

A Digital Library for California K-12 Public Schools,
The Power of Providing Online Databases to All Schools

A White Paper Prepared By

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Executive Summary

For the past fifteen years, states have initiated and supported the development of statewide digital libraries to support K-12 education. At the present time, most states (47) have digital libraries. In all cases, the libraries are defined as having subscriptions to online databases at their core. California is one of three states failing to support K-12 education with a digital library defined by subscriptions to online databases.

The creation of 47 digital libraries has not followed a single model. Each has its own unique story, but in general the best examples are collaborative efforts by a variety of stakeholders. Beyond collaboration, there are other lessons to be learned. The libraries need to have an age and grade appropriate portal for students to use. The libraries must have links to state curriculum content standards to effectively serve the students, parents and teachers of California. The content requires the users have Information Literacy skills to be successful. Finally, the digital library for K-12 needs to be supported by strong marketing.

The most important benefit to students, parents and teachers is providing equitable access to high quality digital resources for every district and student. A statewide digital library provides a significant cost savings for individual school and district purchases of the same subscriptions to online databases. A statewide digital library allows for home access of the high quality materials and demonstrates the appropriate use of technology in the support of K-12 education.

The primary recommendation is to pursue the creation, implementation, and support of a statewide digital library defined by subscriptions to online databases. Further recommendations include the use of a strategy of collaboration to make the project successful. Drive the project with a business plan and leverage existing purchasing consortiums to leverage negotiations with vendors. Emphasize training for all stakeholders, students, parents, and teachers, and implement a marketing plan to encourage participation by all stakeholders.

The creation of a statewide digital library with a core of subscriptions to online databases benefits the students, parents and teachers of California. Educational technology in general also benefits. Educators in the trenches too often view technology projects, often those pursued at a state level, with cynicism. The creation of a tool set with high-quality subscriptions to online databases at their core signals to the cynics that this is an appropriate use of technology and that it benefits their students. The inclusion of a strong training program for teachers and parents will make the cynics converts. A statewide digital library is an important step in the journey to create lifelong learners.

Since the early 1990's, state governments throughout the United States have created digital libraries to support students in K-12 education. At the heart of these projects were the subscriptions to online databases. Using the buying power leverage of the statewide purchase, they saved their individual districts and schools millions of dollars in local funds on these resources, while improving the quality of resources available to every student. The same effort produced equitable access to digital resources for all students, eliminating the barriers imposed by socio-economic conditions. After 15 years, 47 of the 50 states in the United States built digital libraries based on subscriptions to online databases to share their digital resources. The fact that all of these states make the subscription to online database the core offering, now defines a digital library as one sharing subscriptions to online databases with all students and faculty in their state. The three states that do not meet the definition of digital library with these resources for every student in their state are Arizona, California, and Texas.

In California, the completion of a high-speed digital infrastructure for K-12 provides the opportunity to explore the creation and implementation of a digital library built around fee based online databases. It also is an opportunity to address the issue of equitable access and provide the access at a much lower cost than can be done district-by-district and school-by-school. The benefits of a digital library are the appropriate application for the digital infrastructure for K-12.

How A K-12 Digital Library Works

Here is a simple example of how a typical student in any K-12 school in California would use this resource. After defining a research problem and identifying a few search terms, the student would log onto the Digital Library. They can do this anywhere there is a connection to the Internet, the classroom, the school library, or at home. Because the Digital Library recognizes the student by his or her login user name and password, the student is presented with age and grade appropriate electronic resources including subscriptions to online databases. The student chooses the periodical icon, opens the subscription database and enters one of the search terms. Almost immediately, the student has a page full of results of full-text articles from magazines from the past ten years. Since the search terms are highlighted in the full-text articles, the student quickly scans them to determine which best fit the needs of the research problem. The student has the option of saving the articles to the hard drive or their USB drive, emailing it to their home email, or printing a paper copy. The student quickly moves to the next set of search terms. In a matter of minutes, the student has collected a dozen articles and is ready to read and take notes. The emphasis is on evaluating, analyzing and synthesizing information rather than unsuccessful searches and time lost at the photocopier.

Constructing A Virtual Library for K-12 Schools

Every state used a different route to build their digital library. One of the earliest was Pennsylvania. In the 1980's they created a multi-type statewide union catalog on CD-ROM called ACCESS PA. The tradition of collaboration

evolved into the provision of subscriptions to online databases to all of their members, K-12, Higher Education, Public Libraries, and Special Libraries. The result was that school districts were able to provide far more high-quality resources, saving thousands of dollars per school. (Marrone, Chapman & Fuller, 2004)

In Ohio, INFOhio was one of three parallel projects providing similar services for different groups. In the first, Higher Education composed the membership of OHIOLINK and in the second, the public libraries belonged to OPLIN (Ohio Public Library Information Network). The third project was INFOhio serving K-12. In the process the groups shared planning and policy decisions to avoid conflicts and overlapping services. INFOhio also formed strong bonds with the regional computing centers for K-12 to deliver the resources to schools and to link them to the state union catalog. Kentucky's KYVL (Kentucky Virtual Library) evolved in similar manner but the shared purchasing components are stronger.

To make a generalization, the strongest state digital libraries are built on collaborative relationships where each group is able to use its strength to support everyone else. For example, a group with the strongest buying consortium and track record with negotiations handles the vendor relationships. The group with technical expertise establishes standards for the technology while serving, maintaining, and supporting the digital library. Another group with content expertise handles the selection of digital resources. This group typically includes state-level people, district curriculum administrators and school level librarians.

A State professional association or a contracted regional service agency for the project supplies training. The state provides administrative support and coordinates the overall governance of the digital project.

Surveys of the efforts of the various states (Fuller, 2003, 2004, 2005) reveal lessons about the construction of digital libraries. First, an age and grade appropriate portal for K-12 students is important, but usually overlooked in the project usually in states where they share resources with public libraries. These projects use one interface for everyone to enter and the possibility of overwhelming K-12 students is very high. Appendix A is the complete list of states that provide an online subscription database digital library in the United States. The list also includes the URL for each state and any grade and age appropriate portals.

Second, the content effort needs a strong tie to state standards. Mark O'Shea (2005, p. 84) indicates textbooks are only partially aligned with state content standards. Online resources provide a broad-based view to the remaining content aligned with the standards and gives teachers additional rich content to achieve their teaching goals. For example, the online products for Newsbank, Inc. align their content to various state standards for all of their product lines. Other content vendors have done similar alignments with their products. The vast majority of free content provided in the digital library is not aligned with standards and the inclusion of free content has to be considered carefully.

Third, the resources must be provided in the context of Information Literacy. Peter F. Drucker said, “It is all too easy to confuse data with knowledge and information technology with information.” (p. 13) Just providing students, parents, and teachers with high-quality information and state of the art infrastructure is not enough. Students, parents, and teachers need the skills necessary to find, retrieve and manage digital information resources and use critical thinking skills to create and communicate new knowledge. Research by Achtermann and Fuller (2004) indicated students take their cues for research from their teachers. The implication is to make teachers a primary focus for learning and teaching the skills to be successful in a digital world.

Finally, the digital library needs to be marketed to students, teachers, and parents. With the plethora of information found on the Internet, the assumption that the existence of these resources is enough to guarantee their use by key stakeholders is not enough. The digital library, existing in cyberspace, requires the support of an effective marketing plan to justify the expense.

The models for creating a digital library for K-12 vary from state to state. Once the digital library is created, the defining characteristic is clear. The core of the digital offerings is subscriptions to online databases. Collaboration by a variety of partners is essential. Sharing resources within California’s 9,222 schools is the driving force and the digital library provides equitable access for all students in every socio-economic situation.

Benefits

The benefits of a K-12 digital library defined by their core of subscriptions to online databases have two forms. Three are quantifiable and demonstrate the impact of the project. Several others are qualitative in nature, but are no less important.

The first quantifiable impact is every student in California has equitable access to high-quality subscriptions to online resources in every school and community. This fact addresses the problem of the uneven distribution of educational resources, specifically technology based resources in the online age. Access to high quality subscription databases is a factor in student achievement. For example, the Pennsylvania reading scores increased on the Pennsylvania System of School Assessment (PSSA) when networked computers linked the library and classrooms with ACCESS PA databases with licensed subscription databases and with the Internet. (Lance, Rodney, & Hamilton-Pennell, 2000) It is an important step towards evening the playing field in California for every student and truly making it a place where every student can succeed.

According to a California Department of Education (CDE) survey, 42% of the schools do not have access to any online resources including subscriptions to online databases. (CDE, 2005) For comparison, the National Center for Educational Statistics (NCES) reported in the percentage of schools without databases as 25%. (Scott, 2004, p. 7) Across the United States, in the 47 states where subscriptions to online databases are available, there are between three and four online databases per digital library, with 44% falling into the one to three

databases category. (Scott, 2004) Appendix C contains the survey result from CDE with data from national surveys. The CDE survey indicates the online resource most likely to be available is an electronic encyclopedia (24%). Significantly, the category of Other (17%) is the second most likely electronic resource available to California schools, a category that includes the commercial search engines Yahoo and Google. Subscriptions to online databases were reported in only 9% of the 8948 reporting schools. The creation of a K-12 Digital library with subscriptions to online databases increases this automatically to 100%.

Second, by purchasing databases for the statewide digital library, immense cost savings are realized for each and every district or school over making individual school purchases. Estimating the cost and potential savings for California is speculative, but the data from the Alabama Virtual Library (AVL) is instructive. In 2003, the most recent data available, \$850,000 was spent on the acquisition of subscriptions to online databases in Alabama. For the approximately 1270 schools in Alabama, the cost per school was approximately \$670. The AVL estimates the set of databases provided would cost a small high school \$10,000 for site licenses to each part of the set. (AVL, 2003, p. 3) For the sake of comparison, the state K-12 education system in Alabama is about one-fifth the size of California's. Mississippi reports a similar savings. They offer a comparison of costs between individual sites and the MAGNOLIA savings. To match the five subscriptions to online databases offered would cost the individual high school approximately \$29,000 per school. At the rate of \$29,000 per school,

the \$1,086,000 spent for the entire state would cover only 35 schools. (Cunetto, 2004, p. 1) Three products that appear near the top of the CDE report are provided by ProQuest, Inc. (e-Library, SIRS, and ProQuest) The list price for a ProQuest package varies from \$5,295 (for a high school e-Library package) to \$495 for an elementary school basic package for e-Library. Discounts for subscriptions to online databases in purchases for large consortiums range from 35% to 50%.

The final quantifiable benefit is every connected household in the state of California would have home access regardless of the technical infrastructure of the district. This number increases daily and even among the poorest of the poor. According to frequently updated data from the Pew Internet and American Life Project, 49% of households earning less than \$30,000 are connected and online. (Pew, 2005) The result of home access is extending the resources of the school into the home and into the hands of the parents twenty-four hours a day. It fundamentally changes the role of parents in the information process from literally the driver after school hours to an active participant in the learning process.

The quality benefits include assurance that student access to digital resources extends far beyond the use of an Internet search engine. Students, parents and teachers can be confident that the resources provided are authoritative and of high quality. Students will have an age and grade appropriate set of databases. Teachers will have access to content that reaches all of the state standards and extend the content provided by their textbooks.

Subscriptions to online databases of the digital library – offer user privacy, Internet safety, and authoritative sources. These issues are critical if children and young adults are to become effective users of ideas and information in a safe environment. (AASL, 1998)

Another quality benefit is for educational technology in general. Educators in the trenches too often view technology projects, often those pursued at a state level, with cynicism. The creation of a tool set with high-quality subscriptions to online databases at their core signals to the cynics that this is an appropriate use of technology and that it benefits their students. The inclusion of a strong training program for teachers and parents will make the cynics converts.

Recommendations

1. Pursue the creation, implementation and maintenance of a statewide digital library defined by a core of online fee based databases.
2. Secure consistent funding to support the long-term equity goals of the statewide digital library.
3. Collaborate with state agencies, professional associations, district administrators, and school site level faculty to govern the statewide digital library and to select the content.
4. Prepare a business plan for the statewide digital library prior to launch that includes specific goals and objectives, role of collaborating partners, measurements, training of participants, marketing and financials.
5. Leverage existing or new buying consortiums for negotiating with vendors. A list of potential vendors and the URL for their web site is included in Appendix B.
6. Draw from the strengths of all existing collaborating partners to allow them to use their expertise to strengthen the statewide digital library.
7. Pilot test databases and gather feedback from students, parents, and teachers before purchasing sets of new databases.
8. Design Internet based access to the digital library that are age and grade appropriate based on sound education theory and practice plus established web design criteria.

9. Create an online training course or series of tutorials for teachers and parents emphasizing the importance of strong Information Literacy skills in the 21st century.
10. Support the statewide digital library with an aggressive marketing program to teachers and parents.

Conclusion

The creation of a statewide digital library based on a core set of high-quality subscription databases is not the end in itself. Drucker said, "A database, no matter how copious, is not information. It is information ore. For raw material to become information, it must be organized for a task, directed toward specific performance, applied to a decision." (Drucker, 1995, p. 109) The core databases of a statewide digital library are only the first step in a journey towards a process of education where students are changed into life-long learners with the skills to use and adapt information for their entire lives.

References

- Achtermann, D. & Fuller, D. W. *Study of Online Database Use*. Unpublished research.
- American Association of School Librarians. (1998) *Information power: building partnerships for learning* prepared by the American Association of School Librarians & Association for Educational Communications and Technology. Chicago: American Library Association.
- AVL Annual Report*. (2003) Birmingham, AL: AVL
- Bell, M. A. (2005) State-funded Informational Databases: You May Lose Them Even If You Use Them! *Teacher-Librarian*. 32 (3) p. 8-11.
- California Department of Education. (2005) *2003-2004 Library Survey Data*. Sacramento, CA: CDE.
- Chorney, P. (2003). *Comparison of Twenty-five Statewide Database Projects*. Retrieved May 27, 2004 from <<http://www.lori.ri.gov/libstudy/others.php>>.
- Cunetto, S. (2004). *MAGNOLIA*. Starkville, MS: Mississippi State University.
- Drucker, P. F. (1995) *Managing in Times of Great Change*. New York: Dutton.
- Fuller, D. W. (2003) Statewide Efforts to Support Digital Libraries in K-12 Schools. *Treasure Mountain Retreat #11, Evidence-Based Practice and School Library Media Programs*. P. 51, Salt Lake City, UT: Hi Willow Research and Publishing.
- Fuller, D. W. (2004) Statewide Efforts to Support Digital Libraries in K-12 Schools. In D. W. Fuller (Ed.) *The Digital School Library*. (pp. 149-160) Salt Lake City, UT: Hi Willow Research and Publishing.

- Fuller, D. W. (2005) State-Level support of K-12 Virtual Libraries. *Knowledge Quest*. 33(3) p. 25-8.
- Lance, K. C., Rodney, M. J. & Hamilton-Pennell, C. (2000) *Measuring up to Standards: The Impact of School Library Programs & Information Literacy in Pennsylvania Schools*. Greensburg, PA: Pennsylvania Citizens for Better Libraries.
- Marrone, J. Chapman, K., & Fuller, D. W. (2004) A Community of Learning: The Digital School District. In D. W. Fuller (Ed.) *The Digital School Library*. (pp. 133-147) Salt Lake City, UT: Hi Willow Research and Publishing.
- O'Shea, M. R. (2005) *From Standards to Success, a Guide for School Leaders*. Alexandria, VA: ASCD.
- Pappas, M. L. (2003) State Virtual Libraries. *School Library Media Activities Monthly*, 20 (3), 27-31.
- Pappas, M. L. (2004) Finding Information on the State Virtual Libraries. *School Library Media Activities Monthly*. 20 (5) p. 30-2.
- Pew Internet and American Life Project. (2005) Demographics of Internet Users. Retrieved September 10, 2005 from http://www.pewinternet.org/trends/User_Demo_08.09.05.htm.
- Scott, L. (2004) *School Library Media Centers: Selected Results from the Education Longitudinal Study of 2002 (ELS: 2002)*.(NCES 2005-302) U. S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

Appendix A

K-12 Statewide Virtual Library Links

These URLs all relate to online database resources provided by states to K-12 students in the United States. Included in the listing for each state is a link to the department of education and the state library. Not all states provide these resources.

All links were tested and were active as of September 1, 2005.

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Alabama

AVL - Alabama Virtual Library

<http://www.avl.lib.al.us/>

Databases

Elementary School

<http://www.avl.lib.al.us/databases/elem.html>

Middle School

<http://www.avl.lib.al.us/databases/middle.html>

High School

<http://www.avl.lib.al.us/databases/high.html>

Higher Education

<http://www.avl.lib.al.us/databases/college.html>

Alaska

SLED - Statewide Library Electronic Doorway

<http://sled.alaska.edu/index.html>

List of links to sites for K-12 Students

Pre-teens

<http://sled.alaska.edu/kids.html>

Teens

<http://sled.alaska.edu/teen.html>

Databases for Alaskans <http://www.library.state.ak.us/databases/home.html>

Arkansas

Traveler - An LSTA project administered by the Arkansas State Library

<http://www.asl.lib.ar.us/traveler/index.html>

Colorado

Colorado Virtual Library

<http://www.aclin.org/index.html>

Connecticut

Icon - Connecticut Digital Library

<http://www.iconn.org/>

Delaware

DeIAWARE The Digital Library of the First State

http://www.state.lib.de.us/Collection_Development/Electronic_Resources/DelAWARE/

Florida

Florida Electronic Library

<http://www.flelibrary.org/>

Georgia

GALILEO - GeorgiA LIbrary LEarning Online

<http://www.galileo.usg.edu/>

GALILEO - Kids

<http://triton3.galib.uga.edu:80/cgi-bin/kidspage.cgi?nf=0>

Hawaii

Hawaii State Public Library System - Electronic Databases

<http://www.state.hi.us/libraries/hsl/databases.html>

Idaho

LiLI - Libraries Linking Idaho

<http://www.lili.org/portal/>

Illinois

Find It! Illinois

<http://www.finditillinois.org/>

Indiana

INSPIRE - Indiana Virtual Library

<http://www.inspire.net/index.html>

INSPIRE - Indiana Virtual Library Kids' Links

<http://www.inspire.net/inskid.html>

Iowa

Databases for Iowans

http://www.silo.lib.ia.us/for_ia_libraries/databases/index.html

Kansas

KANFIND and KAN-ED Online Database Service

<http://skyways.lib.ks.us/library/databases.html>

Kentucky

Kentucky Virtual Library - Kentucky's Information Source

<http://www.kyvl.org/>

KYVL For k-12 Schools

<http://www.kyvl.org/html/k12/k12.shtml>

Kids - Research Rocket

<http://www.kyvl.org/html/kids/portal.html>

Louisiana

Louisiana Center for Educational Technology - K-12 Online Database Resources

<http://www.doe.state.la.us/lde/lcet/328.html>

Maine

MARVEL! - Maine's Virtual Library

<http://libraries.maine.edu/mainedatabases/>

KIDS!

<http://libraries.maine.edu/mainedatabases/kids.asp>

Maryland

SAILOR - Maine's Public Information Network

<http://www.sailor.lib.md.us/>

Periodicals

http://www.sailor.lib.md.us/MD_topics/lib/_per.html

Massachusetts

Magazine and Newspaper Articles

<http://mblc.state.ma.us/books/magazine/index.php>

Michigan

MeL - Michigan eLibrary

<http://elibrary.mel.org/>

Minnesota

WEB PALS

<http://www.pals.msus.edu/webpals/>

MNLink Gateway

[http://gateway.mnlink.org/WebZ/Authorize?sessionid=0&bad=index.html&next=st
artscreen](http://gateway.mnlink.org/WebZ/Authorize?sessionid=0&bad=index.html&next=startscreen)

Mississippi

MAGNOLIA: k-12

<http://nt.library.msstate.edu/magnolia/>

MAGNOLIA for Elementary Students

<http://library.msstate.edu/magnolia/Elementary/>

MAGNOLIA for Middle School Students

<http://library.msstate.edu/magnolia/MiddleSchool/>
MAGNOLIA for High School Students
<http://library.msstate.edu/magnolia/Secondary/>

Missouri

MORE (Missouri Research and Education Network)
<http://www.more.net/index.html>
MORE Online databases
<http://www.more.net/online/index.html>

Montana

Montana Library Network
<http://montanalibraries.org/>

Nebraska

School K12
<http://www.nlc.state.ne.us/nebraskaccess/school.html>
Electronic Library
<http://www.nlc.state.ne.us/nsf/nel.html>
Electronic Databases
<http://www.nlc.state.ne.us/databases/>
Kids Resource Pages
<http://www.nlc.state.ne.us/libdev/kids.html#ap>

Nevada

INFONEVADA
<http://dmla.clan.lib.nv.us/infonevada.htm>
Nevada Kids Page
<http://dmla.clan.lib.nv.us/docs/kids/>
CLAN - Cooperative Libraries Automated Network
<http://www.clan.lib.nv.us/Polaris/>

New Hampshire

Nhew Link - the Granite State's information Connection
<http://www.nhewlink.state.nh.us/schools/databases.html>

New Jersey

Electronic Resources - New Jersey State Library
http://www.njstatelib.org/Electronic_Resources/

New Mexico

Magazines Online - New Mexico State Library
http://www.stlib.state.nm.us/services_more.php?id=203_0_13_0_M38

New York

NOVEL - New York Online Virtual Electronic Catalog

<http://unix2.nysed.gov/gate/esubject.htm#NOVEL>

North Carolina

NC LIVE - North Carolina Libraries for Virtual Education

<http://www.nclive.org/>

NC Wise Owl

<http://www.ncwiseowl.org/>

North Dakota

LaND (Online Library Resources)

<http://ndsl.lib.state.nd.us/ElectronicResources.html#K12>

Ohio

INFOhio - The Information Network for Ohio's Schools

<http://www.infohio.org/>

Ohio Public Library Information Network

<http://www.oplin.lib.oh.us/>

OPLIN Oh Kids!

<http://www.oplin.lib.oh.us/ohkids/index.htm>

Oh Teens!

<http://www.oplin.lib.oh.us/teenhome.php>

OhioLINK - Ohio Library and Information Network (Higher Ed and State Library)

<http://www.ohiolink.edu/>

Oklahoma

Oklahoma digital prairie - your electronic library

<http://www.odl.state.ok.us/prairie/index.htm>

Oregon

OSLIS (Oregon School Library Information System)

<http://www.oslis.k12.or.us/index.php>

Elementary OSLIS

<http://www.oslis.k12.or.us/elementary/index.php>

Middle and High School OSLIS

<http://www.oslis.k12.or.us/secondary/index.php>

Librarians & Teachers

<http://www.oslis.k12.or.us/librarians/index.php>

Pennsylvania

ACCESS PA - The ACCESS Pennsylvania Database

<http://www.accesspa.state.pa.us/>

Power Library - Pennsylvania Online World of Electronic Resources

<http://www.powerlibrary.org/Interface/POWER.asp>

Rhode Island

Find it! Rhode Island

<http://www.find-it.state.ri.us/>

South Carolina

discus - South Carolina's Virtual Library - K-12

<http://www.state.sc.us/scsl/discus/school.html>

discus - South Carolina's Virtual Library - Discus Kids

<http://www.state.sc.us/scsl/discus/discuskids.html>

South Dakota

For Kids!

<http://www.sdstatelibrary.com/forkids/>

For Teens

<http://www.sdstatelibrary.com/TeenCenter/index.htm>

Tennessee

TEL - Tennessee Electronic Library

<http://www.state.tn.us/sos/statelib/tel/index.htm>

Utah

K-12 School's PIONEER

<http://pioneer.uen.org/k12/index.jsp>

Utah Education Network K-12

<http://www.uen.org/k12student/>

Public PIONEER - Utah's Online Library

<http://pioneer.utah.gov/>

Vermont

VOL – Vermont Online Library

http://dol.state.vt.us/gopher_root5/libraries/schools/SLGUD04.HTM

Virginia

Find It Virginia

<http://www.finditva.com/cgi-bin/main.cgi>

Washington

Digital Learning Commons

<http://depts11.u.washington.edu/lcommons/>

DLC Library

<http://www.learningcommons.org/students/library/>

West Virginia

Electronic Resources

<http://librarycommission.lib.wv.us/E-resources.htm>

Wisconsin

Badger Link

<http://www.badgerlink.net/>

Wyoming

GoWyld.net - Wyoming's Portal to Knowledge and Learning

<http://gowyld.net/index.html>

Wyoming Kids Sites

<http://gowyld.net/wyoming/wykids.html>

Online Databases

<http://gowyld.net/dbases.html>

Appendix B Vendor's URL participating in States

American National Biography

<http://www.anb.org/login.html?url=%2Farticles%2Fhome.html&ip=71.110.154.55&nocookie=0>

ANB provides historical and current biographies of Americans of note.

Britannica Online

<http://www.eb.com/>

The online version of the classic encyclopedia with multi-media added.

EBSCO

<http://www.epnet.com/school/default.asp>

One of the largest providers of periodical subscriptions used their contacts to create a collection of databases for K-20. They also produced the first grade and age appropriate content and portals.

Gale Group

<http://www.galegroup.com/>

A strong collection of materials formerly published in print form about literature and authors, such as *Contemporary Authors*.

McGraw-Hill

<http://www.accessscience.com/>

The online version of the famous *McGraw-Hill Encyclopedia of Science and Technology*.

Newsbank, Inc.

http://www.newsbank.com/us_scho/us_scho.html

This source has the largest comprehensive database of Newspapers in the US. Content can be aggregated in various ways such as "California's Newspapers."

ProQuest

<http://www.proquestk12.com/>

The core of the databases began with University Microfilms, Inc (UMI) and now includes periodicals, journals and newspapers. Also well know products such as e-Library.

Appendix C
Results of CDE Survey 2004-2005
Compared to US Digital Library Percentages

Online Resource	California Raw Count	California Percentage	US Digital Library Percentage ¹
None	3719	41.56%	6.00%
World Book Online	940	10.51%	27.66%
Other	885	9.89%	N/A
Grolier Multimedia Encyclopedia Online	701	7.83%	14.89%
E-Library	506	5.65%	6.38%
Encyclopedia Britannica	391	4.37%	8.51%
ProQuest	283	3.16%	29.79%
EBSCO	261	2.92%	51.06%
InfoTrac	253	2.83%	40.43%
Biography Resource Center	205	2.29%	0.02%
SIRS	203	2.27%	27.66%
Facts on File	192	2.15%	4.26%
Encyclopedia Americana	121	1.35%	2.13%
Opposing Viewpoints	113	1.26%	2.13%
Newsbank	70	0.78%	6.38%
NetTrekker	53	0.59%	51.06%
College Source	40	0.45%	N/A
H.W. Wilson Readers Guides	8	0.09%	23.40%
Grove Dictionary of Art	4	0.04%	2.13%
Gale		N/A	27.66%
OCLC		N/A	17.02%

¹The total of percentages in this column are more than 100% because average offering is 3 to 4 per school, compared to one or two in California.