Learning and Literacy Styles in Government Documents for Kids and Educators

By: Karen McEwen

Introduction to 21st Century Literacy

Until the digital age, literacy was defined as the ability to read and write. Traditional curriculum reflected this approach using print text-based materials. The World Wide Web changed this — altering the idea concept of educational 'texts' to include access to audio and video Web streaming and other online visual images. This evolution added new concepts of literacy to professional educational literature. Not only did a student need to read and write, but also needed to be able to use and understand a computer and how to find online information to be literate (Baguley, Pullen, & Short, 2009). An emerging concept for 21st century learners and educators is visual literacy.

Business/industries need certain skills, which librarians and educators teach. As computers were adopted into businesses and the general economy, the skills needed to use them were adopted into the K-12 curriculum. Baguley et al. (2009) argue that businesses increasingly emphasize the need for creative and innovative thinkers. Simultaneously, the absorption of technology into everyday life has led to the inundation of visual information. Technology skills and learning to adapt to online changes are also a part of 21st century literacy.

Interaction, creativity and how to deal with visual information are some of the core concepts of 21st century curriculum. 21st century literacy skills include: technology proficiency; developing collaborative and cross-cultural solutions; designing and sharing information for groups around the world; understanding and handling simultaneous information; creating and understanding multimedia materials; and understanding the ethics of a technological environment (National Council of Teachers of English, 2008). Therefore, 21st century literacy addresses understanding multimedia tools, citizenship in a global society, and using the World Wide Web for creation, discovery, and consumption of information.

The specific concept of visual literacy is an ongoing challenge for educators, including children's and youth librarians. To address this issue, the Association of College and Research Libraries (ACRL) maintains a pathfinder of articles trying to define it, entitled *Visual literacy resources on the Web* (Zanin-Yost, 2007). From an educational perspective, and for the purposes of this article, visual literacy is defined as "the reading and writing of visual texts" (Moline & Drew, 2008).

Learning Styles

It is also important to consider 21st century concepts of literacy in relation to the learning styles of students. Learning styles represent the way a student absorbs information. While most people have more than one style, individuals usually favor one type over another (University of Illinois, 2008; America's Career Resource Network, 2009).

The three most common learning styles are visual, auditory, and kinesthetic. Visual learners rely on images to learn, creating an image in their head to remember the information. Auditory learners are best when presented with verbal information. Kinesthetic learners require movement and manipulation. By the time students are in fifth grade around half (50%) are kinesthetic learners, forty percent (40%) are visual, and the remaining ten percent (10%) are auditory. An astounding 80 percent of instruction occurs in a lecture based/auditory method! (University of Illinois, 2008; America's Career Resource Network, 2009). Online and print government resources for kids can help librarians serve their young users by accessing free materials in a variety of formats to meet a variety of learning styles.

Purpose and Methodology

This article seeks to identify government documents, especially online government documents and resources, for children and librarians based on the principles of popular learning styles and emerging 21st century theories of literacy. The author performed searches using keyword and subject options (see recommended keywords for full list) in the Advanced Search function of the Indiana University's Online Library Catalog, www.iucat.iu.edu/. Searches were limited by the location for government documents and websites discovered based on searches identifying federal and state governmental and educational sites. In the section Resource for Kids: Documents for 21st century learners, each document is identified by title, sponsoring government agency, education level from kids to teens, SuDocs call number (used at many depository libraries), and online availability.

All of these documents may be accessed freely online in a library or by the public. Because Indiana University, Bloomington, is a selective federal depository library, their mission, in part, is to serve the public by providing access to U.S. government documents. These documents may be requested via interlibrary loan by the call number in the annotation, or found at other depository libraries in Indiana, including the Indiana State Library. These reviews may also inspire further search for free online government information for kids and the some annotated government Web portals are listed in the section: Recommended Online Government Resources for Kids. Both media specialists and public librarians may find these resources useful in teaching, reference, updating library websites, and developing library programs.

Resources for Kids: Documents for 21st Century Learners

Title: ***Bodyworks***
Government Agency: U.S. Department of Health and Human Services, Office on Women's Health
Educational Level: Teens
Call Number: HE 20.41/2:B 63/2/KIT
Website: www.womenshealth.gov/BodyWorks/toolkit/

This kit offers resources for teens and parents. The kit includes basic health and nutrition information, healthy recipes, a DVD on shopping and cooking, weekly planner, as well as regular and fitness journals. All materials, except for the DVD, are available online as well in both English and Spanish.

Title: ***Dr. Reese Ickle's Lab***
Government Agency: Indiana Department of Environmental Management
Education Level: 3rd-6th grade
Website: www.in.gov/idem/5292.htm

Students can click on scientific equipment or trapped molecules to learn what they are and what they do. This highly interactive site includes two games: *Environville* and *Use Your Brain*.

Title: ***A Guide to American Defenders of Land Sea & Sky: A Resource for Teachers, Parents, and Other Educators***
Government Agency: U.S. Department of the Interior, National Park Service and heritage Preservation Services
Educational Level: 7th–12th grade
Call Number: I 29.2:D 36
Website: N/A

This book includes activities encompassing civics, economics, language arts, geography, history, and more. Sample ideas include drawing and using maps, how to organize a debate group, and finding art and news articles that represent a culture.

Title: ***Junior Ranger: Night Explorer***
Government Agency: National Park Service, U.S. Department of the Interior
Educational Level: ages 5 to 12
Call Number: I 29.9/2:EX 7/2
Website: N/A

This booklet is self-described as an explorer's activity guide. Sample topics include light, constellations, and planets. Educational information alternates with practical but fun exercises. Sample exercises include picture jumble, maze, and scavenger hunts.

Title: ***Learning About Acid Rain: A Teacher's Guide for Grades 6 through 8***
Government Agency: U.S. Environmental Protection Agency
Educational Level Grades 6 through 8
Call Number: EP 4.8:AC 6

Websites: www.epa.gov/acidrain/education/
teachersguide.pdf
www.epa.gov/region5/tgeachers

This book includes nine different experiments involving methods to measure ph as well as the effect of acid rain on various materials. Additional word activities are available at the back of the book. It is available along with a teacher's guide for download at the website provided.

Title: **NASA's Great Observatories Paper Model Kits**
Government Agency: National Aeronautics and Space Administration
Educational Level: Grades 5–12
Website: http://er.jsc.nasa.gov/seh/NASA_Great_Observatories.pdf

This resource features three do-it-yourself paper models: The Chandra X-Ray Observatory, Compton Gamma Ray Observatory Model and the Hubble Space Telescope.

Title: **Peace Corps Challenge Online Game Government Agency: Peace Corps**
Educational Level: Grades 3–12
Websites: www.peacecorps.gov/kids/
www.peacecorps.gov/wws/educators/enrichment/wanzuzu/index.cfm

As a volunteer for the Peace Corps, the player is assigned to the town of Wanzuzu. In Wanzuzu the player must talk to the villagers and help make sustainable living decisions. As a special feature for educators, there is a page of lesson plans searchable by grade level, subject, and region.

Title: **Presidential Campaign Songs 1789–1996**
Government Agency: The Smithsonian Institute
Educational Level: N/A
Call Number: AE 1.102:C 34/1789-1996/1x
Website: N/A

Although this CD was not produced with children in mind, it provides educators and librarians a different perspective on political campaigns — and a great comparison to modern political ads. The CD features songs from the presidential campaigns of George Washington through William Clinton.

Title: **Smokey Bear.com: Get Your Smokey On**
Government Agency: U.S. Department of Agriculture (USDA) Forest Service Educational Level: K–5
Websites: www.smokeybear.com/kids
www.smokeybear.com/resources.asp

Young learners can visit Smokey the Bear's outpost to learn campfire rules, to explore mazes and play interactive games. The website includes educator resources consisting of lesson plans, an activity book and poster, and a guide to federal wild lands. it also uses social networking tools to extend the educational setting to Flickr, Twitter, Youtube, Facebook, and MySpace.

Title: **Sunwise: A Program That Radiates Good Ideas**
Government Agency: U.S. Environmental Protection Agency
Educational Level: K-8th grade
Call Number: EP 1.2:SU 7/57/2008/KIT
Website: www.epa.gov/sunwise

Who would not like science experiments that include gumdrops and Frisbees? Learn all about the sun and skin protection with lots of interactive experiments. The kit also includes word and game activities. Educators and librarians can visit this website for more details about how to use this kit for a class, curriculum, or library program. The website also adds updated resources such as MP3 files of an audio presentation originally aired on Radio Disney.

Title: **The Two Bite Club/My Pyramid**
Government Agency: Food and Nutrition Service (FNS), U.S. Department of Agriculture (USDA)
Educational Level: Preschool
Call Number: A 98 8/2:405
Website: www.mypyramid.gov/preschoolers

Bright, colorful and child friendly, this interactive story and game based on the familiar food pyramid features anthropomorphic characters. The mother presents the nutritional information as a game for preschoolers. The children learn about each food group on the chart by selecting and sampling items from the cupboard and refrigerator. The accompanying website includes multimedia resources and interactive tools for parent and child.

Title: **USFA Kids**
Government Agency: U.S. Fire Administration
Educational Level: Pre K-3rd grade
Websites: www.usfa.dhs.gov/kids/flash.shtm
www.usfa.dhs.gov/kids/parents-teachers/

In this interactive website, children have the opportunity to become a junior fire marshal by working through lessons and taking a quiz. Also featured are interactive games, puzzles, and coloring pages. A separate tab for parents and teachers includes Spanish materials, discussion points and lesson plans.

Title: **Visit Presidential Libraries and Museums**
Government Agency: U.S. National Archives and Record Administration
Educational Level: Elementary to High School
Call Number: N/A
Website: www.archives.gov/presidential-libraries/visit/

This website provides links to presidential museums and libraries. Each individual presidential library and museum offers resources for students and educators. Samples of the information provided include curriculum guides, primary documents, essays, biographies, maps and podcasts.

Title: **What Do Maps Show?**
Government Agency: U.S. Geological Survey
Education Level: Upper Elementary to Junior High
Call Number: I 19.2:M 32/21/KIT
Website: http://egsc.usgs.gov/isb/pubs/teachers-packets/mapshow/mapshowindexpdf.html

This kit teaches students to read regular and topographic maps. It includes a set of four lesson plans along with reproducible materials. The kit is available in print or online.

Title: **The Wildlife Investigator Series**
Government Agency: U.S. Department of the Interior, Bureau of Land Management
Education Level: K–12
Call Number: I 53.63:
Website: N/A

This book for educators offers ways to present information about the natural history of animals, wildlife trees and wildlife biologists. The accompanying CD has a lesson plan in the form of pre-prepared PowerPoint slides.

Recommended Online Government Resources for Kids

These government documents reviewed represent only a few of the excellent online government information resources available for kids. Here are some hints on finding more. Search any online catalog using these recommended keywords in various BOOLEAN searches:

> Child, Children, Coloring Book, Educator(s), Guide, High School, Juvenile, Junior High, Kid(s), Kit(s) Poster, Resource(s), Speech(es), Set, Study, Teen, Toolkit, Workbook, Workshop, and Youth.

Another hint is to use search online government portals, many which have sections specifically for kids, education, and literacy. For example, the main U.S. government portal, www.usa.gov, has Kids, Teen, and Parents sections both in English and Spanish. It searches government websites for federal, state, local and tribal governments and the search may be narrowed by the type of government organization. It also provides an A-Z index, and tutorials for learning how to search. Indiana government's main portal IN.gov, www.in.gov, has sections on Resources for Educators, and Information for Kids. Also, both federal and state agencies often post information just for kids. One example is the Indiana, Division of Parks and Reservoirs, Just for Kids website, www.in.gov/dnr/parklake/2383.htm. It includes fun activities and games under the categories of rainy day activities and coloring pages for plants and animals.

One of the best online indexes to government resources for kids is on the American Library Association Government Documents Round Table website Gov Docs Kids, which lists numerous websites for kids by governmental agencies at http://wikis.ala.org/godort/index.php/Gov_Doc_Kids. Government Information for Librarians, Teachers, Parents, and Children is included. The goal of the resource is "to promote government information in order to engage K–12 students in learning about history, culture, science, and government through games and other interactive activities; to assist teachers and school librarians with locating teaching aids, lesson plans, and

exciting tools to enhance students' learning, and to provide librarians with a collection of free government resources to advance their reference interview and collection development decisions" (Government Documents Round Table, 2009). Links range from governmental, natural resources, creative, and financial learning activities for kids from a variety of state, federal and international sources.

Government websites for kids also may focus on a particular type of resource such as coloring books. An example of what a library can do with government resources for kids is the online Coloring Books pathfinder by Evergreen State College, Olympia, Washington at http://govdocs.evergreen. edu/coloringbooks.html. It links to available online coloring books published by federal government agencies, many in color. Some may be requested in print. Another pathfinder is the Educational CyberPlayground at www. edu-cyberpg.com/Arts/color.html.

Conclusion

Both online and print government resources meet a variety of librarian, educator, and children's needs for 21st century learning. This article describes some examples of interesting and recommended government books, kits, media, websites, online activities, and search portals that will inspire and delight. These resources can support librarian teaching and programming based on emerging literacies in this technological age and various learning styles. New government resources for children are always being developed, especially using social networking.

Recommended Government Information for Kids:

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U.S. National Aeronautics and Space Administration. (1998). *NASA's great observatories*. Retrieved from http://er.jsc. nasa.gov/seh/NASA_Great_Observatories.pdf

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About the Author

Karen McEwen has a BA in World Literature from Pennsylvania State University and holds a Masters of Library Science from Indiana University. Her interest in intellectual freedom is demonstrated by her involvement with a local literacy group the Midwest Pages to Prisoners Project. Her area of research, currently focuses on the effect of emerging technology on educational environment.