhistory.si.edu/ourstory/

LESSON PLANS FOR TEACHING U.S. HISTORY:

http://www.ourdocuments.gov/content.php?flash=false&page=tools

Includes a valuable Teachers Sourcebook:

http://www.ourdocuments.gov/content.php?page=sourcebook3

MORE LESSON PLANS ON U.S. HISTORY:

The National Archives has just launched its new online public website with more than 3,000 historic documents, photos and videos available for download, along with applications for teachers to create and share history lessons: from DocsTeach.org http://bit.ly/cOs9yl

NATIONAL PARKS: (I am indebted to Richard Bryne, Free Technology for Teachers website for this lesson plan possibility: "The new Ken Burns documentary The National Parks: America's Best Idea premiered on PBS.. On the website, there are some great lesson plans that incorporate a variety of digital storytelling tools including Google Earth. In addition to the lesson plans, PBS has put together eleven modules that will teach you and your students how to create place-based digital stories from start to finish. The digital storytelling modules include screencasts showing you how to do each task each step in the digital story creation process. Many of the lesson plans designed to accompany The National Parks: America's Best Idea provide a great opportunity to combine elements of geography, history, and writing into one lesson "

WEBSITES DISCUSSED ARE:

http://www.pbs.org/nationalparks/for-educators/lesson-plans/

and

http://www.pbs.org/nationalparks/

FOR TEACHERS OF AMERICAN HISTORY:

The Learning Page for the American Memory Project of the Library of Congress is useful for teachers <http://memory.loc.gov/learn/ The Learning Page is designed to help educators use the American Memory Collections to teach history and culture. It offers tips and tricks, definitions and rationale for using primary sources, activities, discussions, lesson plans and

suggestions for using the collections in classroom curriculum. American Memory is a gateway to the Library of Congress's vast resources of digitized American historical materials. Comprising more than 9 million items that document U.S. history and culture, American Memory is organized into more than 100 thematic collections based on their original format, their subject matter, or who first created, assembled, or donated them to the Library.

LESSON PLANS for U.S. History and American Studies:

PICTURING THE CENTURY - LESSON PLANS AND WORKSHEETS



Picturing the Century is an online photo exhibit

created by and hosted by the <u>National Archives and Records Administration</u>. The exhibit contains six galleries of images from 20th Century life in the United States. <u>NARA</u> provides teachers with <u>six lesson plans</u> including a printable worksheet for using the <u>Picturing the Century</u> images in their classrooms.

Here are some related resources for teaching U.S. History that also may be of interest:

<u>Lesson Plans and More for U.S. History Teachers</u> <u>Lesson Plans from the US Department of State</u> The Farm Letters - Stories of Great Depression Life

HISTORY GAMES AND LESSON PLANS FOR TEACHING HISTORY:

http://www.besthistorysites.net/Multimedia.shtml
U.S. GOVERNMENT STUDIES GAMES



Law Focused Education, http://www.texaslre.org/onlinegames.html

a subsidiary of the State Bar of Texas, has developed some good games about US Government.

<u>Law Focused Education</u> has thirteen games that could be used in Civics and Social Studies classrooms across the United States. There are three additional games that are specific to Texas. The games offered by <u>Law Focused Education</u> cover topics like the Bill of Rights, the US Constitution, the Declaration of Independence, and the Branches of Government. One topic addressed by <u>Law Focused Education</u> that you don't often see turned into a game is Federalists v. Anti-Federalists.

ART:

MUSEUM OF MODERN ART LESSON PLANS: http://www.moma.org/modernteachers/

ARTS EDGE: FREE COLLECTION OF PODCASTS AND LESSON PLANS FOR TEACHING MUSIC AND CULTURE: http://www.freetech4teachers.com/2009/07/arts-edge-podcasts-and-lesson-plans.html

ONLINE ART ACTIVITIES AT THE NATIONAL GALLERY OF ART:

http://www.freetech4teachers.com/2009/07/online-art-activities-at-national.html

BIOLOGY:

TEACH GENETICS: <u>Teach and Learn Genetics - Free Lesson Plans</u>

http://tinyurl.com/ylks2zg

Learn. Genetics™

<u>Learn Genetics</u> and <u>Teach Genetics</u> are produced

by the University of Utah for, as their names imply, learning and teaching about genetics. <u>Teach Genetics</u> offers dozens of downloadable lesson plans. Many of the lesson plans available on <u>Teach Genetics</u> are designed to accompany the visual learning resources found on <u>Learn Genetics</u>. <u>Learn Genetics</u> features many excellent visual aids to explain the fundamentals of genetics. One of the excellent visuals on <u>Learn Genetics</u> is the <u>Cell Size and Scale</u> interactive visual aid. <u>Cell Size and Scale</u> shows visitors the size of cells relative to common small items such as coffee beans and rice grains. Use the slider at the bottom of <u>Cell Size and Scale</u> to see how small cells are.

LESSON PLANS FOR BIOLOGY: Biology Lesson Plans:

Arkive - Images of Life on Earth



Arkive is a great website for biology teachers and

students. Arkive has thousands of images and videos of threatened plants and animals. Arkive also has a Google Earth layer that students can use to view marine species habitat. The education section of Arkive has complete lesson plans including video clips and slideshows that teachers can download. There are lesson plans appropriate for use in elementary school, middle school, and high school. If you're looking for a short educational activity, Arkive has educational games that students can play independently.

CLIMATE CHANGE:

CLIMATE CHANGE LESSON PLANS:

http://www.smithsonianeducation.org/educators/professional_development/conference/20 09/climate_change/learning_activities.html

CLIMATE CHANGE, WILDLIFE, WILDLANDS LESSON PLANS

http://www.globalchange.gov/resources/educators/toolkit/materials

The <u>United States Global Change Research Program</u> has published a good <u>series of lesson plans</u> and <u>learning activities</u> about climate change, wildlife, and wildlands. Lesson plans and activities are available for eleven ecoregions. Click on a region, displayed on an interactive map, to locate lesson plans and activities. The lesson plans are available for download as PDFs. When you're on the <u>resources</u> page, make sure you also click on <u>toolkit materials</u> to find stand-alone, fun, educational activities. You should might also want to consider using the following video as an introduction to lessons on climate change, wildlife, and wildlands.

COPYRIGHT:

COMPREHENSIVE LESSON PLANS FOR TEACHING COPYRIGHT:

http://www.freetech4teachers.com/2009/05/comprehensive-lesson-plans-for-teaching.html

VIDEO AND LESSON PLANS ON FAIR USE IN COPYRIGHT CONTEXT:

http://www.mediaeducationlab.com/2-user-rights-section-107-music-video

COPYRIGHT FOR EDUCATORS:

http://www.freetech4teachers.com/2009/04/copyright-for-educators.html

ECONOMICS:

ECONOMICS EDUCATION LINKS: http://www.econedlink.org/

Useful Lesson Plans for Economics

TEACHING RESOURCES FOR ECONOMICS (from the American Economics Association)

http://www.rfe.org/showCat.php?cat id=91

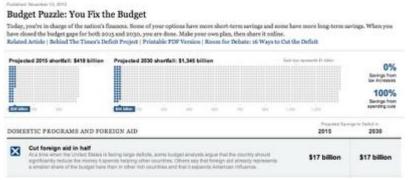
SAVING MONEY AND OTHER LESSON PLANS:

http://www.freetech4teachers.com/2009/01/saving-money-in-plain-english-and-other.html

The Federal Budget Puzzle - Interactive Challenge

The New Hork Times

Turn on any cable news network talk show and you'll hear plenty of pundits putting forth their ideas for fixing the federal budget. But which ideas or combinations of ideas will work best is hard (impossible?) to determine. So that you can try your hand and fixing the federal budget *The New York Times* offers an interactive budget puzzle. Budget Puzzle: You Fix the Budget presents users with the projected budget shortfalls of 2015 and 2030. Users then have to make selections from a long list of budget cuts and or tax increases to close the shortfalls.



Applications for Education

One way that the <u>Budget Puzzle</u> could be used in a classroom is to have students try various combinations of cuts and tax increases to close the budget shortfalls. After developing what they think are the best solutions you can have students debate the merits of each other's plans.

Here are some related items that may be of interest to you:

Economics Lessons Using Planet Money Podcasts
Captains of Industry - Economics Simulation Game
Interactive Bills and the History of the US Mint

ESL: ENGLISH AS A SECOND LANGUAGE

Many of the resources listed in this guide treat ESL. In addition here are some useful resources.

ESL GOLD: www.eslgold.com

LESSON PLANS AT: http://www.eslgold.com/teacher/plans.html

USING ENGLISH: www.usingenglish.com

LESSON PLANS AND WORKSHEETS: http://www.usingenglish.com/teachers/lesson-

plans/

TEACHER HANDOUTS AND PRINTABLES: http://www.usingenglish.com/handouts/

DAVE'S ESL CAFÉ: http://www.eslcafe.com/

GRAMAR LESSONS at: http://www.eslcafe.com/grammar.html

LARRY FERLAZZO's ENGLISH WEBSITE: http://larryferlazzo.edublogs.org/larry-ferlazzos-english-website/

Includes SCIENCE FOR ENGLISH LANGUAGE LEARNERS:

http://larryferlazzo.com/eslscience.html

ENGLISH LANGUAGE VERB CONJUGATIONS: www.conjugation.com (over 500 English verbs with full conjugations in all tenses! A great learning and teaching tool)

ROAD TO GRAMMAR has built-in quizzes testing student's knowledge of English verb tenses: www.roadtogrammar.com (Truly excellent!)

OTHER RESOURCES AVAILABLE at: http://esires1.pbworks.com

LESSON PLANS FOR YOUNG CHILDREN:

<u>Fun Dinosaur Games and Lesson Plans</u>: http://www.freetech4teachers.com/2009/02/fundinosaur-games-and-lesson-plans.html

ENERGY:

Games, Projects, and Lesson Plans About Energy



Energy Kids is a website produced by the US Energy

Information Administration for the purpose of educating students about energy and its many forms. Energy Kids provides a wealth of easily accessible information about energy which students can use to play games, solve riddles, and take quizzes about energy. Some of the games students will find include Energy Sudoku, crossword puzzles, and riddles. Energy Kids also provides students of all ages with ideas and outlines for science fair projects around the energy theme. The science fair projects are available as free PDF downloads. For teachers, Energy Kids offers dozens of free lesson plans that can be downloaded as PDFs. The lesson plans are arranged by grade level. Teachers will also find a wealth of links to other sites containing resources for teaching lessons about energy. If your students are looking for science fair project ideas, Energy Kids offers them a good selection of project ideas. Students needing to convert units of energy from one measurement to another, should find the Energy Kids energy calculator to be handy.

Here are some related items that may be of interest to you:

A Crash Course in Wind Energy

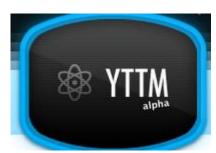
Exploring Alternative Energy Sources

Coal Mining Practices Outlined in Google Earth

ENVIRONMENT AND EARTH DAY:

EARTH DAY LESSON MATERIALS: http://www.freetech4teachers.com/2009/04/last-minute-earth-day-lesson-materials.html

HISTORY AND POPULAR CULTURE LESSON PLANS:



YTTM (YouTube Time Machine) is a new service that allows you to search for videos by year and genre. The premise of YTTM is simple; select a genre, select a year, watch a video. Want see a television commercial from 1975? Select the "commercials" filter then move the timeline slider to 1975. If you do that you'll see this commercial for the Buick Riviera. Want to see a clip of Michael Jordan in his prime? Select the "sports" filter then move the timeline slider to a year in the early 90's.

Applications for Education YTTM could be a fantastic resource for history teachers and their students. YTTM could be used to find clips of news reports about important events in 20th Century history. Teaching a lesson on the development of advertising, media, or propaganda? YTTM could help you find video clips to use in that lesson.

GEOGRAPHY:

LESSON PLANS FOR GEOGRAPHY: (National Geographic) http://education.nationalgeographic.com/education/edu/

MATHEMATICS:

MATHEMATICS: LESSON PLANS FOR MATH: <u>Math eBook - Math Lessons for K-12</u>: http://www.freetech4teachers.com/2009/07/math-ebook-math-lessons-for-k-12.html

MATHEMETICS LESSONS ONLINE:

http://or.amatyc.org/

MATHWAY: http://www.mathway.com/

Free step-by-step math solver answers pre-algebra, algebra, geometry, trigonometry, and calculus homework problems with embedded lesson plans.

MEDICINE:

MEDICAL ANIMATION LIBRARY: http://www.freetech4teachers.com/2009/05/medical-animation-library.html

MUSIC:

ARTS EDGE: FREE COLLECTION OF PODCASTS AND LESSON PLANS FOR TEACHING MUSIC AND CULTURE:

http://www.freetech4teachers.com/2009/07/arts-edge-podcasts-and-lesson-plans.html

CLASSICAL MUSIC LESSON PLANS:

http://www.freetech4teachers.com/2009/08/classics-for-kids-classical-music.html

MUSIC THEORY LESSON PLANS: http://www.freetech4teachers.com/2009/04/music-theory-lessons-and-tutorials.html

PHYSICS:

100 amazing videos for teaching and studying physics: http://www.onlinecolleges.net/2010/03/03/100-amazing-videos-for-teaching-and-studying-physics/ Includes Lesson Plans

RESEARCH AND WRITING SKILLS:

GREENWOOD SKILLS CENTER FOR RESEARCH AND WRITING:

http://skillscenter.greenwood.com

Specific Lesson Plans found in the Teacher's Corner part of the Web Site: http://tinyurl.com/ycrzsd7 (Each Lesson Plan comes with suggested Student Activities)

SCIENCE:

Science Netlinks - Dozens of Science Lessons: http://sciencenetlinks.com/matrix.php

Shedd Aquarium in Chicago has a great collection of interactive learning activities. The activities are categorized according to grade level and vary in format. Some of the interactive activities are like video games (Squish the Fish for 1st graders) while others are more like virtual scavenger hunts (Conservation Investigation). The games and virtual scavenger hunts could easily take students an hour or longer to complete and the students would learn something new throughout the activity. In addition to the interactive activities, Shedd Aquarium provides a host of great Marine Science lesson plans for grades K-12. http://www.sheddaquarium.org/sea/

SCIENCE, ART AND TECHNOLOGY: LESSON PLANS FOR EDUCATORS:

http://www.artic.edu/aic/education/sciarttech/global pages/g1.html

The Art Institute of Chicago's education section of their website "began as a year-long course offered...to Chicago Public School science teachers interested in exploring the relationship between science and art within a museum setting." The website has six different lessons

encompassing several different scientific disciplines, including "Art and Astronomy", "Perception, Light, and Color", and "The Chemistry and Physics of Light and Color". At the top of the page links to "Lesson Plans", "Student Projects", "Self-Guides", and "Books and Media" are also available. The "Self-Guides" are "guides for museum visits", and address concepts such as color and pigment in paintings, as well as particular artists' styles. "The effects of acid rain on stone sculpture" is one a fascinating lesson plan where students study the effects of acid rain on sculptures they make. The "Student Projects" tab has some great examples of charts that were made by classes to summarize what they had learned for the chosen lesson plan. As the site indicates, determining how to authenticate paintings was a popular lesson plan for chemistry classes.

BioSciEdNet: http://www.biosciednet.org/portal/

A DIGITAL LIBRARY PORTAL FOR TEACHING AND LEARNING IN THE BIOLOGICAL and MEDICAL SCIENCES This impressive portal (referred to in the shorthand as "BEN"), was created by the National Science Digital Library (NSDL) in order to bring high-quality educational resources to science educators everywhere. The entire project is managed by the American Association for the Advancement of Science (AAAS), and the resources here total over 14,000, and they cover 77 discrete biological sciences topics. First-time visitors to the site will note that will they are not required to register to access these resources, however they may wish to do so in order to maintain a thorough list of the resources they find most useful here. The homepage is simple and to the point, and it features a "New Resources" area, and a collection of browsing options that allow users to pick out resources by type, audience, or subject. Persons who haven't used BEN before may wish to look at the "Using BEN" area for a bit of guidance.

SCIENCE VISUALIZATIONS VIDEOS

The <u>Best Science Visualization Videos of 2009</u> is a collection of videos depicting visualizations of some really interesting science concepts. One of the videos that I found particularly interesting was a "breaking waves" simulation. **Applications for Education** The <u>videos in this collection</u> demonstrate concepts in biology, physics, and chemistry.

http://www.wired.com/wiredscience/2009/08/visualizations/all/1

PLANET SCIENCE: GAMES AND LESSON PLANS:

http://www.freetech4teachers.com/2009/05/planet-science-science-games-and-lesson.html

FREE SCIENCE E-BOOKS:

FREE SCIENCE BOOKS ONLINE: http://sciencebooksonline.info/

Science Books Online is a directory of free ebooks for all areas of science. The books range from small PDF pamphlets to full-length texts made available in electronic form for free. Most of the materials have to be downloaded in order to be viewed but there are some materials that you can view directly within your browser.



AAAS Science Netlinks. Science Netlinks

offers dozens of lesson plans and online learning activities. The lessons and activities are cover a wide variety of science topics. All of the lesson plans are sorted by grade level, but you can also sort the lesson plans by science benchmark standards. A series of icons also indicates if each lesson plan has a printable worksheet, e-worksheet, or is an interactive experience. **Applications for Education** Science Netlinks provides science teachers with a good collection of lesson plans aligned to the benchmarks for Science Literacy. In addition to lesson plans, Science Netlinks offers a selection of reviewed resource websites for K-12 science teachers.

SCIENCE PROJECTS AND POSTERS FOR ELEMENTARY SCHOOLS:

http://www.freetech4teachers.com/2008/11/science-projects-and-posters-for.html
VALUABLE COLLECTION OF SCIENCE LESSON PLANS: http://tinyurl.com/y9pxjd7
(From the Digital Library Portal for Teaching and Learning in the Biological and Medical Sciences)

AMERICAN MUSEUM OF NATURAL HISTORY: SCIENCE:

http://www.amnh.org/science/?src=toolbar

The website of the Science department at the American Museum of Natural History in New York has some great interactive features, including a video, entitled "Scientific Expeditions 2008". Visitors should click on "See the Video", which is located front and center on the Science homepage. To "download the transcript" click the link above the video. Also, the video is captioned for those who are hearing impaired. The section entitled Science at the Museum: Exploration and Discovery gives a good overview of the Science department at the museum, and the changes it has made over time. The department consists of the following sections, accessible by clicking on the menu on the right hand side of the page: "Anthropology", "Invertebrate Zoology", "Vertebrate Zoology", "Paleontology", and "Physical Sciences". Those persons interested in hearing talks at the museum, will want to click on "AMNH Podcasts", on the right hand side of the page, below the menu. The latest podcast, from May 2009, features author Michael Pollan. There are a number of ways to subscribe to the podcasts, including RSS and iTunes.

SPEECHES:

HOW TO TEACH WITH TED (TECHNOLOGY, ENTERTAINMENT, DESIGN)

http://teachingwithted.pbworks.com/
TED is at www.ted.com

TECHNOLOGY:

TECHNOLOGY SKILLS: 10 USEFUL VIDEO SITES TO TEACH YOU TECHNOLOGY SKILLS: http://www.techradar.com/news/world-of-tech/10-useful-video-sites-to-teach-you-new-tech-skills-640740

WEB STRATEGIES:

GOOGLE FOR EDUCATORS: http://www.google.com/educators/p_websearch.html

LESSON PLANS FOR TEACHING WEB SEARCH STRATEGIES:

http://www.freetech4teachers.com/2009/08/lesson-plans-for-teaching-web-search.html

COMMONCRAFT VIDEO FOR TEACHING WEB STRATEGIES

(in Plain English): www.commoncraft.com/search

Free Technology for Teachers: www.freetech4teachers.com

RELATED RESOURCES AVAILABLE AT THIS WEB SITE: http://tinyurl.com/6dfaxn

and also here: http://googleshortcuts.pbworks.com

By Stephen Perry:

E-MAIL: perrystephen@fastmail.fm

Related resources at: www.tinyurl.com/6dfaxn

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