



THE 21ST-CENTURY LIBRARY

Where Resource-Based Learning Happens

Future U.S. President John F. Kennedy, in his address at the Convocation of the United Negro College Fund on April 12, 1959, spoke about the crisis facing the United States—the threat from the Soviet Union’s growing military might and space technology. Using the Chinese word for “crisis” (*wei-ji*), supposedly composed of two characters that represented *danger* and *opportunity*, Kennedy highlighted the opportunity afforded by science and

technology to “extend the principles on which we based our republic to all mankind.”¹

Although we now know that *wei-ji* does not actually mean “danger/opportunity,” the combined concepts describe well the predicament in which libraries now find themselves. On the one hand, the rapid digitization of all types of information makes the need for reputable sources of information even greater. On the other hand, with so much information freely available on the World Wide Web, some people wonder whether libraries will soon be-

come unnecessary. Or will digital technology actually enable libraries and librarians to perform a more significant role in education?

William Badke tells about a college student who wrote an article for the student newspaper about doing research for his term paper. The student mistakenly attached his notes for the article to the back of the paper. In his private notes, he wrote, “Never touched a library, never talked to a librarian. Who would, when everything you need is on the Internet?”²

BY ANNETTE MELGOSA and FELIPE TAN

The visible Web provides access to much freely available information, some of which is good. In this respect, the above-mentioned student was partially correct. However, he did not realize that many vital research sources are *not* available on the Web. (See Box 1: *What's on the Free Web [and What's Not].*)

The vastness of the Web hides the fact that much of it is of questionable quality. A Christian school library will want to provide quality collections as an alternative to this trivial and untrustworthy information. The Apostle Paul vividly describes those things upon which our thoughts should dwell, using terms such as *true, noble, right, pure, lovely, admirable, excellent, and praiseworthy* (NIV).³ This biblical benchmark provides a standard by which to measure the information resources we provide for our students.

Resources should also be measured against traditional collection standards, such as objectivity, expertise, faithfulness to factual truth, quality writing, and publication standards, as well as attention to beauty and functionality. Often, free Internet resources do not measure up to these standards. Library collections can provide pre-selected, quality copyrighted sources such as children's or adult literature, published research and reference works, historical and archival materials, proprietary databases, and other authoritative sources. Many of these resources, while available electronically, are not free.

In addition to providing excellent collections (see Box 2: *Vital Resources in the Library Collection*), today's complex milieu of Internet and library resources means that librarians must also play an increased instructional role, guiding students to appropriate resources and teaching them how to evaluate those sources. In this article, we discuss these roles in relationship to free and subscription Web resources.

The Differences Between the Free Internet and Library Electronic Resources

The Internet is a network of computers around the world that communicate with one another, while the Web is the

What's on the Free Web (And What's Not)

Things that are easily found on the free (or visible) Web but which are generally not suitable for quality research include:

- **Miscellaneous facts and figures.** While efficient at producing quick answers, the sites located by Google and other popular search engines offer little in-depth analysis.
- **Consumer-level information about current events in areas such as health, employment, or travel.** These include Q & A forums, sites dealing with popular or alternative medicine, travel destinations, or consumer, political, and religious advocacy, all of which tend to be biased and unsuitable for serious research.
- **Newsbytes, summaries of recent inventions, and popular articles about medical and scientific discoveries,** which despite their catchy titles, lack full research findings and patent information, and are often biased.
- **World news and current events** in brief clips and articles, which do not usually include objective, in-depth research or expert commentary that adds meaning to an event.
- **Practitioner-level information for various disciplines,** which while helpful to professionals, often includes facts that can be taken out of context, misinterpreted, or misrepresented by a novice student using them as a primary source.

While the vast majority of "hits" in a typical Internet search results fall into the above categories, there is some good research-based material on the free Web. Used in conjunction with reputable sources in the academic library, these types of Internet sources can be helpful:

- **Books whose copyrights have expired, and portions of books still under copyright.** Google Books (<http://www.books.google.com>) and Project Gutenberg (<http://www.gutenberg.org>) provide full access to books in the public domain. However, students may have difficulty understanding the historical context of this type of material. For full-text versions of books protected by copyright (including electronic ones), payment is required.
- **Statistics and official data, as well as some government-funded research, particularly in the health sciences.** In the United States, research funded by the National Institutes of Health is freely available through the National Library of Medicine's PubMed database (<http://www.ncbi.nlm.nih.gov/pubmed/>) after a time delay. Much good worldwide research and statistical data are available from United Nations sites (<http://www.un.org/>, <http://www.unesco.org>).
- **Open-source research publications.** Information from these sources may be less reliable than reports in reputable subscription-based journals. However, some reputable researchers currently post their studies in open access repositories. Students will still need to compare these sources with findings published in reputable journals. Open-DOAR (<http://www.opendoar.org/>) is one example of an open research repository.

What's on the Deep Web?

Research-based resources are usually found on the deep or hidden Web and typically can be accessed only via paid subscription. Libraries purchase licenses that allow their patrons to use these resources.

- **Electronic subscriptions to journals.** Although most journals are now available electronically, they require fee-based subscriptions.
- **Databases of subscription-based journal articles.** This is where most Web-based research is located. Databases may be interdisciplinary or limited to a specific subject area or level of education (K-12 or higher education).
- **Industry or scientific databases.** Most industry research and data are only available through subscription databases.
- **Electronic book collections.** Current titles are increasingly becoming available in electronic form. Libraries often purchase such collections and make them available to their patrons.

For more information about these types of resources, see Box 3: *Important Resources for the Library Collection*. To learn how school libraries can collaborate to cut costs, see articles in this issue by Carolyn Gaskell and Katye Hunt.

platform upon which documents can be found. Search engines are used to access the resources published on the Web. Search engines like Google, Yahoo, or Yahoo! Kids⁴ mine the resources of a database rather than the Web itself. Although these search engines provide a great deal of information, they do not index everything. In fact, Paul Gil⁵ estimates that only 10 percent of the Web is currently available through popular search engines. This “visible” Web, often referred to as the “free Web” or “free Internet,” contains a mass of “largely unpublished materials produced by organizations, businesses, individuals, experimental projects, entrepreneurial webmasters, etc.”⁶ Anyone with a computer and Internet access can post mate-

rials on the free Web without editing or verifying their accuracy.

The other 90 percent of the Web, the “deep” or “invisible” Web, is accessed largely through dynamically generated database pages. One source estimates that the invisible Web is about 500 times the size of the visible Web.⁷ The deep Web has a larger proportion of high-quality materials that have undergone editorial and screening processes (for example, peer-reviewed academic journal articles). Many of the resources on the invisible Web are accessed via paid subscription. Libraries provide the gateway for these resources.

While pricing models for these subscription-based, deep Web resources continually change, libraries can often take advantage of lower costs by joining government- or library association-

based consortia. It is therefore worth contacting national or regional library associations to find out what is available. See Carolyn Gaskell’s article in this issue for more information about consortia-based purchasing.

In order for the 21st-century library to provide the gateway to quality print and electronic collections, it must have up-to-date computer technology. Box 3: *Standards for Computer Technology in Libraries* can help to define the technology needs of the library.

Libraries Combine Free and Paid Resources With Information Literacy

Going back to the student who used only freely available Internet sources in

B O X 2

Vital Resources for the Library Collection

School and higher education libraries, well-stocked with a combination of print and electronic resources, are more critical than ever in a world where information of questionable quality constantly bombards students. Rather than spending less on libraries, the information revolution should inspire Adventists to remember our *raison d’être*, stated so well in *Counsels to Parents, Teachers, and Students*: “The most important work of our educational institutions at this time is to set before the world an example that will honor God. . . [where] every department is to bear the mark of divine excellence.”*

Adventist school libraries should contain the best resources, in a safe, academically sound collection that has been carefully selected to reflect Christian values.

Here is a list of the types of resources that every Christian school and college library should provide. All materials should be age-appropriate, congruent with Christian principles, and supportive of the curriculum. Due to space limitations, the list is of necessity incomplete.

Books

A rich variety of books that relate to the school’s majors/disciplines

- An excellent source is **Resources for College Libraries** (<http://www.RCLweb.net>), which provides a list of the core collection of titles in 61 curriculum-specific subject areas.

- For the K-12 library, **Resources for School Librarians** (<http://www.sldirectory.com/libsf/resf/selection.html#top>) provides a comprehensive list of selection tools. Educators and librarians will need to screen titles to ensure that they conform to the school’s collection-development policies.

Materials that help teachers integrate faith and learning

- *The Christ in the Classroom* series published by the General

Conference’s Institute for Christian Teaching (<http://www.aiias.edu/ict/index.html>) is an invaluable resource. The Website provides an index to the articles and 200 sample monographs.

- CIRCLE (<http://circle.adventist.org>) provides links to a number of excellent resources, such as *Growing in Faith, the Australian Primary Religion Curriculum* (<http://circle.adventist.org/download/GrowinginFaith.pdf>).

- *Faith Integration* modules and video clips are available from the Adventist Virtual Learning Network (<http://www.avln.org>).

- *Ellen G. White (Spirit of Prophecy) materials in print and digital formats*. Libraries can integrate the Spirit of Prophecy collection within their general book selection or include it in an **Adventist Heritage Center**, where manuscripts, diaries, photos, and artifacts that are useful for Adventist research are housed.

Reference Sources

- *A variety of Bible versions, along with commentaries, dictionaries, handbooks, lexicons, and concordances.*

- *Major reference sources such as encyclopedias (general and subject), dictionaries, thesauruses, biographical sources, yearbooks, and directories.* **Guide to Reference Books**, edited by Robert Balay (11th edition) and organized by academic discipline (<http://www.guidetoreference.org/HomePage.aspx>), is an excellent guide.

- *Books on study skills, research, and academic writing, including style manuals.*

Journals

- *Journals and magazines* related to the school’s curriculum. These can be acquired through print subscriptions and/or online databases. The librarian should explore with the local or regional library association whether the school can obtain access to databases at reduced cost.



By interacting with a librarian in the classroom, students learn to identify him or her as a trustworthy advisor when they are doing research, looking for relevant resources, or trying to identify the appropriate bibliographic style in assigned essays.

The Association of Seventh-day Adventist Libraries (ASDAL) consortium (see article on page 47) can help libraries obtain databases at affordable prices. Indices to help locate articles within journals are indispensable in a college library.

- *Newspapers and news magazines* (local, regional, international) either in print or electronic form.
- *Church publications*, such as *Adventist Review*, *Ministry*, *The*

his research, one suspects that he had little expertise in evaluating sources. Students who rely exclusively on general-purpose search engines for research often retrieve inaccurate or irrelevant information⁸ and may thus produce shallow or inaccurate copy-and-paste “research” papers or class projects. They may also fail to understand plagiarism issues. Recognizing this, libraries have sought to bridge this gap. Today’s librarians teach students how to efficiently search for and determine the best sources, and use them appropriately to create original intellectual work.

Ellen White wrote in various contexts about the importance of sound judgment, critical thinking, and the ability to think for oneself. A few examples help us

Journal of Adventist Education, the *Seventh-day Adventist Periodical Index*, and union and division publications.

Curricular Materials

Resources for teachers and professors on pedagogy, administration, lesson preparation, classroom management, and use of various technologies.

Local Heritage

- *Materials related to the heritage of the institution and perhaps even the local or national church.* University charter documents and minutes of important committee meetings are important sources for researchers and historians.

- *Oral and written history, and artifacts (including photographs) of the local community and of the country where the library is located* will help promote local and national identity. A wall map of the nation, as well as a local map of the city or state of the institution’s location will be helpful to users, especially faculty and students from other states or countries.

Media

Films, DVDs, music and sermon recordings, eBooks, etc. that are used in the school, as well as appropriate equipment (TV, DVD/Blu-ray player/eBook reader) that is maintained and updated on a regular basis.

* Ellen G. White, *Counsels to Parents, Teachers, and Students* (Mountain View, Calif.: Pacific Press Publ. Assn., 1943), p. 57.

Standards for Computer Technology in Libraries

As part of their responsibility in preparing 21st-century citizens, Adventist school and college libraries must acquire adequate technology to ensure that students and teachers have ready access to the Internet and the library's other electronic resources.

K-12 Libraries

According to the International Federation of Library Associations (IFLA), "the school library serves an important function as a gateway to our information-based present day society. For this reason, it must provide access to all necessary electronic, computer and audiovisual equipment."¹

IFLA specifies that school library space should provide the flexibility necessary for changing and emerging technologies² and should apportion space for small-group or formal classroom teaching using instructional technologies.³ They specifically mention computer work areas with Internet and public access catalog stations (this assumes that the school has an electronic catalog).⁴

to understand her views on this important aspect of education. Referring to youth and their leisure activities, for example, she advised that "since they cannot always have the guidance and protection of parents and guardians, they need to be . . . taught to think and act from conscientious principle."⁹ Referring to church workers, she stated that "God has given men . . . minds, and He means that they should become thinkers, and do their own thinking and planning, rather than depend upon others to think for them."¹⁰ To medical students she wrote, "show yourselves to be close, critical thinkers, having soundness of heart and uprightness, being loyal to God, and true to mankind."¹¹

In the realm of information use, Christian schools have a great opportunity and solemn responsibility to teach students to think for themselves and to evaluate potential resources. Who better to help students learn to identify quality resources than the Christian librarian?

Higher Education Libraries

The Association of College and Research Libraries is revising its Standards for Libraries in Higher Education. Its current (2004) standards suggest establishing a "ratio of computer workstations to combined student and faculty FTE."⁵ The 2006 ACRL White Paper⁶ moves beyond ratios, listing some factors that must be considered when determining the number of work stations in a college library:

- Do most students have their own laptops, so that they can connect wirelessly to the Internet while using the library?



The 21st-century library includes technology-supported group-study areas where students, teachers, and librarians can collaborate on research projects.



- Are there an adequate number of networked computer stations elsewhere on campus for students to use?
- What level of IT support is available to the library?
- How many library applications and resources require technology for access?
- Will large groups of students need to use the library to complete their in-class projects?

Schools must provide sufficient numbers of computers with Internet access so that students can complete their academic requirements.

Several surveys have shown that even when students have their own laptops and wireless connectivity, library workstations remain busy.⁷ Computers are a vital part of the 21st-century library and must be factored into school budgets and planning.

Recommendations

The library should have:

- *Adequate space and facilities to provide for current and future technology needs*, including sufficient electrical, network, and Internet connections, as well as sufficient workstations to allow for individual, small-group, and classroom-size gatherings.
- *An annual budget for upgrades in hardware and software.*
- *Computer workstations that are networked to the rest of campus and have reliable, fast Internet connectivity.*

- *Printing, scanning, and photocopying facilities connected to workstations.*
- *Adequate projection and other teaching technologies.*
- *Online catalog stations in addition to the workstations normally used by students.*
- *Adequate technical support.*
- *Staff who are knowledgeable about educational technology and information literacy.*

REFERENCES

1. International Federation of Library Associations, "IFLA/UNESCO School Library Guidelines" (2002):8, <http://archive.ifa.org/VII/s11/pubs/sguide02.pdf>. Accessed February 22, 2011.
2. Ibid., p. 7.
3. Ibid.
4. Ibid., p. 8.
5. Association of College and Research Libraries, "Standards for Libraries in Higher Education," June 2004: Suggested Points of Comparison: Input Measures, <http://www.ala.org/ala/mgrps/divs/acrl/standards/standardslibraries.cfm>. Accessed February 22, 2011.
6. Debbie Malone and others, "Factors Influencing the Number of Computers in Libraries: An Exploratory White Paper," *Association of College and Research Libraries* (2006), http://www.ala.org/ala/mgrps/divs/acrl/about/sections/clis/collpubs/white_paper_computers_in_libraries_april2006.pdf. Accessed February 22, 2011.
7. Ibid., p. 6.

Key Information Literacy Standards for 21st-Century Learners

In October 2007, the American Association of School Librarians (AASL), a division of the American Library Association, launched *Standards for the 21st-Century Learners*.¹² This document highlights nine concepts referred to as *Common Beliefs*, the first of which succinctly describes the foundational skill for learning: "Reading is a window to the world." The standards also emphasize technology skills (fourth belief) and multiple literacy, which includes digital, visual, textual, and technological literacy (sixth belief).

AASL Standards recognize that the role of the school library extends far beyond merely providing learning resources. As partners in academia, librarians "will collaborate with others to provide instruction, learning strategies" (ninth belief) to help learners become sophisticated, responsible users of information capable of finding and evaluat-

ing information for accuracy, validity, appropriateness, and importance in a variety of contexts.¹³

Partnership for 21st Century Skills

Another organization, the Partnership for 21st Century Skills,¹⁴ developed *P21 Framework Definitions*, with selected core subjects and 21st-century themes as its base.¹⁵ Within this context, students learn an array of skills, grouped into three sets: (1) learning and innovation skills; (2) information, media, and technology skills; and (3) life and career skills. These skills involve critical thinking and problem solving, information literacy, and the ability to "navigate the complex life and work environments" of the 21st century.¹⁶

Both the *P21 Framework Definitions* and the *AASL Standards* emphasize the need to integrate information literacy into the fabric of K-12 education. Teaching students to become wise con-

sumers of information as well as budding researchers is key to developing an information-literate citizenry.

Information Literacy Competency Standards for Higher Education

The Association of College and Research Libraries (ACRL) developed and adopted the *Information Literacy Competency Standards for Higher Education*, which have been endorsed by the American Association for Higher Education and the Council of Independent Colleges.¹⁷ These standards define information literacy as "a set of abilities requiring individuals to 'recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information.'"¹⁸

The ACRL's five competency standards¹⁹ have been broken down into objectives and learning outcomes that can be summarized as follows:

- Ability to determine the nature and extent of information needed;
- Ability to access needed information effectively and efficiently;

- Ability to critically evaluate information and its sources, incorporating selected information into one's own knowledge base and value system;
- Ability to individually or as a member of a group use information effectively to accomplish a specific purpose;
- Ability to understand economic, legal, and social issues surrounding the use of information, so that one can access and use information ethically and legally.

Academic and library administrators must study ways “to connect the library and librarians with the curriculum to integrate information literacy into courses and programs.”²⁰ With the exponential increase in digital information, the library's role in preparing students to capably select and analyze information becomes ever more critical.

Translating Standards Into Learning

Today, librarians at all levels express concern about students' tendency to trust whatever they find on the Web. De Rosa and others²¹ studied perceptions toward and use of libraries among the general populations (including a subset of college students) of Australia, Canada, India, Singapore, the UK, and the U.S. They found that although college students are more aware of library resources and access them more often than the general population, there was room for improvement.

Clare Snowball, who studied high school students' perceptions about reading and libraries, found that students are willing to forgo quality for ease of access, and will usually take whatever they find on the Internet and “make it work.” Snowball quotes a high school student as saying, “Ninety per cent of the time you're going to find it on the Internet. . . . Even if it's not as good as the one in the book, at least you've got it straight away.”²²

Realizing that students need to become more savvy information users, librarians actively provide information literacy instruction to students, intro-

ducing them to a wide variety of print and Internet tools, including subscription-based resources. They teach students how to find and get the most out of free and subscription/purchased sources in both print and electronic format. Librarians also teach students how to evaluate sources and to use them appropriately and ethically.

K-12 Example

At the K-12 level, librarians work with teachers to embed research-based lessons within the curriculum. If a social studies teacher wishes students to research market systems as part of a lesson on barter economies, for example, he or she might begin by assigning topics to small groups of students (e.g., definition, history, examples from various cultures, bartering today). The assignment might culminate in the students' setting up an actual micro-barter economy in their classroom or as an exhibit for the school's spring fair. (See Chart 1.)

For the research part of the assignment, students visit the library where the librarian teaches them how to use free Internet and subscription-based academic sources for their assignment. As part of the instruction, the librarian describes how to formulate search strategies, and identify and evaluate resources.

Higher Education Example

According to Grafstein,²³ information-literacy instruction involves “broader, process-based principles of research and information retrieval that apply generally across disciplines” as well as “knowledge about the subject-specific content and research practices of particular disciplines.” Two tertiary-level approaches for teaching these skills are (1) a one-credit class in library skills or (2) one or more library-instruction sessions embedded within pre-selected general-education classes (usually English composition) and higher-level research classes. Seattle-Pacific University, for example, in-

C H A R T 1	
Example of a K-12 Information-Literacy Lesson on Bartering	
Activities	Information-Literacy Goals
Based on class discussion about the barter economy, brainstorm words about the topic (e.g., <i>bartering</i> , <i>barter history</i> , <i>barter economy</i> , <i>trading</i>). Use one or more of these to do a Web search.	Identify terms to form search strategies
Discuss how to evaluate research results (e.g., check Website for sponsor information, Google author; look for links or references).	Evaluate sources
Summarize each result, making note of relevant dates, facts, and links that may lead to further information.	Use resource to build knowledge
Identify the bibliographic elements that need to be incorporated into references; discuss the importance of giving credit to authors.	Use resource responsibly and ethically
Find a library resource with an article on <i>barter</i> . Read it, taking notes, and record proper location information.	Appropriately select a variety of academic sources



The provision of comfortable study spaces in the library helps to foster collaborative learning communities, an important element of academic preparation for careers in modern society.

cludes information literacy in its Undergraduate Degree Learning Outcomes.²⁴ Its librarians teach information-literacy lessons as part of the general-studies curriculum.

At Walla Walla University, in College Place, Washington, librarians team up with the Freshman Orientation task force, the English Department, and various academic departments at four points in the curriculum, thereby linking information-literacy skills to real learning and ensuring that students understand how to apply these skills. (See Chart 2.)

Summary

Research shows that student learning suffers in schools that lack good library collections and a vibrant information-literacy program. Dozens of studies from 19 U.S. states and one Canadian province consistently show a correlation between high-quality school library programs and student achievement.²⁵ The erroneous belief that a library is no longer needed because “everything is

C H A R T 2

Information Literacy at Walla Walla University

Tier 1—Freshman Orientation Library Session	Tier 2—English Composition Library Session	Tier 3—Research Writing Library Module	Tier 4—Selected Senior Research Classes Library Session
Students participate in an interactive tour of the library to learn about its facilities/policies, its Web page, and collections, and to discover strategies for finding resources.	A librarian visits the classroom when a research-based essay is assigned. Students learn how to identify and evaluate three types of resources for their essay.	A librarian teaches an entire module. These sessions guide students through the complete literature research process.	Librarians visit senior-level research classes to introduce the specific literature of the discipline.

Sample of Information-Literacy Competencies Taught in Each Tier

<ul style="list-style-type: none"> Determine availability of resources. Understand differences between resources in various formats. 	<ul style="list-style-type: none"> Identify key topic-related concepts. Explore a variety of resources. 	<ul style="list-style-type: none"> Evaluate sources. Construct advanced searches. Evaluate the body of research. 	<ul style="list-style-type: none"> Become acquainted with discipline-specific resources. Refine citation and referencing skills.
--	---	---	--

freely available on the Internet” puts student learning at risk.

Administrators who understand the library’s educational role recognize the need for trained librarians who can skillfully combine free and subscription sources into a cost-effective, balanced print and electronic collection. They understand that librarians are also *educators*, teaching students to navigate and critically engage with this complex world of information. Christian school administrators know that God is “the sure foundation for [our] times, a rich store of salvation and wisdom and knowledge,”²⁶ and that He desires us to “fill the mind with great thoughts, pure thoughts.”²⁷ It is therefore imperative that adequate funds be allocated to provide an attractive, well-funded, and well-ordered school library whose collections represent the best that is available and where trained, Christian personnel teach students how to engage with information. ✍



Annette Melgosa, the Coordinator for both this and the previous *Libraries* issue of the *JOURNAL* (December 2004/January 2005), is Instruction/Access Services

Librarian at Walla Walla University in College Place, Washington. The editorial staff express heartfelt appreciation for her enthusiasm and commitment to seeing the project through from identification of topics and authors, peer review, manuscript revision, to suggestions about photos and illustrations.



Felipe Tan is Senior Cataloger of James White Library at Andrews University in Berrien Springs, Michigan.

NOTES AND REFERENCES

1. John F. Kennedy Presidential Library & Museum: Historical Resources, “Remarks at the Convocation of the United Negro College Fund, Indianapolis, Indiana, April 12, 1959”: <http://www.jfklibrary.org/Research/ReadyReference/JFK-Speeches/Remarks-at-the-Convocation-of-the-United-Negro-College-Fund-Indianapolis-Indiana-April-12-1959.aspx>. Accessed March 31, 2011.
2. William Badke, “The Great Research Disaster,” *Online: Exploring Technology & Resources for Information Professionals*, 33:6 (November/December 2009):49, <http://www.onlinemag.net/nov09/index.shtml>. Accessed March 31, 2011.
3. Philippians 4:8. Scripture texts credited to NIV are from the *Holy Bible, New International Version*, Copyright © 1973, 1978, International Bible Society. Used by permission of Zondervan Bible Publishers.
4. For more information about appropriate search engines for children, see Christy Scott’s article on page 18.
5. Paul Gil, “What Is ‘The Invisible Web,’” *About.com: Internet for Beginners* (January 2010): <http://netforbeginners.about.com/cs/secondaryweb1/a/secondaryweb.htm>. Accessed April 13, 2010.
6. Will Sherman, “Are Librarians Totally Obsolete?” *Teacher Librarian* 35:1 (October 2007): 21.
7. Jane Devine and Francine Egger-Sider, *Going Beyond Google: The Invisible Web in Learning and Teaching* (New York: Neal-Schuman Pub., 2010), p. 4.
8. *Ibid.*, pp. 29-31.
9. Ellen G. White, *Testimonies for the Church* (Mountain View, Calif.: Pacific Press Publ. Assn., 1948), vol. 4, p. 652.
10. _____, *Manuscript Releases* (Silver Spring, Md.: Ellen G. White Estate, 1990), vol. 9, p. 162.
11. _____, *Counsels to Parents, Teachers, and Students* (Mountain View: Pacific Press Publ. Assn., 1943), p. 474.
12. American Association of School Librarians, “Standards for the 21st-Century Learner” (2007): <http://www.ala.org/ala/mgrps/divs/aasl/guidelinesandstandards/learningstandards/standards.cfm>. Accessed March 31, 2011. Hereafter, this document will be referred to as *AASL Standards*.
13. Brain research also points toward this conclusion. More than absorbing information, learning involves critical thinking in an enriched environment. Variety of formats of carefully selected resources, e.g., online, print, film, etc., promotes brain-based learning dubbed also as “resource-based learning.” A library collection should not only provide information but should contain a variety of materials that will lead students to think and reflect. See Judith Anne Sykes, *Brain Friendly School Libraries* (Westport, Conn.: Libraries Unlimited, 2006), pages 47-53.
14. Partnership for 21st Century Skills is a national organization that advocates for 21st century readiness for every student. For more information, see <http://www.p21.org>. Accessed March 31, 2011.
15. *P21 Framework Definitions* (December 2009): http://www.p21.org/documents/P21_Framework_Definitions.pdf. Accessed March 31, 2011.
16. *Ibid.*, pp. 3-5.
17. Association of College and Research Libraries, “Information Literacy Competency Standards for Higher Education” (2000): <http://www.ala.org/ala/mgrps/divs/acrl/standards/informationliteracycompetency.cfm>. Accessed April 15, 2010.
18. American Library Association, “Information Literacy Standards for Higher Education” (January 18, 2000): <http://www.ala.org/ala/mgrps/divs/acrl/standards/standards.pdf>, pp. 8-14. Accessed March 31, 2011.
19. *Ibid.*, pp. 8, 9, 11, 13, 14.
20. Lianne Snavely, “Global Educational Goals, Technology, and Information Literacy in Higher Education,” *New Directions for Teaching and Learning*, No. 114 (Summer 2008):37.
21. Cathy De Rosa and others, *Perceptions of Libraries and Information Resources: A Report to the OCLC Membership* (Dublin, Ohio: 2005): http://www.oclc.org/reports/pdfs/Percept_all.pdf. Accessed April 13, 2010. While the majority of college students in this study seem to use and value library resources such as online databases and journals, a significant number seem unaware of their usefulness. See pages xi and xiii for population data and 1-13, 1-33, and 2-13 for college students’ use of library resources.
22. Clare Snowball, “Teenagers Talking About Reading and Libraries,” *Australian Academic & Research Libraries* 39:2 (2008):112.
23. Ann Grafstein, “A Discipline-based Approach to Information Literacy,” *The Journal of Academic Librarianship* 28:4 (2002):197.
24. Seattle Pacific University, “Undergraduate Degree Learning Outcomes” (May 2005):2: <http://www.spu.edu/depts/oa/documents/assessment/UGDegreelearningoutcomesMay05.pdf>. Accessed September 6, 2010.
25. Lawrence Hardy, “The Future of Libraries,” *American School Board Journal* (January 2010):24. See also *School Libraries Work!* Research Foundation Paper (Scholastic Library Pub. [2004]). This paper provides summaries and a list of resources on the impact of school libraries and library media specialists on student academic achievement.
26. Isaiah 33:6 (NIV).
27. Ellen G. White, *Christ’s Object Lessons* (Washington, D.C.: Review and Herald Publ. Assn., 1941), p. 60.