There are two dimensions that need to be considered in judging the quality of web sites devoted to children and family issues—the quality and accuracy of the information and the effectiveness of the instructional design. The most important aspect of the web site is the quality of the information. If the information is inaccurate and taken from biased or unreliable sources, then no amount of cleverness in design can overcome this problem.

Determining the quality of information is a difficult and complex process, nevertheless, for professionals who are developing web sites it is important to develop critical evaluation skills as they review other web sites for possible links to their own work and as they make recommendations to other sources of information. At present human development and family life web site developers have yet to establish professional standards and conventions to document the sources of their information and the necessary standards to ethically present credible information. In many cases the conventional ethical standards that govern teaching family life and conducting clinical work still apply (See Brock, 1993 for example), but the brevity and anonymity of web site programming pose significant challenges. Some of these challenges were highlighted in the work of Fogg and his colleagues (2002) in a study of consumer views on web site credibility. They found that consumers focused on the visual appeal, the structure of the information and the focus of the content. The authors write, “nearly half of all consumers (or 46.1%) in the study assessed the credibility of sites based in part on the appeal of the overall visual design of a site, including layout, typography, font size and color schemes” (Fogg, et al., 2002, p. 6). Consumers rarely focused on the quality of the content, the authority of the authors or organization sponsor, and other factors that might contribute to the accuracy of the information. Within the same study, the authors also conducted focus groups with content experts and found that they rarely mentioned design and layout in their review of web sites and focused their attention on the accuracy and clarity of the information presented.

Evaluating the Quality of Websites

There have been a number of efforts to develop criteria and methods for evaluating websites. Kirk (1996) developed one of the early guides to analyzing websites and identified many of the major issues that need to be considered in evaluating websites including: authorship, publishing source, point of view, verifiability, and currency. Based on studies of web credibility, Fogg (2002) developed a set of guidelines for establishing credibility when designing websites. A more relevant system of analysis for family life education has been created by faculty at Tufts University (n.d.) who created the Child and Family Webguide in 2001. This website catalogues and reviews websites devoted to topics related to children and families. They use for dimensions to rate websites—authority (How trustworthy is the source?), content (How accurate is the content?), ease of use (How easy is it to find and navigate the site?), and stability (How current is the information?). Many of the dimensions identified by Fogg would fit into these general categories. Additionally, the framework I developed in Hughes (1994) to develop family life
educational efforts can be applied to websites and Myers-Walls (n.d) elaborates this system in her family life education quality assessment tool. Based on these various recommendations and models I have developed the following rating system that focuses on three broad dimensions:

- Authority—information about the authors and organizations who developed the web content.
- Content—the quality, accuracy and currency of the information
- Instructional Design—the effectiveness of the use of web design and use of learning research to educate the public.

Rating Websites on Authority

Information about Authors/website developers

The credentials of the author of the family life content and/or developer of the web site should be plainly visible on the website. These credentials at a minimum should include the author's educational background, training, and work experience related to human development and family life issues. It might also include certification or licensure in various professional groups. In these instances there should be direct links (or address/telephone numbers) to the credentialing organization so that web site visitors can verify information claimed by the author/developer.

It is useful to know who is creating the information, even if the author is a grandmother with 30 years experience raising her own children and grandchildren. This allows the reader to decide about the authority or credibility of the source. Different readers will have different standards for deciding credibility.

Information about Institutional affiliation of the website

It is also important to know who sponsors the web site. Web sites can be sponsored by educational institutions, professional associations or organizations, private individuals and many others. The sponsoring organization should be visible throughout the website. There should be links to other aspects of the institution or organization. This information will also provide readers with information for them to decide on the authority of the website.

A website’s authority should also be based on clear information about the limits of the knowledge and expertise of the authors/developers. In general, ethical standards should be adhered to in regards to limits of expertise. For example, non-licensed practitioners should not claim particular clinical or therapeutic expertise. Likewise, educators should note their specific areas of expertise and the limits of their ability to provide specific clinical guidance. Additionally, websites should note cautions and/or warnings regarding topics that are inappropriate for general website-based advice such as instances of dangerous and/or abusive behavior, suicidal behaviors and so forth. Clear directions to telephone or web-based hotlines or local professionals should be provided.
Website Rating Dimensions for Authority

Clearly identify the credentials of the authors/web site developers

   Education, professional affiliations, professional certification or license, expertise in the area/topic

Clearly identify the organization that developed the website

   Name, location, history, purpose, services provided, educational or help oriented emphasis

Provides easy ways to contact the website organization

   address, telephone number, email address, IM, other

Purpose of website is to provide information or to educate

   Minimal advertising, clear distinction between ads and content

Website is clearly maintained

   Dates are provided on pages, design is consistent, hyperlinks work, grammar and spelling is accurate

Website provides links to other websites, helpful sources of information and so forth that may be beyond the scope of the particular website.

   Links to related websites, local agencies or professionals, telephone hotlines

Website provides cautions or referrals regarding issues that require more help than is possible through a website (e.g., dangerous, harmful, or illegal activities).

Rating Websites on Content

Scientific Information

A major difference in the quality of websites is the basis for the information. High quality websites are based on our scientific understanding of human development and family life. Scientific information is not an infallible source of advice, however, there is much we know that should not be ignored in our attempts to improve the lives of children and families.

Web developers interested in developing high quality resources related to children and families must incorporate scientific information regarding these issues. There is also important clinical and practical knowledge that has been developed by experienced
teachers and clinicians that must not be ignored in providing information. In Hughes (1994) I provide a broad description of how theory and research can be used in developing family life educational materials. In this document I apply those general ideas to websites.

**Documenting Source of the Information**

In addition to using scientific and clinical information as a basis for the information presented on a website it is also important to provide documentation of the sources of information. High quality websites will provide this information about the overall website as well as with more specific content.

**Rating Dimensions for Content**

General description of the source(s) of the information contained in the website

Very visible links to the general source(s) of the content

Ease at which it is possible to check the source of information provided.

Authors’ names and affiliations are visible with content

Prevention/Intervention theoretical orientation of website is clear and appropriate

Website is based on current research evidence

Website includes dates on content

Website includes evidence of major and/or most important research sources

Website accurately uses the findings from research

Website clearly presents research evidence

Website draws appropriate implications from research evidence

Website notes limitations or cautions about research evidence

Contextual information regarding children and families involvement in various settings (school, work, child care, faith community) is appropriately considered.

Culture and social class influences are appropriately considered.

Political, economic, and other macrosocial influences are appropriately considered.
Rating Websites on Instructional Design

Effective websites are well designed and based on sound educational principles. A well designed website is more than just “easy to navigate;” it provides information in a format that is readable, provides helpful examples or illustrations and provides ways to obtain additional information. There is a growing body of scientific information regarding online learning (Bonk & Zang, 2008) and multimedia learning (Mayer, 2005) that should be at the foundation of web design, but is rarely mentioned. There is also a growing body of knowledge in the prevention and intervention literature about good practice in regards to behavior change and persuasion (Bond & Hauf, 2004; Fogg, 2003). Instructional design dimensions of website development are incomplete and need additional attention as knowledge of effective website educational design improves.

Rating Dimensions for Instructional Design

General design dimensions.

Website has a clear overall structural/educational design that is logically organized and easy to follow.

Website includes navigational system that fits the audience and has conceptual coherence.

Graphical elements (illustrations, photographs, color, typography) are appropriate for the audience(s).

Website has easy tools for searching the site for specific information.

Reading level is appropriate for the audience(s).

Instructional design dimensions.

Teaching/Prevention/Intervention strategies and techniques are based on principles of effective practice.

Website provides links to credible additional or related information beyond the scope of the existing website.

Website is designed for a specific audience(s).

Website has clear objectives for the instructional aspects of the design.

Instructional activities/techniques fit the objectives
Instructional activities/techniques fit the audience(s) (e.g., age group, family type, gender, ethnic/cultural group).

Examples are used effectively to extend understanding or provide additional explanation.

Guidance for engaging instructional activities is sufficient.

A variety of instructional activities/techniques (e.g., stories, video illustrations, quizzes, surveys, etc.) are used to enhance learning.

Instructional design elements are created to allow participants to obtain a deeper understanding of a topic (e.g., a FAQ is linked to an in-depth article or other related FAQs).

Instructional opportunities are created to obtain peer support or feedback.

Feedback is provided to participants in regards to instructional activities (e.g., answers to quizzes, links to related information, etc.)

Instructional opportunities are available to ask questions and to obtain additional information. In other words, the website authors/instructors are available for clarification or further instruction.

Graphical elements (including video, pictures, graphs, etc.) extend information or learning.
References


