Resources on the Net

Digital Special Collections and Tools for Locating and Evaluating ThemCompiled by Chris Bober

Inspiration for the theme of this annotated bibliography can be attributed in part to the pomp and ceremony that preceded the launch of the Digital Public Library of America (DPLA) on April 18, 2013. In the eyes of its founders, the DPLA "brings together the riches of America's libraries, archives, and museums, and makes them freely available to the world. It strives to contain the full breadth of human expression, from the written word, to works of art and culture, to records of America's heritage, to the efforts and data of science." The DPLA platform provides links to content from library collections located throughout the country and aggregates their metadata. The DPLA has made a grand gesture, promising to share the nation's wealth of digital resources from prominent cultural, educational and scientific institutions freely to all members of society, to bring these disparate collections together in a national network, and to provide a user-friendly interface. It is an initiative that deserves popular support to secure its long term sustainability. Some of the material presented below describes a few smaller scale institutional and national efforts that preceded the DPLA. They all hold true to one of the DPLA's guiding principles, opening up access to digitized collections completely free of charge to the public. First, one looks at some of the challenges brought upon by rapidly developing digital collections

Digital public library of America (DPLA). (n.d.). Retrieved from http://dp.la/

Current Issues – The State of Digital Collections in Academic Libraries

Maron, N.L. & Pickle, S. (2013, February 21). *Appraising our digital investment: Sustainability of digitized special collections in ARL libraries*. Retrieved from Association of Research Libraries web site: http://www.arl.org/bm~doc/digitizing-special-collections-report-21feb13.pdf

This is a report of a survey conducted with member libraries of the Association of Research Libraries (ARL) that focused on their post-digitization activities, specifically the ongoing challenges of maintaining digital special collections. Securing continued funding was a major theme, as initial start-up costs received from external sources, once exhausted, had to be drawn from shrinking internal budgets. Another key finding was that libraries were investing heavily to increase their digitized collections without carefully consideration for ensuring that existing digital collections had adequate staff to maintain them. There is much to be learned for libraries that are now investigating the re-deployment of staff to digital special collections, mainly to avoid the administrative pitfalls whereby digital special collections "once created, are intended to essentially run without much active management, a situation that could ultimately hamper the ability of these institutions to sustain their projects and achieve the impact they desire."

Current Issues - Assigning Credibility to Digital Collections

Gold, A. U., Shapiro Ledley, T., Buhr, S. M., Fox, S., McCaffrey, M., Niepold, F., Manduca, C., . . . Lynds, S. E. (2012). Peer-review of digital educational resources: A rigorous review process developed by the Climate Literacy and Energy Awareness Network (CLEAN). *Journal of Geoscience Education*, 60(4), 295–308. doi: http://dx.doi.org/10.5408/12-324.1

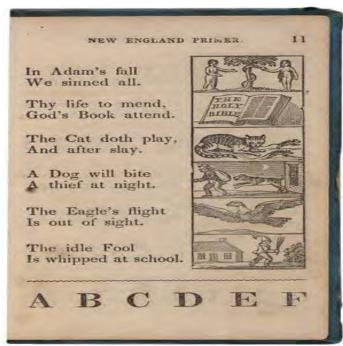
This article addresses a major concern for science educators, the inability to critically evaluate the authority, quality, and suitability of the ever increasing number of activities, videos, visualizations, experiments and other potentially useful educational materials for scientific literacy that populate digital libraries. The authors report on Climate Literacy and Energy Awareness Network (CLEAN), a hybrid review system developed for

evaluating teaching materials specific to climate and energy topics that are suitable for middle schools, secondary and postsecondary institutions. CLEAN draws upon a number of standard educational review processes, including peer-review. Both educators and scientists make up the disciplinary specific review panels which "ensure that attention is paid to both scientific accuracy and pedagogic effectiveness." Keeping the multitude of review panels viable has been challenging, as the level of expertise required is not easily obtainable from the scientific community. It is believed that the CLEAN review process can be applied to other disciplines "because most review questions identify high-quality teaching materials and are not thematically focused on climate and energy science."

Educational History Research - Historical Textbooks

Harvard University Library Open Collections Program. (2013). *Reading: Harvard views of reading, readership, and reading history*. Retrieved from http://ocp.hul.harvard.edu/reading/
A digitized selection of printed books on various elements of reading instruction published from the late 18th to the early 20th centuries, this material forms part of a larger online collection that explores the "intellectual, cultural, and political history of reading" as presented by Harvard University Library's Open Collections Program. Material is drawn from selections in the Monroe C. Gutman Library's *Historical Textbooks Collection* that documents the history of education. Browseable topics/genres include textbooks, readers, primers, spellers, and grammars representative of the materials used to teach reading to children of various skill levels. The majority of the works are American imprints with a selected number of European publications in French, German, Spanish, and Italian. This is an impressive collection of unique primary source materials that "document the principles, and some of the biases, in reading instruction from the 18th to the early 20th centuries."

Figure 1. The New England Primer, or, An Easy and Pleasant Guide to the Art of Reading: Adorned with Cuts: To Which Is Added the Catechism. Boston: Massachusetts Sabbath School Society, [after 1836].



Adapted from "Reading: Harvard views of reading, readership, and reading history", by Harvard University Library Open Collections Program, 2013.

Digital Research Library, University of Pittsburgh. (2003). 19th century schoolbooks. Retrieved from http://digital.library.pitt.edu/nietz/

19th Century Schoolbooks is a digital library containing selections from the Nietz Old Textbook Collection, founded by the late Professor Emeritus, University of Pittsburgh, John A. Nietz. The full color image collection, with searchable text, consists of 141 American primary and secondary schoolbooks. It also includes two surveys of historic schoolbooks done by Professor Nietz. The Nietz Old Textbook Collection originally consisted of 9,000 titles that he had acquired "to demonstrate the history of teaching in the early years of the United States." Through gifts and purchases, the collection now includes over 16,000 titles, many of which "are rarely held and have not yet been reproduced in microform collections or reprint editions."

Stanford University, Cubberley Education Library. (n.d.). *American primers and readers* featuring *the words and collection of Richard L. Venezky*. Retrieved from http://venezky.stanford.edu/
This virtual exhibition provides an ongoing legacy to a larger exhibit that took place in Fall 2008 at Stanford University's Green Library on The Venezky Collection, consisting of American primers and readers published between the late 1700's and the mid twentieth century. Richard L. Venezky (1938-2004) was a noted scholar whose expertise included the history of literacy and reading. The exhibition follows some of the themes in Venezky's scholarship on the evolution and history of textbooks and reading. Venezky's denoted five distinct historical periods in the evolution of American textbooks: Colonial (1639–1782), early national (1783–1837), pre-Civil War (1838–1865), early modern (1866–1920), and modern (1921–present). Venezky believed that the "evolution of the modern reading textbook is in part the history of American education and in part the history of American culture." The complete microfiche collection of the Venezky family's donated materials, *American Primers*, contains various editions of many of the textbooks, helping to illustrate how they evolved

Making of America books. (2007). Retrieved from University of Michigan web site: http://quod.lib.umich.edu/m/moagrp/

over time. This collection is housed at Stanford University's Cubberley Education Library.

Making of America Books is one of two major projects from a joint Cornell University/University of Michigan Cornell University digital library of primary sources in American social history from the antebellum period through reconstruction. The initial collaboration dates back to fall 1995 with initial funding provide by the Andrew W. Mellon Foundation. Candidates for digitization were selected from primary materials within their respective institutions. Through various phases, Cornell University's primary focus was on digitizing journal articles while University of Michigan concentrated on digitizing monographs, particularly in the subject areas of education, psychology, American history, sociology, science and technology, and religion. The total number of books in this collection is 10,281 although there does not appear to have been any additions since 2007. Subject browsing was introduced in 2007, opening up the Nineteenth Century to reveal a wealth of textbooks including *Easy experiments in physical science, for oral instruction in common schools* (1876).

Educational History Research – African American History

New-York Historical Society. (n.d.). Examination days: The New York African free school collection," Retrieved from https://www.nyhistory.org/web/africanfreeschool/

This web site provides digital images from a collection entitled Penmanship and Drawing Studies, 1826-26, part of the records of the New York African Free School, founded in the late 1780's by the American Manumission Society, an advocacy group for African Americans. Originally a single-room schoolhouse with about 40 students, its stated purpose was to "educate black children to take their place as equals to white American citizens". It became part of the New York public education system in 1835. The digital archive of 51 items represents a selection of the school's records kept by the New-York Historical Society. Digital images of student work include drawings, essays, penmanship exercises, and original poetry as well as teaching materials like lesson plans and problems. This valuable scholarly resource collection helps to shape a portrait of

Antebellum New York City.

Educational History Research – Women's Education

Albert M. Greenfield digital center for the history of women's education. (2012). Retrieved from Bryn Mawr College web site: http://greenfield.brynmawr.edu/items

The Albert M. Greenfield Digital Center for the History of Women's Education web site was officially launched in October, 2012. Its stated mission is "to foster scholarship and dialogue on the history of women's education by providing a digital space that will act as a locus for inquiry and research into these diverse areas." The site is divided into two main components: a digital repository of primary sources; presentations of digital exhibits. Resources are drawn from Bryn Mawr College's extensive special collections, and include original texts, letters, photographs, realia and other materials beneficial to historical research with a focus on the nineteenth and twentieth centuries, both "critical periods in the movement for greater access to women in education." Numerous digital exhibits provide a showcase for the historical collections and are presented using the Omeka platform, providing a real museum like experience while browsing thematically through the displays accompanied by narration.

Open Data Repositories

Child care and early education research connections. (2013). Retrieved from http://www.researchconnections.org/childcare/collection.jsp

Child Care & Early Education Research Connections, launched in 2004, is an interactive database that can be used to search the full text of over 20,000 resources relevant to the field of childcare and early education, and in particular, children in low-income families. Jointly authored by the U.S. Department of Health and Human Services, the National Center for Children in Poverty at Columbia University, and the Inter-university Consortium for Political and Social Research at the University of Michigan, this resource also provides researchers access to U.S. public use datasets from major child care, Head Start, and early education research and evaluation studies. Currently over 20 public dataset series are available along with over 45 other studies. Recently added downloadable datasets include the 2011 Child Care Licensing Study and the Massachusetts Early Care and Education and School Readiness Study.

PSLC datashop: A data analysis service for the learning science community. (2013, April 04). Retrieved from https://pslcdatashop.web.cmu.edu/

The Pittsburgh Science of Learning Center (PSLC) DataShop bills itself as "the world's preeminent central repository for data on the interactions between students and educational software and a suite of tools to analyze that data." This public educational data repository offers the educational research community a secure storage facility and provides access to the performance and learning activities of secondary and post-secondary students engaged in authentic learning tasks with on-line course materials and intelligent tutoring systems in mathematics and other science based disciplines. There are over 300 datasets stored in the constantly growing repository. PSLC Datashop's web applications also offers researchers a number of features to facilitate and further their analysis, allowing them to import data into the repository and export data from the repository, as well as providing free tools to analyze the data.

Digital Libraries of Educational Materials for STEM (Science Technology Engineering Mathematics Education)

NSDL: The national science digital library. (n.d.). Retrieved from http://nsdl.org/

The NSDL, created by the National Science Foundation in 2000, consists of metadata records describing collections within mostly open access sites that have created "high quality online educational resources for teaching and learning, with current emphasis on the sciences, technology, engineering, and mathematics (STEM) disciplines—both formal and informal, institutional and individual, in local, state, national, and

international educational settings."

The 154 collections and over two million resources included within the NSDL repository are organized into eighteen aggregator partnerships, with two of the more renowned sites listed below:

BEN (BioSciEdNet): Digital library portal for teaching and learning in the biological sciences. (2013). Retrieved from http://www.biosciednet.org/portal/index.php

BioSciEdNet contains over 18,000 peer-reviewed resources covering all aspects of life sciences education, and includes teaching material appropriate for designing pre-K, elementary and secondary school curriculums. *DLESE (Digital library for earth system education).* (n.d.). Retrieved from

http://www.dlese.org/library/index.jsp

DLESE provides access to a wide array of digital resources and collections of resources, as well as datasets and communications specific to K-12 education "to support inquiry-based, active student centered learning about the Earth system." Peer-reviewed resources account for less than 10 per cent of the total. The slow growth of peer reviewed resources has been partly attributed to chronic decreases in government funding.

Search Engines for Retrieving Open Access Digital Collections

OAIster. (2013). Retrieved from OCLC web site: http://oaister.worldcat.org/

OAIster is a freely available retrieval service that uniquely searches open access resources including digitized special collections and institutional repositories. A byproduct of developments within the Open Access Initiative (OAS) movement, OAIster was originally created at the University of Michigan who successfully launched the inaugural edition in 2002. Over a short period, the database "grew to become one of the largest aggregations of records pointing to open access collections in the world." As of January 2010, OCLC has assumed sole ownership of OAIster with a database consisting of over 25 million records representing the collections from more than 1,100 contributing institutions worldwide. A multitude of material types are retrievable including books, journal articles, audio and video files, and images. Search fields include keyword and subject, as well as language and resource type.

Compiler's note: Text that is enclosed within quotations marks has been taken directly from the source document.

Chris Bober is the Education Librarian at Concordia University Libraries, Montreal, Canada.