

Youth Financial Education Web Sites: Evaluating Value and Appeal

Jan B. Carroll and Judy McKenna

Colorado State University Cooperative Extension

Marianne C. Bickle, Colorado State University

Most people agree that education by technology is the wave of the future. "Families with children are more likely than ever to own a computer and be connected to the Internet" (Wilhelm, Carmen & Reynolds, 2002). Among the numerous technology applications available, one of the most exciting is the Internet. According to Wilhelm et al., home Internet access is increasing even more rapidly than is computer availability.

The challenge facing educators is to insure that technology lives up to its promise. It will take a community of classroom teachers, Cooperative Extension educators, and 4-H Youth Development agents working together to identify educational Web sites with accurate and unbiased information. Web sites must be not only educational if learning is to take place- they also must be appealing to youth.

Web sites can add a "real world" learning opportunity by providing answers to questions, on-line calculators for comparing choices, and interactivity to increase student interest and involvement. Authentic activities lead students from simply clicking a mouse to higher-order skills and problem-solving opportunities. Educators must help evaluate content information available through Web sites so appropriate individualized learning experiences may take place.

Educators' Concerns about the Internet

Technology both tantalizes and frightens educators. The enormous capabilities of technology can make learning more inviting, up-to-date, and practical. Yet, many educators are concerned about the potential negative impact on youth who find, and accept as true, Internet information that is one-sided, sales oriented and/or misleading. Gardner (2000) believes that use of the Internet allows educators to personalize lessons and offer active, hands-on learning tailored to student learning styles. At the same time, he warns that the Internet has no intrinsic means of quality control.

Students can use technology to learn higher-level skills such as thinking critically and embedding learning in a relevant context. Web-based self-assessment can help students develop goal setting behavior, planning and self-monitoring through a cognitive behavior modification technique (Good & Brophy, 1995; Hazari & Schnorr, 1999).

While evaluation of existing technology is as important as use of the technology, teachers find it difficult to evaluate sites that are appropriate for school curricula (Baxter, 1999; Hertzler, Young, Baum, Lawson, & Penn-Marshall, 1999; Lewin, 1998; Shiveley & VanFossen, 1999). The biggest challenge for educators is to preview the content in sites before assigning them as part of students' coursework. Busy teachers often are short of time to thoroughly evaluate each site.

Purpose of the Study

The Youth Financial Education Web Site Review project was initiated in response to a question, "Do we have a list of appropriate and educational financial literacy Web sites for youth?" Specialists from 4-H Youth Development and Family Economics initiated a

collaborative research project that included Colorado youth and national Cooperative Extension financial educators as Web site evaluators. The purpose was to identify financial Web sites considered educational and interesting to teens. The project was targeted to the needs of classroom teachers and Cooperative Extension consumer educators who lack adequate time to identify and evaluate educational Web sites.

Methods

Evaluation Instruments

Several researchers have established criteria for evaluating Web sites for educational potential (Risinger, 1998; Shiveley & VanFossen, 1999; Hammett, 1999). For example, Hammett suggested the following basic criteria: authority (who provides the content), purpose (educational, sales, political, etc.), accuracy (credibility), timeliness (up-to-date), integrity of information (source of information), viewpoint (unbiased versus sales-oriented). More recent evaluation information can be found in Fetsch & Hughes (2002), McKenna (2001) & Virginia Tech University Libraries (2002).

Researchers hypothesized that teen reviewers might not be able to evaluate all of the criteria because they lacked sufficient experience with financial topics to critically analyze the Web sites' content. This led to a two-pronged approach of developing one evaluation form for teen evaluators and a second one for adult educators with financial expertise. The teen form was based on a Web site review rating (Web Site Reviews, 1999) with questions about content, design, navigability, and additional links. (For a copy of the instrument, contact Jan Carroll at: jan.carroll@colostate.edu or Judy McKenna at: mckenna@cahs.colostate.edu).

Sites and Raters

To identify appropriate Web site choices for enhancement of financial education for youth, a national e-mail query of Family Economics and 4-H Youth Development specialists identified 92 financial education Web sites. Sites were screened by staff and 26 were determined to be appropriate for young people. The instrument for teen raters was piloted by a group of high school students and revised to incorporate their recommendations before the actual Web site review.

Sixty-four 4-H members in Colorado, ages 14-18 years, made up the panel of teen Web site evaluators. Each of the sites was evaluated by a minimum of three young people. Teens were asked to rate the design, navigability, links, and content of three Web sites. In addition, they were asked about their experiences with computers and money management. Raters used a 5-point scale with Likert-type items, with 5 being "awesome" and 1 being "real bad." Teens were asked to evaluate Web sites based on content, including tracking expenses, comparing prices when shopping, setting aside money for future purchases, using a spending plan or budget, repaying debts, writing down and achieving money management goals, discussing money management with family, understanding the cost of buying on credit, knowing questions to ask for auto insurance, improving knowledge of investments, knowing how money affects one's future, making decisions about money, and opening savings accounts. They evaluated the following design factors: usefulness, whether the design serves a purpose, loading speed, clean and uncluttered appeal, and fun. They were asked to rate how easy the Web sites were to explore. Finally, they rated the availability of external links and how appropriate and up to date the links were. Teen evaluators scored each Web site on its educational value.

The financial education professionals rated sites using another instrument with criteria deemed most appropriate for adults with a

level of expertise in financial education (Hammett, 1999). Adult evaluators each rated three Web sites and were asked to consider the following: authority (author credentials identified, author affiliation credible, clear identification of sponsoring organization with contact information); purpose and coverage (clarity of primary purpose ~ sales, fun, information, education, etc.); accuracy and validity (based on professional experience); importance (is the information important to youth seeking financial education?); timeliness (current information); objectivity (bias or a particular perspective); and advertising claims (conflict of interest statement). In addition, raters were asked to give an overall recommendation score for the site as a resource for youth to obtain financial education. The scale was 3 (good) to 1 (poor).

Findings

A majority of the 4-H teen reviewers had a lot of experience with computers (68%) but fewer had much experience with money management (31%.) Two of the 26 Web sites were no longer operational by the time the data were analyzed. Of the 24 remaining Web sites, seven were highly rated by both youth and adults as valuable and appealing educational resources. They are identified below with comments from the evaluators and the research team.

- * www.kiplinger.com/kids ~ Short pieces designed for youth and their parents, including managing student loans, teaching children how to save money, and piggy bank calculator.
- * www.pathfinder.com/money ~ Money Magazine's Web site. Several sources of information such as Money 101 section and the Money/Fortune Stock Tournament would be valuable to young people, although the site is actually geared to adults.
- * www.cibc.com/smartstart ~ Canadian Imperial Bank of Commerce. Bright, cheerful, very elementary. Allowance Room

and Money Machine exercises judged inappropriate for both "under 12" and "13-18" age groups. Distinct gender bias.

- * www.themint.org ~ Northwestern Mutual Life Foundation and the National Council on Economic Education Web site. Specific exercises for middle school and high school students including starting a business, investing, and using credit cards.
- * www.yahooligans.com ~ Yahoo! Inc. trademarked site. Home page does not suggest money management topics. Searching for "investing" did uncover a number of topic areas. Despite this, it was rated as valuable and appealing.
- * www.homefair.com ~ Commercial site. Information for consumers to make more informed choices about relocation, mortgages, and related topics including finding an apartment or job.
- * www.quicken.com ~ Quicken® site. Most useful as a simulation activity.

Implications and Conclusions

Educators can benefit from this evaluative process and the reported results in various ways:

1. Use the evaluation instruments as a class project. Web sites continuously appear, disappear, and change content. Including youth in evaluation provides a context for healthy questioning and expands the information-seeking skills of youth.
2. Assign youth to use the best sites at home with their parents, incorporating questions for young people to discuss with their parents to help foster communication about financial education topics.
3. Create regional or county-wide collaboration teams of educators to create a plan for evaluating Web sites to address local financial education needs of youth.
4. Provide Web site evaluation training based on research-based information to local youth financial education coalitions.

5. Incorporate Web site evaluation exercises into school enrichment programs teaching young people how to determine which resources they can trust.
6. Train 4-H Youth Development agents and leaders to use Web site evaluation in programs for 4-H clubs and special events.

A major concern of educators is the proliferation of information. There is much work to be done with Web sites and youth financial education. A Web site review by adults provides tools to help young consumers learn more about financial education. Teen evaluations are also important for content, appeal and interactivity.

References

- Baxter, J. (1999, February 24). PSD ahead of the curve on using computers for class. *Fort Collins Coloradoan*, p. A1.
- Fetsch, R. J. & Hughes, R. (Updated July 23, 2002). Evaluating family life Web sites. Online: <http://www.ext.colostate.edu/PUBS/CONSUMER/10253.html>
- Gardner, H. (2000, March-April). Technology remakes the schools. *The Futurist*, 30-32.
- Good, T. L. & Brophy, J. (1995). *Contemporary educational psychology* (5th ed.). New York: Holt, Rhinehart, and Winston.
- Hammett, P. (1999, January). Teaching tools for evaluating World Wide Web sources. *Teaching Sociology*, 27(1), 31-37.
- Hazari, S. & Schnorr, D. (1999, June). Leveraging student feedback to improve teaching in Web-based courses. *T.H.E. Journal*, 30-37.
- Hertzler, A. A., Young, V. E., Baum, C. M., Lawson, M. & Penn-Marshall, M. (1999). Nutrition and exercise information for children on the Internet. *Journal of Family and Consumer Sciences*, 91(3), 100-103.
- Lewin, L. (1998, September, October). Taming the Web: Reading for comprehension. *Multimedia Schools* 5(4), 50-52.

- McKenna, J. (May 2, 2001). Financial resources. Online: <http://www.ext.colostate.edu/pubs/finance> (Retrieved August 5, 2002).
- Risinger, C. F. (1998). Separating wheat from chaff: Why dirty pictures are not the real dilemma in using the Internet to teach social studies. *Social Education*, 62(3), 148-150.
- Shiveley, J. M. & VanFossen, P. (1999, January, February). Critical thinking and the Internet: Opportunities for the Social Studies classroom. *The Social Studies* (90)1, 42-46.
- Virginia Tech University Libraries. Bibliography on evaluating Web information. Online: <http://www.lib.vt.edu/research/evaluate/evalbiblio.html> (Retrieved August 2, 2002).
- Web Site Reviews (1999, August). Web guide. Online: www.webguidemag.com. (Retrieved September, 2000).
- Wilhelm, T, Carmen, D. & Reynolds, M. (2002). Kids Count Snapshot. Online: http://www.aecf.org/publications/pdfs/snapshot_june2002.pdf. (Retrieved August 6, 2002).

Jan Carroll is 4-H Youth Development Specialist, Cooperative Extension, Colorado State University, 129 Aylesworth NW, Fort Collins, CO 80523-4050; (970) 491-6102, email: jan.carroll@colostate.edu

Judy McKenna is Professor and Family Economics Specialist, Cooperative Extension, Colorado State University, 160 Aylesworth SE, Fort Collins, CO 80523-1575; (970) 491-5772, email: mckenna@cahs.colostate.edu

Marianne C. Bickle is Associate Professor in the Department of Design and Merchandising, Colorado State University, 161 Aylesworth SE, Fort Collins, CO 80523-1575; (970) 5331; email: bickle@cahs.colostate.edu