University of California at Berkeley

Web-Based Curriculum Resources
for Career Academies

CASN
CAREER ACADEMY SUPPORT NETWORK

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This guide is available on-line at: http://casn.berkeley.edu
The on-line version provides live links to all listed web sites.

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Introduction

This guide is intended to serve as a collection of some of the most relevant and useful websites that will help educators working in a Career Academy. It does not try to be exhaustive but rather selective in what is included. Teaching and learning in a Career Academy is a unique educational endeavor that prepares students for college and careers by utilizing strategies such as project-based learning, interdisciplinary projects, real-world applications of knowledge, work-based learning through job shadows and internships, and combing core academic and Career Technical Education (CTE) through themes such as Health Sciences or Arts, Media and Entertainment. Educators utilizing these strategies face unique challenges when designing and delivering curriculum. We hope this "short list" of web-based resources will allow you to avoid having to comb the Internet – we have done that for you—so you can get to work with students. The resources are listed alphabetically in each category.

The web is a dynamic and ever-changing resource. The moment this guide is in print there will be sites that have become obsolete or out-of-date. If you have any suggestions or comments on resources that should be included in this guide please contact the Career Academy Support Network (CASN) at ask_casn@berkeley.edu.

The CASN website, http://berekley.casn.edu, has many more resources for Career Academies such as a searchable curriculum database, guides on topics such as cohort scheduling and forming/ coordinating/ utilizing an Advisory Board, a directory of academies throughout the nation, and many others designed for Career Academies.

Search Engines & Information Indexes

Everyone has their favorite search engine, but they do differ. Here are a few you may want to investigate to see if it might become a new favorite. Many sites use meta-search technology searching multiple search engines at once. An information index is a set of topic menus and submenus where selections are narrowed to find what you need.

Search Engine & Info Indexes	Description	Comments
About.com www.about.com	Provides information in the form of over two million hand-crafted, original articles, recipes, product reviews, videos, tutorials and more. Has information for all high school subjects and much, much more.	Comprehensive section on Education. Great list of alphabetical "topics" to choose from.
All The Web www.alltheweb.com	Provides both comprehensive coverage of the web and outstanding relevancy.	If you can't find it on Google, try All The Web next.
Ask.com www.ask.com	Allows you to search by asking questions in a "natural language."	Definitely worth considering.
Bing www.bing.com	Bing offers tabs for different kinds of searches similar to Google and including "images," "videos," "maps" and "shopping."	Microsoft is known for constantly reworking a product until they get it right. This is one of their newest reworks.
Britannica www.britannica.com	Subjects to browse are infinite. Offers premium membership, but not necessary to join.	An oldie but a goodie. A nice touch: a list of recent *New York Times* articles useful in the classroom.
MetaCrawler www.metacrawler.com	MetaCrawler is a metasearch engine utilizing results from Google, Yahoo!, Bing, Ask and other search engines	Good starting point for almost any topic.
WebCrawler www.webcrawler.com	WebCrawler brings users the top search results from Google, Yahoo!, Bing, Ask and other popular search engines. WebCrawler also provides multimedia results, including images, video, news, and local information.	Utilizes metasearch technology to compile results delivering relevant and comprehensive results

Web-based Collaboration
Social Bookmarking, Wiki's, Blogs, & Online Portfolios

Social bookmarking allows users to save, organize, search and manage links to web pages that they want to remember and/or share with other teachers or students for an interdisciplinary project, for example. Descriptions may be added to these bookmarks so that other users understand the content of the resource without first needing to download it for themselves. Descriptions may be comments, votes in favor of or against its quality, or tags. A great resource if you work on a number of different computers, work in different classrooms or want to easily share bookmarks with others.

A **blog** is a type of website, usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video. Many blogs provide commentary or news on a particular subject; others function as personal online diaries. A typical blog combines text, images, and links to other blogs, web pages, and other media related to its topic. The ability of readers to leave comments in an interactive format is an important part of many blogs.

A **Wiki** (pronounced *WIK-ee*) is a website that allows the easy creation and editing of any number of interlinked web pages using simplified editing tools. No need to be or for a webmaster. Wikis are often used to create collaborative websites, for personal note taking, and/or for group/interdisciplinary projects. A defining characteristic of wiki technology is the ease with which pages can be created and updated.

An **online portfolio** also known as an **e-portfolio** or **digital portfolio**, is a collection of electronic evidence assembled and managed by a student(s) on the web. An online portfolio is a type of learning record that provides evidence of achievement. Such electronic evidence may include text, electronic files, images, multimedia, blog entries, and hyperlinks. Online portfolios are both demonstrations of student's abilities and platforms for self-expression. Some e-portfolio applications permit varying degrees of audience access, so the same portfolio might be used for multiple purposes and can be maintained dynamically over time.

Parting thoughts - There are many types of web-based collaboration venues as described above. A resource not described in this guide as it is not currently intended for educational usage are social networking sites such as Facebook, LinkedIn and Twitter to name a few. Teachers and students, however, may find these useful.

Web-based Collaboration	Description	Comments
Social Bookmarking Site **delicious** http://delicious.com/	Get all your bookmarks compiled in one place. Get to your bookmarks from any computer, anytime, anywhere. Your bookmarks will organize themselves; by tagging your bookmarks collections will naturally emerge. Share your bookmarks with friends and see the most popular bookmarks for any tag.	Part of Yahoo! Fairly intuitive site.

Web-based Collaboration	Description	Comments
Social Bookmarking **Diigo** http://www.diigo.com/	"Diigo is a powerful research tool and a knowledge sharing community." Never wonder: "Where did I see that again?" "Where did you see that again?" "If your colleagues are going to come to the table with the same information you have."	Capabilities include: annotating, archiving, and organizing websites according to your needs, share resources with collaborators, search for new resources based on comments others have made, bring colleagues together in a group (team-based research….great for students and teachers who work together). How to video tutorials!
Blog **Blogger** https://www.blogger.com/start	Share your thoughts, photos, and more with your others. Easy to use. Post text, photos, and videos from the web or your mobile phone. Unlimited flexibility to personalize your blog with themes, gadgets, and more.	Great resource for educators: to update students on classroom activities, upload resources for projects, and engage students in learning outside the traditional walls. Connected with Google – use your google account to login and get rolling. Take the "quick tour" and/or watch the video tutorials.
Blog **Wordpress** http://wordpress.com	"WordPress is a state-of-the-art publishing platform with a focus on aesthetics, web standards, and usability. WordPress is both free and priceless at the same time."	Open source blog publishing application allowing teachers to facilitate online collaboration with students; literary analysis to build a community of readers, students can construct a database within their shared page to links on relevant information, while simultaneously improving the quality of work produced. How to video tutorials!

Web-based Collaboration	Description	Comments
Wiki **PBWORKS** http://pbworks.com/	Create a secure online workspace in about 60 seconds. Encourage classroom participation with interactive wiki pages that students can view and edit from any computer. Nothing to install so you don't need to worry about getting IT help to your classroom.	Be sure to click on the "For Education" section. Free training via instructional videos that are very informative. You control who can view and edit your workspace. Each student has a unique login and password, so you always know who made what change.
Wiki **Wikispaces** http://www.wikispaces.com/	Wikispaces is the binder of the 21st century: upload assignments, students can collaborate and comment, stay organized, and keep up to date with the logistics of today's classroom.	A user-generated, user-edited and user-maintained site where students have an increased sense of ownership over their education. *"an inspiration for students because they learn from each other"* Loaded with how-to tutorials!
Online Portfolio http://www.agedtechprep.com/content/portfolio/portfolio.html	Detailed example of what could be included in a student portfolio. A joint project between the California Department of Education, Modesto Junior College Agricultural Division, and the Central Valley Consortium Agricultural Education Tech Prep.	Essential resource for those who find themselves anywhere on the spectrum of novice to expert when it comes to eportfolios.
Online Portfolio **Carbonmade** http://carbonmade.com/	Showcase images of student work and post portfolios of student work.	Easy to upload images and videos like a slideshow.

Lesson Plan Sources

There are literally thousands of sites for lesson plans. These sites have been culled from masses due to their well-organized lesson plans, covering many subjects and grade levels. Browse these sites once a year before school starts, or use in a pinch. Attention was paid to sites that will provide information on topics such as project-based learning, interdisciplinary curriculum and authentic/alternative assessments.

Lesson Plan Sources	Description	Comments
Analyze and Apply www.analyze-apply.com	Cataloged database for: online teacher training, professional development, problem solving techniques, leadership coaching, teaching materials, jobs in teaching, performance management training, online teacher certification, lesson plans, preschool teacher training, training seminars.	Offers links for those that want to teach and those that do teach. Some links bring up ads first, most are useful.
Columbia Education Center www.col-ed.org	Catalogued database for lesson plans, funding resources, and grant opportunities.	Not as many "traditional" lesson plans, does include separate section on "web-based" lessons. Lots of grant links!
Educator's Reference Desk www.eduref.org	Lesson plans can be searched by subject area and grade level (K-12). "From the Information Institute of Syracuse, the people who created AskERIC, the Gateway to Educational Materials, and the Virtual Reference Desk, the Educator's Reference Desk brings you the resources you have come to depend on. 2,000+ lesson plans, 3,000+ links to online education information, and 200+ question archive responses."	This is the site for educators! Search and upload lesson plans! Do you have an educational question? Chances are the answer is already here! "Teachers can go to this website and change their classroom tomorrow….I have."
Ford Partnership for Advanced Studies (PAS) http://www.fordpas.org/	Academically rigorous, interdisciplinary curriculum that provides students with content knowledge and skills necessary for future success—in business, economics, engineering, and technology. The inquiry- and project-based program offers a series of modules that links learning in academic subjects with the challenges students will face in post-secondary education and expectations of the workplace they will face as adults.	Free resources and professional development/training available.

Lesson Plan Sources	Description	Comments
The Learning Network http://learning.blogs.nytimes.com	"The Learning Network provides teaching and learning materials and ideas based on <u>New York Times</u> content. Lesson plan units use recent articles as springboards for examining important curricular topics. Teachers can use or adapt our <u>lessons</u> across subject areas and levels. Lessons are designed to be shared with teachers in other content areas and to support interdisciplinary units. Students aged 13 and older can respond to <u>opinion questions</u>, take quizzes and learn the <u>Word of the Day</u>"	Interactive for students and teachers! Contains hundreds of free lesson plans for grades 6-12.
The Lesson Plans Page www.LessonPlansPage.com	"4,000 free lesson plans! Lesson plans that match your criteria, <u>select a subject</u>, <u>recent additions</u>, or seasonal lessons, or <u>search</u> for specific topics. <u>HotChalk.com</u> (parent site) - free online teacher tools and thousands of additional teacher resources!" "participate in discussions with other educators" – fostering de-privatization of the classroom	Site is obviously updated often, rather refreshing!
ProQuest www.proquestk12.com	"Access to information from periodicals, newspapers, multimedia and image collections, out-of-print books, dissertations, and scholarly collections in various formats" as well as "more than 5.5 billion pages of information, spanning 500 years of scholarship, in formats that range from print to microform to digital."	Another *big* site. Fee-based. Easy to use. Every resource imaginable for a teacher. I guess you really can have it all....for a price.
Smithsonian Institution www.si.edu	"The world's largest museum complex and research organization composed of 19 museums, 9 research centers, and the National Zoo."	Searchable lesson plans from preK-12; art & design, science & technology, history & culture, and language arts. Browse this one over the summer, when you have more leisure time.

Project-Based Learning Resources

Project-based, or PBL as it is often referred to, is learning that engages students in complex, real-world problem solving that is academically rigorous, relevant and uses active learning. PBL taps students' drive to learn, capability to do important work, and need to be taken seriously. Results are not predetermined or predictable. Students must draw from multiple information sources and disciplines to solve the problem. Resources below range from schools utilizing PBL to places where you can get training and ideas. If you're searching for a project with a unique flavor to engage students and help them develop research skills, try these sites.

Project-Based Learning (PBL) Resources	Description	Comments
The Buck Institute www.bie.org	The Buck Institute for Education (BIE) is a non-profit, research and development organization dedicated to improving the practice of teaching and the process of learning.	Wonderful resources for projects on government & economics. Professional development and training available. A recognized leader in PBL.
Center for Occupational Research and Development www.cord.org	CORD is a national nonprofit organization providing innovative changes in education to prepare students for greater success in careers and higher education. CORD assists educators through new curricula, teaching strategies, professional development, and partnerships with community leaders.	Go to the curriculum materials & resources section to download free information.
College, Career and Technical Education Project Based Learning http://pbl.sdccte.org	This is the internet site where projects created by San Diego Unified School District teachers during Summer Project-Based Learning Institutes are posted in a database that is searchable by project title as well as content area/s. Most projects are interdisciplinary. Sample curriculum maps are also included.	Excellent place for examples of actual projects teachers created as a team. Some are more easily transferrable to other classrooms and schools but all provide inspiration and ideas.

Project-Based Learning (PBL) Resources	Description	Comments
ConnectEd California www.connectedcalifornia.org	This site contains numerous resources including a PBL development guide (See *Designing a Multidisciplinary Integrated Curriculum*), as well as integrated curriculum in many content areas including biomedical and health science, engineering, and arts, media and entertainment. The site also contains video examples of integrated curriculum.	A rich site with much to offer. Updated often.
Digital Safari Academy www.digitalsafari.org	The Digital Safari Academy at Mt. Diablo High School in Concord, California is a 3-year college and career program beginning in the sophomore year of high school. Over the three years, students work on a series of large interdisciplinary projects that are completed through the use of industry standard multimedia tools. Examples of these exemplary projects are available on this website.	Wonderful example of a school utilizing PBL and technology. Be sure to check it out for an example of what PBL looks like in reality.
Edutopia www.edutopia.org	The George Lucas Educational Foundation (GLEF) is a nonprofit operating foundation that documents and disseminates models of the most innovative practices in our nation's K-12 schools.	Great place for ideas. Many videos show student projects, research and current educational topics, blogs from other educators sharing information and Produces a magazine also.
The Futures Channel Digital Video Resource Library www.thefutureschannel.com/ real_world_professional.html	The Futures Channel Digital Video Resource Library contains "micro documentaries" that take students behind the scenes with architects and designers, artists and inventors, music composers and sound engineers, aerospace engineers, deep sea explorers, and dozens more men and women in careers that many students haven't even imagined.	This website offers dozens movie clips showing how professionals use mathematics, science, the arts and other content areas in their careers.

Project-Based Learning (PBL) Resources	Description	Comments
High Tech High http://projects.hightechhigh.org http://www.hightechhigh.org/resource-center/Curriculum/Curric-HTH%20Guide%20to%20PBL.pdf	This site provides a searchable database by content area, grade level, and project duration of projects designed by teachers at High Tech High. This web site provides a project-based learning workshop and other resources for designing high quality integrated curriculum.	A wonderful site showing how PBL lives and breathes in a school.
International Education and Resource Network www.iearn.org	This network links up schools in different countries (or states) for projects. All projects end with an exhibition or product—which fits with an academy perspective. Examples of projects include clean water for Nicaragua, Balkans peace making, and a long list of **environmental science** projects.	If you want your students to participate in a global affairs project, this is the site to search. Must join to get full access to lesson plans, online professional development, and collaboration opportunities. This is not a point, click, and print resource for lesson plans.
New Tech Network http://www.newtechnetwork.org	An online project-based learning system — the PeBL™ Collaborative Learning Environment — which unifies students' learning experiences, enabling them to share projects online, collaborate, and create new knowledge.	Links to articles and examples of schools in this Network provide examples of what PBL looks like in action.
Project Based Learning http://pbl-online.org	This is a one stop online resource for Project-Based Learning where you will find everything you need to design and manage high quality projects.	The gold standard for PBL resources – do not miss. The site will help you plan rigorous and relevant standards-focused projects, search for projects developed by others, and review research and web resources about PBL.

Project-Based Learning (PBL) Resources	Description	Comments
Samford University Teacher Education http://dlserver.samford.edu/edu/teacheredpbl.htm	The goal of the Web site is to provide administrators, faculty, students and parents with detailed information on the components, implementation, assessment and documentation of PBL.	Most of the links go to other side for information.
ThinkQuest www.thinkquest.org	"Projects provide a flexible framework for engaging students in exploring curricular topics and developing 21st century skills, such as communication, teamwork, and technology skills. Students are motivated by the fun and creative format and the opportunity to make new friends around the world. For teachers, a school portal enables quick and easy management of student accounts and project work.	Great resource for integration of technology into the classroom. Must register – but free!
Web Quest http://edweb.sdsu.edu/webquest	Inquiry and web-based based project resources. Includes about 500 projects for students in grades 9-12. In addition to traditional subject matter, the projects usually include work on **life skills** and **professional skills**.	These are collaborative, teacher written projects that are proven products. The projects are displayed using a common format—task, resources, problem, evaluation—that makes them extremely accessible. 2-3 yr subscription is $20. Information on how to give workshops on WebQuests. Great resource for a project in any subject area.

Media Sources

The web offers access to interactive multimedia resources of all kinds. Many are familiar, such as www.cnn.com or abcnews.go.com. The sites listed here are designed more specifically for teachers and students.

Media Sources	Description	Comments
Brain Pop http://www.brainpop.com/	Animated, curriculum-based content that supports educators and engages students. Resources include **movies**, quizzes, experiments, timelines, activity pages, and much more covering hundreds of topics within Math, Science, Social Studies, English, Technology, Arts & Music, and Health. All content is aligned to and searchable by state standards.	Great for visual learners, English Language Learners (ELLs) and to reinforce topics. Students seem to love the animated videos.
Discovery Education http://www.discoveryeducation.com/	Huge amount of up-to-date digital resources. STEM tools, current events, activites, and a lesson plan library that ties directly to the digital content on the site.	Visual components and project ideas are great. Student and teacher friendly site.
History Channel www.historychannel.com	Click on classroom resources for topics and teacher's guides. Of special note are the Oral History Interview Guidelines, which are downloadable as a handout. Resources for teachers: newsletter, "idea book" (biannual magazine), interactive lesson plans, biography feature.	Well-designed site for teachers and students who are researching. Includes live webcasts, TV shows and clips…..great additions to a presentation.
iTunes University	Choose from more than 250,000 free course lectures, videos, readings, and podcasts from universities and institutions worldwide. There are over 600 universities with active iTunes U sites. And most of these institutions — including Stanford, Yale, MIT, Oxford, and UC Berkeley — distribute their content publicly. You can learn about the Galapagos Islands or learn a new language. In the Beyond Campus section, you can tour some of the world's most famous museums or brush up on your leadership skills. Students and faculty can access a wealth of content from distinguished entities such as MoMA, the New York Public Library, Public Radio International, and PBS stations.	Get free or inexpensive videos, podcasts, audiobooks, TV shows from places like the History Channel and National Geographic. Be sure to check out the K-12 section. Need to have iTunes to use this.

Media Sources	Description	Comments
Media Awareness Network www.media-awareness.ca	Offers a clearinghouse of information, teaching units on **media** and **communications**, student handouts, and media education tips. Information regarding parent involvement: "Parenting the Net Generation" and "Be Web Aware".	The best site for **media** and **communications**. Comes from Canada, with a refreshing perspective on the media. **Five star site.** Best bet: online modules to teach students how to surf the web.
Public Broadcasting Service (PBS) http://www.pbs.org/teachers/classroom/9-12/	Thousands of lesson plans, teaching activities, on-demand video assets, and interactive games and simulations. Resources are correlated to state and national educational standards and are tied to PBS' award-winning on-air and online programming like NOVA, Nature, Cyberchase, Between the Lions and more.	Information as well as demonstration and/or simulations. Students really seem to enjoy this site.
U.S. News www.usnews.com	Sections devoted to "k-12 News, Lasests in U.S. Education News, Best Colleges, Paying for College, Online Education, Careers"	A good resource for teachers to stay on top of the news that effects classrooms. No longer hosting a "classroom" section.
USA Today Education www.usatoday.com/educate/home.htm	"Resources designed to make your job easier in two ways: by drawing relevant connections between what students are learning in your class and actual events, trends and circumstances in the world around them, and by helping you develop in students the literacy, problem-solving and higher-order thinking skills they need to thrive in school, careers and citizenship."	Excellent resources for bridging the gap between classroom concepts and the "outside world". Weekly Cross- Curricular Activities!

General Curriculum & Innovative Education Resources

General Curriculum & Innovative Education Resources	Description	Comments
Awesome Library www.awesomelibrary.org	Catalogues the top 5% of all education resources, from more than 20,000 sources. Database for teachers, kids, teens, parents, librarians, and college. Searchable by "the Arts, English, Math, Social Studies, Science, Health, Technology, Languages, Literature, Title, Authors, Lessons, Reference, News, Special Ed, Geography, Counselor, Nurse, Principal, Teacher, Students, Main, Family, and Community. Available in 23 languages.	Narrows down (slightly) your internet search for websites, not direct links for lesson plans. Good set of rubrics and materials on **public speaking** for **media** and **communications**.
Calaxy k - 12 http://www.k12hsn.org/calaxy/	The California K-12 High Speed Network (K12HSN) offers a comprehensive set of tools to support California classrooms. This free suite of tools, includes blogging, videoconference scheduling, wikis, an asset management module, as well as Moodle-an online course management system and a file sharing system where educators can upload videos, podcasts, images and documents. Thousands of Thinkfinity resources are also available.	Calaxy is an excellent tool to share lesson ideas, upload student learning objects, disseminate best practices, and more! Messaging and social networking functionalities help you connect with other educators in the K12HSN Community.
California Learning Resource Network (CLRN) http://www.clrn.org/home/	Find and compare electronic learning resources and online information links for free. A searchable database of standards-aligned software, video and Internet learning resources with hundreds of free primary, secondary and reference resources.	Hundreds or reviews of electronic educational resources for all academic subjects. Before investing in any electronic learning resources for your class check out this site.

General Curriculum & Innovative Education Resources	Description	Comments
Career Academy Support Network (CASN) http://casn.berkeley.edu/curriculum.php	A searchable database of curriculum compiled solely for Career Academies. Search by California Industry Sector, subject, grade level, or keyword.	A great place to find resources to "green" your interdisciplinary curriculum. Users, like many other consumer sites such as Yelp, can rate the curriculum. If you are part of a CA Partnership Academy (CPA) you can download and share curriculum.
Education Northwest (formerly NWREL) www.nwrel.org	A comprehensive site devoted to school reform. Provides research-based resources on a variety of topics such as: Small Learning Communities, Assessment, Mentoring, Writing, Mathematics, among many other topics. Provides professional development and technical assistance as well.	A great site for seeing what is out there and what other schools and districts are doing to improve teaching and learning.
Federal Resources for Educational Excellence (FREE) http://www.free.ed.gov/	A federal government web site that makes teaching and learning resources from across the federal government available in one place. This site lists all the education projects supported by more than 30 government agencies. Features animations, primary documents, photos, and videos searchable by subject areas: Arts & Music, Health & Phys Ed, History & Soc Studies, Language Arts, Math, and Science.	FREE relies on a search tool that displays the full text of each resource. Comprehensive and informative. Good source for project research. Search today, use it tomorrow!

General Curriculum & Innovative Education Resources	Description	Comments
The Franklin Institute Science Museum www.fi.edu	Some highlights: • **Biology** - the human heart and circulation • **Aeronautics** - design an aircraft • **U.S. History** - the life of Benjamin Franklin	Very friendly site for an educator. Easy to navigate and full of useful information.
The Gateway to 21st Century Skills www.thegateway.org	Spearheaded by the ERIC Clearinghouse on Information and Technology. Currently includes more than 7,000 items from 320 members of the consortium. "variety of educational resource types from activities and lesson plans to online projects to assessment items"	Teachers can type a topic, grade level, and other information into a search screen that retrieves—from more than 140 web sites— lessons, instructional units, and other free educational materials on the specified topic. **Five stars.** Lots of lesson plans, with descriptions. A few sentences to read vs. scrolling through the whole lesson. Great time saver!
Jobs for the Future www.jff.org	Good for research and publications on: • school-to-career • internships • standards • 9th grade curriculum • mentoring	Site of a leading organization focused on school-to-career issues.
The Leadership and Learning Center http://www.leadandlearn.com/	Doug Reeves organization that provides professional development for a fee. Includes podcasts, webinars, videoconferencing, professional development resources, The Center Magazine issues available.	For schools that are looking to improve student achievement. Must register.
National Geographic www.nationalgeographic.com /education/	Searchable database by grade and topic. Many downloadable resources. Maps and adventures for students in: • Geography • Biology • Health Sciences Lessons and activities, EdNet (Education Network), Teacher Store, and The JASON Project. Newsletters, Educator Programs Galore!	This site is what you would expect from National Geographic: very organized, professional, comprehensive. Great for research videos, and relevant, current events in the classroom. Integration of interactive online projects.

General Curriculum & Innovative Education Resources	Description	Comments
Pitsco Innovative Education www.pitsco.com	Pitsco is a private effort to "revolutionize high school education." Many of the products are fee-based, but many other resources are available on this site. "Hands-On Real World Curriculum for the 21st Century" "Age appropriate, student centered, emphasis on reading, cooperative working in pairs and teams of six to solve real world problems while learning core curriculum concepts	Outstanding site worth looking at if you stress team-based and project-based instruction in your classroom. Emphasis is on **technology**.
Plato Learning www.plato.com/The-PLATO-Network.aspx	"PLATO Learning products cover a broad range of teaching and learning needs—from intervention and credit recovery and innovative and teacher-facilitated solutions for traditional classroom instruction to trend-forward distance learning options"	For those who are interested in credit recovery, online learning, and summer school.
Rubistar www.rubistar4teachers.org	See rubrics in action. A required site for project-based teachers. Users can save and edit rubrics online. You can access them from home, school, or on the road. Registration and use of this tool is free.	Great time saver for making rubrics….point and click….and edit!
SitesAlive! www.sitesalive.com	A subscription service to web-based classrooms. "Students who subscribe to a sitesALIVE! program experience learning alongside students living and doing research (scientific, cultural, historical, etc.) in a remote location. By following a program throughout the semester, classroom students learn how basic academic concepts apply to "real-world" situations and witness exciting new discoveries almost as they occur.	Incorporates science, math technology, social studies, geography, history, and language arts. Especially good on **environmental science**, such as classes in rainforest and fisheries restoration in Central America.

General Curriculum & Innovative Education Resources	Description	Comments
The Virtual High School www.govhs.org	A collaborative of high schools that offer on-line courses that your school may not provide.	A non-profit endeavor, but charges an annual fee for participating schools.
What Kids Can Do www.whatkidscando.org	Reviews meaningful community projects carried out by students all over the country. Good for: • Journalism • Arts • Internships • Service Learning "advocate for learning that engages students as knowledge creators and not simply test takers" "bring youth voices to policy debates about school, society, and world affairs"	If you're momentarily uninspired, here's the site to search. Theme— 'Powerful Learning with Public Purpose'—describes this site.

Career & Subject Resources

These sites may overlap with general curriculum resources, but offer more specialized information for particular career fields and academic subjects.

Career & Subject Resources	Description	Comments
Access Excellence http://www.accessexcellence.org	Resources section links you to array of subtopics. Emphasis on: • **Biosciences** • **Environment** • **Health** • **Math** • **Science** You'll also find bioethics lessons and plant genome projects.	Highlights include: • The Living Skeleton, a series of X-ray images of the human body. • Graphics Gallery, a series of labeled diagrams with explanations of important processes of biotechnology. • Microscopy with light and electron projects by and for students.
American Association for the Advancement of Science www.aaas.org	Covers all sciences, including social sciences. Large publications section, with books and other media available. • **Agriculture** • **Environmental Science** • **Health and Bioscience** • **Education** • **Engineering** • **Information Technology** • **Transportation** • **Aviation**	Primary audience is not necessarily educators but there is a ton of info here. A good source to stay on top of emerging science and research. Includes Career Resources for students who are exploring options.
ArtsEdNet www.getty.edu/education/	The "homepage" for **arts** and **communication**. A large array of lesson plans available, plus all resources for arts instruction, organized by grade level. • **Media and Communications** • **Visual and Performing Arts**	Try this site if you want to bring more art into your curriculum.

Career & Subject Resources	Description	Comments
Calisphere http://www.calisphere.universityofcalifornia.edu/	Calisphere is the University of California's free public gateway to a world of primary sources. More than 150,000 digitized items — including photographs, documents, newspaper pages, political cartoons, works of art, diaries, transcribed oral histories, advertising, and other unique cultural artifacts — reveal the diverse history and culture of California and its role in national and world history. Content has been selected from the libraries and museums of the UC campuses, and from a variety of cultural heritage organizations across California. • **History** • **Social Sciences** • **English Language Arts** • **Visual Arts**	An amazing site that is rich beyond imagine. You must check this one out. Browse by subject, A-Z, content standards…. So easy to find what you are looking for.
The Consortium for Mathematics and Its Applications (COMAP) www.comap.com	COMAP develops curriculum materials and teacher training programs that are multidisciplinary, academically rigorous, and fun, using mathematical tools to explore real-world problems. • **Math**	Products are in print, video, and multi-media formats. Provides links to resources in **mathematics** and **science** for educators and students. Grades 9-12.
Eisenhower National Clearinghouse http://www.goENC.com/	Formerly the Eisenhower National Clearinghouse for Math and Science but this program is no longer funded by the government. However, the resources compiled over decades are still available in a searchable database. Focus on: • **Math** • **Science** • **Engineering** • **Electronics** • **Bioscience** • **Health** • **Environmental Science** • **Agriculture**	A huge amount of curriculum that is easily searchable.
ExploreLearning.com www.explorelearning.com	A fee-based site for interactive, online simulations for **math and science**.	This site makes learning fun. Lots of interactions for fractions – a hard concept for so many students.

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Federal Aviation Administration (FAA) www.faa.gov/education_res earch/education/	Offers Aviation Education Curriculum Guides as part of a collaborative effort between the Massachusetts Corporation for Educational Telecommunications, FAA, NASA, and Bridgewater State College. • **Aviation** • **Transportation**	This is a good site if a student wants to do a **history of aviation** or learn about **careers in aviation**. The National Coalition for Aviation Education also offers here a guide to help educators identify and obtain aviation-oriented educational materials and information.
Foundation for Teaching Economics www.fte.org	Designed to "introduce individuals to an economic way of thinking," this site offers detailed lesson plans in **economics**, as well as content standards, links, and resources. • **Agriculture** • **Environmental Science** • **Business** • **Marketing** • **Finance** • **Consumer and Family Life** •	If you teach economics you should visit this site.
History Matters www.historymatters.gmu. edu	**U.S. history**, with topics that cut across all careers. Offers lesson plans, resources. • **Math** • **Science** • **Humanities** • **Economics** • **Geography**	A great "homepage" for **U.S. history** teachers.
Math Forum www.mathforum.com	The Math Forum is an online math education center that offers: • Secondary math units • Web-based discussion areas • Forum Internet Mathematics Library • Ask-an-expert service	Good reference source for standard math subjects. Its problems of the week provide creative, non-routine challenges for students. Excellent list of Internet resources for specific math subjects.

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The NASA Quest Project www.quest.arc.nasa.gov	Searchable lesson plans for **space** and **aeronautics**. Good section on careers in aeronautics, plus K-12 teacher's guides. Current units of interest include Women of NASA and Astroadventures: Build a Habitable Planet. Designed to engage students in authentic scientific and engineering processes. The solutions relate to issues encountered daily by NASA personnel."	Tons of relevant engaging lesson plans that you can use tomorrow. You can get on a mailing list and NASA will update you with information that students are interested in! If you want more general information on NASA, try www.nasa.gov/audience/for educators/Redirect_Spacelink.html
National Center for History in the Schools www.sscnet.ucla.edu/nchs	**U.S. history** and **world history**. Units available that correlate to history standards. Designed for teachers who need ideas and materials for next month.	Easy-to-locate units and lessons. Reproducible, downloadable materials. An excellent user-friendly site. **Five star site.**
National Council of Mathematics Illuminations http://illuminations.nctm.org	Based on the NCTM Principles and Standards for School Mathematics, this site contains lesson plans and online activities developed by expert teachers, as well as mathematics education web resources and searchable interactive versions of updated NCTM standards.	Another easy to use site that allows you to go straight to grade level and topic to find lessons. **Five star math site.**
Ohio Math Works www.ohiomathworks.org	Ohio Math Works is a PBS project that shows students in grades 7, 8, and 9 how industry professionals use **mathematics**. Videos take students behind the scenes in companies and give them an opportunity to do the math-related tasks that are done by professionals on the job. • **Hospitality and Tourism** • **Culinary Arts** • **Health** • **Media and Communications** • **Visual Arts** • **Science** • **Journalism**	On this award winning, engaging site for grades 7, 8, and 9, you'll find math units that relate to: • Theme parks • Snacks • Fashion • Weather • Newspapers **Five star site** for integrating math and careers.

Career & Subject Resources	Description	Comments
PBS Teachers http://www.pbs.org/teachers	A service of the Teacher Resource Service at PBS and participating public television stations nationwide. Provides a blend of technologies, including online communication and video. A large, general site with over 3,000 lesson plans in many subjects. • **Visual Arts Communications** • **Media Studies** • **Health**	Can also be used as a specialty site for **arts**, **literature**, and **health**, where it is very strong.
Smithsonian National Air and Space Museum www.nasm.si.edu	Classroom resources, online activities, electronic field trips, interactive videoconferencing, and professional development. Grades 3-12. A site as large as the Smithsonian itself. Links to other archives, museums and offices of education throughout the government.	Although this site is limited to **science** it is high quality.
TERC www.terc.edu	Non-profit education research and development organization whose mission is to improve **mathematics**, **science**, and **technology** teaching and learning. It develops, evaluates, promotes, and supports implementation of exemplary, inquiry-based mathematics and science curricula. • **Engineering** • **Technology** • **Agriculture** • **Biosciences** • **Health**	A current, innovative site with a list of instructional programs and materials created by TERC. Many links to interesting projects/resources for students.

Career & Subject Resources	Description	Comments
United States Holocaust Memorial Museum www.ushmm.org	A teacher-friendly site that will give you ideas, lesson plans, and resources.	Indispensable as a resource for teaching about the **Holocaust**. Professional development opportunities.
U.S. National Archives and Records Administration www.archives.gov	Look for the section on the Digital Classroom, which offers lesson plans and ideas on how to use primary materials in **history** research. "The National Archives and Records Administration (NARA) is the nation's record keeper. Whether you want to see if they contain clues about your family's history, need to prove a veteran's military service, or are researching an historical topic that interests you", you can find it all here!	A surprisingly interesting site. If you want a document or record, start here. Pertinent resource for history.
(California) Virtual Enterprise http://www.virtualenterprise.org/	Virtual Enterprise is a simulated **business** that is set up and run by students to prepare them for working in a real business environment. With the guidance of a teacher ("consultant") and real-world business partners, the students determine the nature of their business, its products and services, its management and structure, and engage in the daily operations of running a business. Emphasis is placed on using current business software, communications, and the Internet for business transactions.	Serves a wide range of student abilities and interests. A strength of this program is its flexible nature. The simulation model is utilized to serve diverse student populations ranging from special education students in high school to community college students working on business degrees.
Worldwide Arts Resources www.wwar.com	Guide to arts curricula and resources used in arts high schools and programs across the country.	Many of these programs and resources maintain links to other arts resources on the web.

Miscellaneous

These sites are a collection of odds and ends that make teaching a generation of technology natives easier and more fun for both you and them.

Miscellaneous	Description	Comments
Bubbl.us http://bubbl.us/	Use the computer to brainstorm – create many different types of interactive techniques such as mapping, webbing, listing, bulleting, etc.	Website allows you to make mindmaps online to share, embed in website, blog, or presentation, e-mail, print, and save your brainstorming ideas. Increased student engagement, especially if you delete an idea (must check it out to see what happens!) Quick, easy, and fun way to demonstrate brainstorming!
Mindmeister http://www.mindmeister.com/	Open collaborative mind mapping tool that allows teams to work collaboratively on brainstorming ideas, planning projects, and organizing notes.	Can be used online and offline, great device for putting all the pieces together for the "big picture".
How Stuff Works http://www.howstuffworks.com/	This website is designed to take the time out of researching: explaining how just about everything works organized in 15 areas from the home & garden, to food, to science, to money, to history, to electronics…they have it all!	This site is excellent for finding short 2 or 3 minute snippets to reinforce ideas and concepts that are presented to students. Also includes puzzles, games, top 10s, and trivia for everyone!
eHow http://www.ehow.com/	Yes we are teachers, but we do not have all the answers. "eHow gives the ability to research, share, and discuss solutions and tips for completing day-to-day tasks and projects."	Similar to howstuffworks website, includes more information for use by those not in school, however lots of pertinent information included that can be useful to your classroom. Quick and easy to find information and clarification on topics.

Miscellaneous	Description	Comments
NeoK12 http://www.neok12.com/	Includes educational videos, lessons, quizzes, games, and puzzles for K-12 students…FREE!!!	Allows students to develop a model in their brain while increasing curiosity about the subject matter. Ideally promoting self-learning at the same time. Use in class as both and introduction and review of ideas!
Kentucky Virtual Library **HOW TO DO RESEARCH** http://www.kyvl.org/kids/homebase.html	The website offers a colorful graphic that takes students step-by-step through the processes of conducting research. Each section can be clicked on to reveal a further understanding.	Esthetically pleasing and easy to follow, this can be used with a wide range of students (ability and grade level). The best part is that students can access it at home, at school, and on their phone to assist them with the sometimes daunting task of researching!
Organize Your Information! **How?** http://www.visual-literacy.org/periodic_table/periodic_table.html	This website offers a plethora of examples to assist students in visually organizing information. Part of: visual-literacy.org "This e-learning site focuses on a critical, but often neglected skill for business, communication, and engineering students, namely *visual literacy*, or the ability to evaluate, apply, or create conceptual visual representations."	This website is a must-use for educators. With the diversity of students in today's classrooms we are constantly being asked to provide information in a variety of ways to reach all learning styles. This website offers 72 different ways to visually organize information! The best part: it's organized like the periodic table!!!