Fun and Interesting Learning for Students and Educators

Annette Lamb



TORN IN TWO from the Boston Public Library is a website that explores defining events from the American Civil War.

The Virtual Tour examines people, places, and events connected with the Civil War. In the People section, users can explore the lives of a dozen different people impacted by the war. Students can explore their lives before, during, and after the war. In addition, users can examine maps related to their experiences and a timeline of events. The Places section provides access to period maps of the world, regions of the United States, and individual states. Finally, the timeline features maps, photographs, and other documents related to key events before, during, and after the war.

Curriculum guides are available for elementary, middle, high school, and special curriculum. These include standards-based lessons, students sheets, and supporting materials.

Librarians will find this website to be an effective way to illustrate the role of maps in understanding history. Consider collaborating with the history teacher on a project focusing on primary source materials, map reading, and history.

Sponsored by the Norman B. Leventhal Map Center at the Boston Public Library, the Torn in Two experience can be extended by exploring other maps in the library's collection.

To visit the website, go to http://tornintwo.org/. To try the

Virtual Tour, go to http://tornintwo.org/about-the-exhibi.../take-the-virtual-tour. To download Teacher Resources, go to http://tornintwo.org/teacher-resources/curriculum-guides.



RIPPED APART from The National Museum of American History is an engaging Civil War mystery app.

Based on real people and events from history, this app-based simulation game immerses youth in a fascinating photography history collection. Participants take on the role of a Smithsonian intern solving cases. Using historical photographs, users must decipher documents to solve authentic problems. The game examines various perspectives as players learn about the causes and key players in the Civil War. In addition, users can experiment with 19th century photography using their mobile device's camera.

The project website contains interesting information about the real-world stories that serve as the basis for the engaging simulation.

Designed for young adults, librarians will find this app to be a fun way to explore primary source materials and learn about American history. Collaborate with the history teacher to connect library and history standards related to primary source documents and information inquiry in history.

Teachers may need to provide some guidance in the use of the simulation because no in-app directions are provided.

To learn more about the project and download the app, go to http://americanhistory.si.edu/ripped-apart.



CAVE BRO by Florida Virtual School is a fun interactive app focusing on healthy food choices.

Developed by the Florida Virtual School, this middle grades app uses a game environment to teach concepts related to choosing a healthy and balanced meal. Players work their way through 25 levels. Each level introduces new foods. In addition to game play, users also learn about specific foods and their nutritional value.

The colorful, attractive graphs and fast-paced games will be a hit with youth.

Librarians will find this to be a fun app to address health and nutrition standards. Collaborate with the health teacher to build activities that connect the app with the ChooseMyPlate. gov website and nonfiction books in the library collection.

Future versions of the program may include an exercise element.

To visit the nutritional facts website, go to http://www.choosemyplate.gov/.

To download the app, go to https:// itunes.apple.com/WebObj.../MZStore.woa/.../viewSoftware....



QUANDARY is both a web and app-based learning game for middle grade students that promotes critical thinking and decision-making skills.

Exploring concepts related to ethical decision-making, users are immersed in a futuristic colony on the planet Braxos. Colonists must make decisions about the future of the colony based on facts, opinions, and alternative solutions. The game contains three episodes addressing different types of dilemmas. In Lost Sheep, colonists must weigh the value and threat of a native predator. In Water Wars, the community must deal with issues of water pollution and cooperation. In Fashion Faction, colonists must consider the pros and cons of conformity.

The scenarios are presented using an attractive, graphic-novel-style approach. Participants can explore the perspectives of a dozen different characters by reading their cards, which contain text and animation. Users sort these cards into three categories: fact, solutions, or other opinion. To proceed students must correctly sort the cards. Users work their way through a series of problems and solutions to come to a conclusion that addresses the dilemma.

Librarians will find that the game can be associated with reading, listening, and speaking standards. Skills related to critical thinking, perspectivetaking, and decision-making can be directly connected with the Standards for 21st Century Learners.

The website contains teacher support materials to facilitate discussions related to the game.

To try the web-based version, go http://www.quandarygame.org/ to To download the app version, go to https://itunes.apple.com/WebObj.../ MZStore.woa/.../viewSoftware....



LEARN. GENETICS from the Genetic Science Learning Center provides high-quality, interactive information about genetics as well as the foundational science related to genetics topics.

Sponsored by the University of Utah, the website is divided into the areas of genetics, cell biology, ecology, human health, neuroscience, and science tools. Each section provides fascinating tutorials and interactives related to core concepts.

The Genetics section begins with a tour of basic genetics, then examines specific aspects of the field such as characteristics of inheritance and epigenetics. In addition, it explores practical applications such as pigeon breeding.

Each resource includes interesting information and visuals. Most incorporate interactive elements to keep students interested.

Librarians will find many connections to the science curriculum. Consider working with the science teacher to select specific sections that might be used to introduce or reinforce a science lesson.

To visit the website, go to http:// learn.genetics.utah.edu/.



THE NATIONAL AQUARIUM

app and website provide fascinating information about thousands of animals. Sponsored by a nonprofit focusing on the world's aquatic treasures, the website features a high-quality encyclopedia, webcams, and educational information.

The searchable Animals encyclopedia includes high quality photographs and information about thousands of creatures along with a link to the exhibit where this animal is found.

Their blog contains informative stories about science, conservation, and animals.

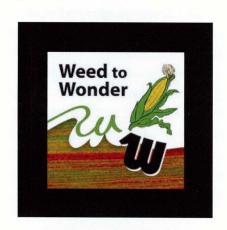
The teacher section includes printable booklets and fact sheets.

While the app doesn't provide the detailed encyclopedia found at the website, it does provide a guide for visits and fun facts about the animals.

To visit the National Aquarium website, go to http://aqua.org/.

Go to the Animals section of the National Aquarium website at http://www.aqua.org/explore/animals.

To download the app, go to https://itunes.apple.com/.../a.../national-aquarium/id933624749....



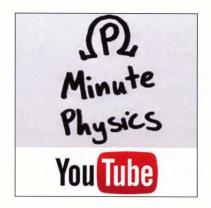
The **WEED TO WONDER** app and website explore how a common Mexican weed was transformed into a modern food and fuel known as corn.

Developed by the Cold Spring Harbor Laboratory, the fascinating story is told through a series of tutorials that include text along with over 150 photographs, maps, diagrams, and videos. The materials are divided into six sections including an introduction, domestication, hybrid vigor, genome sequencing, jumping genes, and biofortification.

Designed for middle and high school levels, librarians will find this app/website to be a good addition to their growing "interactive e-book" collection.

To explore the website, go to http://www.weedtowonder.org/.

To download the app, go to https://itunes.apple.com/au/app/weedtowonder/id524811954....



The **MINUTEPHYSICS** You-Tube channel website provides fascinating, focused science videos.

Each fast-paced, one-minute video introduces a topic and provides lots of examples. The illustrator uses simple marker drawings mixed with interesting photographs to bring each concept to life.

By weaving in facts with humor, even the most reluctant student will enjoy the experience. Because the videos move very quickly, most students will need to view the clips multiple times to catch all the details.

Librarians will want to mine the You-Tube channel and match the videos with the science curriculum. Use the search tool to find specific topics of interest. To visit the website, go to https://www.youtube.com/user/minutephysics.



The **ASAP SCIENCE** YouTube channel brings STEAM alive for young adults.

From their Science Wars Acapella Parody to lessons on music science, both students and teachers alike will grow to love this group of science geeks. Their goal is to make science fun and accessible through the use of music and fascinating science facts.

Although best known for their You-Tube channel, the group has also published a book titled ASAP SCIENCE. Addressing timely questions about binge-watching TV, power naps, and brain freeze, their examples are aimed directly at the young adult audience.

Librarians will find their videos to be great resources to encourage STEAM projects that emphasize music.

Keep in mind that the group often weave "adult" and "potty" humor into their works to attract the interest of young adults. However, high school students will find this approach hilarious. Before using a particular video with a class, be sure to watch it first.

Go to their YouTube channel at https://www.youtube.com/user/AsapSCIENCE.

To get their book, go to http://asap-science.com/book/.



KIDLIT TV is a website exploring the world of children's literature.

Designed for parents and educators, the online resource contains audio, video, and links to resources related to reading and children's books.

The Storymakers series uses a talk show format to feature authors and illustrators. The Field Trip section explores topics in children's literature such as pop up books. The Inside Scoop area features upcoming titles and kid lit news. The Read Out Loud section contains videos of author's reading their books aloud.

In addition, the website contains a community area featuring members of the children's literature community from teachers and librarians to authors.

In addition to the website, the videos are available at YouTube. The You-Tube channel also links to book trailers and children's videos from publishers and other sources.

KidLit TV is a fun way to keep up with what's happening in children's literature. Librarians will find the resource useful for locating new books and project ideas.

To visit the website, go to http:// kidlit.tv/.

To visit the YouTube channel, go to https://www.youtube.com/channel/ UCRmmQ9RQUy0ha9EZkIfwa5g.



CHALLENGE: ROBOTS from

National Geographic is an educational game involving youth in solving realworld problems.

Designed for grades three through ten, the online activities explore key concepts related to engineering. Students act as engineers to solve a series of problems at RoboWorks, Students begin with an orientation that reviews the six steps of the engineering process. After completing the Orientation, students work their way through a series of online activities including Build a Robot, Robotic Bees, Ocean Cleanup, and Tunnel Explorer.

Librarians will find this resource to be a motivating way to promote the engineering aspect of STEAM. An educator guide provides lots of extension activities for both the library and classroom settings.

To visit the website, go to http:// education.nationalgeographic.org/g.../ challenge-robots/.



The PLUM LANDING website and apps are a companion to the popular PBS Kids program focusing on environmental science.

Designed for ages six through nine, the website contains a wide range of motivating science activities.

The Games section includes over a dozen games that encourage children to play, explore, create, and share what they learn about our amazing planet. Children learn concepts related to soil, seeds, invasive species, ecosystems, and other fascinating topics.

The Videos section plays short, animated videos focusing on ecosystems such as the desert, jungle, and mountain regions.

The Ship section highlights the television program's featured characters.

The Pictures section features images submitted by users of the Nature Sketchpad website and Plum's Photo Hunt app.

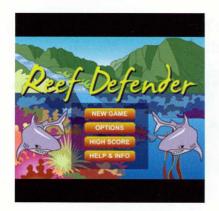
The Parents section contains fun family adventure ideas and tips for getting families outdoors.

The Educators area provides curriculum resources including activities and media resources organized thematically and aligned to science standards.

Two apps allow children to extend the experience. The Plum's Creaturizer app provides tools to build crazy creatures and Plum's Photo Hunt encourages children to photograph wonders in their own backyard.

Build the Plum character into a primary grades library center focusing on environment science topics. Incorporate a tablet or laptop along with science books and objects related to nature themes.

To visit the website, go to http://pbskids.org/plumlanding/.



REEF DEFENDER is an app from the Department of Land and Natural Resources of Hawaii.

Before jumping into the game, app users are encouraged to explore the Hawaii Sharks website to learn more about sharks, Hawaiian mythology, shark safety, and shark incidents. A shark quiz is also available. Students will also enjoy following sharks with the Tiger Shark tracker.

After learning about the importance of the reefs to sharks, app players use their pet shark to boot bad items that can harm the reef out of the ocean. Bad items include bottles, cans, cigarettes, invasive species, motor oil, herbicides, and fertilizer.

Librarians will find this game to be a nice way to motivate youth to explore the informational website about sharks. Add this app to a learning center that includes books about reefs and reef creatures.

The app is available for both Apple and Android.

To download the Apple app, go to https://itunes.apple.com/us/app/reef-defender/id657761952....

To explore the website, go to http://dlnr.hawaii.gov/sharks/.

The **JFK CHALLENGE** app from the John F. Kennedy Library Foundation immerses users in American history and the impact of Kennedy's presidency.



Designed for ages 9 through 11, students become NASA and Peace Corps trainees as they accept President Kennedy's challenge to make a difference in the world. Users begin by creating a quick profile so their work can be saved. Then, they choose a mission: The Peace Corps or The Space Race. A multimedia tutorial provides an overview of the history of their mission and Kennedy's connection. Students then work their way through a series of skills-building training activities and missions. The game elements are directly related to the content of the app, making the experience both fun and educational.

Librarians will find this app to be a motivating way to bring history alive for youth. Use this app in a library station related to Kennedy or as part of a series of activities connected to life in the 1960s.

To learn more, go to http://www.jfkchallenge.org/.

To download the app, go to https://itunes.apple.com/us/app/jfk-challenge/id957358011...

SHOUT SCIENCE! by Scott Dubois is an amazing comic storybook app exploring scientists and scientific discovery.

Designed for ages 7 through 11, the app contains three narrative biographies featuring Anton Van Leeuwenhoek, Maria Sibvlla Merian, and James Hutton.

Set during the Scientific Revolution in Europe, readers learn about both science and history connected with the scientist. Students scroll down a timeline or explore a map, then make a selection. For each person, the student can read the story or access additional information about the person including background information, an image, and timeline.



Rather than reading across pages, users scroll down a series of screens to read the story. To enhance engagement and reading comprehension, the app incorporates animation, diagrams, sound, and interactive elements.

Use this engaging comic storybook app to jumpstart a biography project. Connect the app with the graphic biographies in your library collection.

Go to Shout Science to learn more about the author and the app at http://www.shoutscience.com/.

To download the app, go to https://itunes.apple.com/us/app/shout-science!/id672884678....

Copyright of Teacher Librarian is the property of EL Kurdyla Publishing LLC and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.