

Information at a Click: Assessing Efficiency Educational Websites

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ABSTRACT

As program administrators seek to promote more comprehensive energy efficiency behaviors, they increasingly are developing websites to stimulate customers' interest and inform and expand their views of the possible and desirable, deliver programmatic and related information, and facilitate communication among site users.

The authors developed criteria for assessing efficiency program websites based on a comprehensive review, analysis, synthesis, and simplification of website evaluation criteria used by: the Association for Library Service to Children, a division of the American Library Association, to select its *Great Web Sites for Kids*; the Arizona Technology in Education Alliance for its *Exemplary Web Site Awards*; the National Endowment for the Humanities for its *EDSITEment* website selection; and Oracle Education Foundation for its 2009 *ThinkQuest Website Competition*.

The ten website evaluation categories include: program presentation; efficiency program information and content; organization; presentation; media use; technical aspects; written language mechanics; responsiveness to the needs of the audience; sensitivity to human diversity; and originality.

As with any set of evaluation criteria, not all will apply in every situation. Specialized websites might be quite effective, even though satisfying only some of these criteria. The evaluators selected this set of criteria to cover a broad swath of possible attributes and provide a lens by which they could compare websites across programs.

This paper discusses these criteria and gives examples of their use in evaluating two educational websites.

Introduction

The Internet has considerable potential to support energy efficiency programs as a communication tool. Websites offer the opportunity to distribute more information, to more people, at a lower cost than almost any other medium. While energy efficiency program websites can serve as resources providing program participants with the information they need to identify and install energy-efficient equipment and receive incentives, program websites can also play a much more comprehensive role in educating the public.

Energy efficiency program websites can provide multimedia resources and interactive elements to engage customers, build their understanding of the energy-saving measures available to them, and motivate them to change their behavior in ways that will conserve energy. Energy efficiency programs can also use websites as an educational tool, providing resources to teach both children and adults about energy and energy conservation issues, and reaching out to teachers and other educators who might incorporate energy issues into their instruction.

An effective website can make a significant contribution to the success of an energy conservation program. Recognizing the benefits that an effective website can provide, program implementers are devoting more resources to developing and maintaining websites. The role a website can play in driving the success of an energy efficiency program and the growing significance of the website in relation to the

program as a whole increasingly require program evaluators to determine whether a website is meeting its full potential.

The technology that goes into a website can easily track the site's performance in some areas—for example, by measuring the number of times each page is viewed and how many distinct users visit the site. A review of the evaluation literature for energy efficiency programs found a variety of innovative uses of the Internet that had been assessed using these tools (O'Leary 2009; Williamson 2009). Counting the number of users that visit a site can provide information on the site's general popularity and determine which parts of the site are used most often. In addition, observing the change in traffic resulting from new elements can help evaluate the impact that those elements have on the site's overall popularity.

While counting the number of visitors a website receives provides some valuable insights, these numbers are best considered an *output* indicator, rather than an *outcome* indicator. Web traffic data reveals little about the quality of the information the website presents and the ultimate benefits gained by visitors to the website. In an effort to develop a more detailed methodology for evaluating the websites that support energy efficiency programs, the authors synthesized the evaluation criteria used by: the Association for Library Service to Children (1997), a division of the American Library Association, to select its *Great Web Sites for Kids*; the Arizona Technology in Education Alliance for its *Exemplary Web Site Awards* (AzTEA 2009); the National Endowment for the Humanities for its *EDSITEment* website selection (NEH 2009); and Oracle Education Foundation for its 2009 *ThinkQuest Website Competition* (Oracle 2009). This synthesis yielded ten areas for evaluators to consider.

The authors used these ten areas of evaluation to examine two educational websites as part of a larger process evaluation of several K-12 education programs offered by an electric utility. The two websites serve as examples throughout this paper, illustrating the criteria involved in evaluating each of the ten areas of evaluation and calling attention to issues that evaluators should consider when using this methodology. Both of the websites that serve as case studies for this paper support energy efficiency education programs implemented in schools. One program provides teachers with an established curriculum on energy efficiency and resource conservation, while the other encourages teachers to identify and implement school-wide energy efficiency measures as part of the development of innovative ways to teach energy efficiency to their students. Both websites serve two primary audiences: students and teachers. Both also provide information to a secondary audience of parents or other adults interested in the programs.

To simplify the presentation of the ten areas of evaluation for efficiency program websites, this paper groups together areas of evaluation that cover similar characteristics. However, under each area of evaluation, there is a distinct set of criteria for determining a website's strengths and weaknesses in that particular area. These criteria are addressed in the paper's narrative and presented as tables within each section.

Ten Areas for Website Evaluation

Areas 1 & 2: Program Presentation, and Efficiency Program Information and Content

The most important aspect of any energy efficiency program's website is the quality and comprehensiveness of the content it provides. Websites play a crucial role in support of energy efficiency programs by providing content in two broad areas. First, the website must present the program to participants and potential participants, making clear the program's motivation and the benefits of participation. Second, a website directly provides participants with the program's information resources. The first two areas of evaluation for efficiency program websites focus on the content websites provide in each of these areas.

Table 1 presents a summary of the criteria that evaluators should consider when examining the content an efficiency program website provides.

Table 1. Evaluation Criteria to Consider for an Efficiency Program Website

Area of Evaluation	Criteria to Consider
Program Presentation	The purpose of the website is stated and evident in the content.
	Benefits of program participation are clear.
	A full description of the program content and activities involved is provided.
	Unique characteristics of the content/program are clearly evident.
	The content allows users to easily identify and access resources.
	Links to sponsoring organizations are provided.
	The Acceptable Use Policy for the site is clearly stated for all audiences.
	Copyright guidelines, permissions, and public domain notifications are followed.
Efficiency Program Information and Content	All content information relates to the site’s overall purpose.
	Program content, processes, and policies are provided.
	Content is expertly presented, as evidenced by the depth of information and supporting details.
	Information provided is accurate, relevant, and valuable to intended audiences.
	A variety of information sources are used, including primary sources.
	Sources are credible, credited, and citations are thorough enough to verify contents.
	The website intentionally stimulates local, national, and global awareness, presents action steps, and effectively engages others in addressing the issue and making a difference.
	Diverse viewpoints are provided, with clear differentiation between opinion and fact.
	The information provided is current (the site has been updated within the last two months).

In order to effectively present an energy efficiency program to potential participants and support committed participants in taking action through the program, a website should meet four broad criteria.

1. It should inform visitors what resources the program offers and how those resources will help them accomplish their goals.
2. It should allow visitors to easily identify and access resources.
3. It should specify how participants can use those resources.
4. It should provide links to the organizations that sponsor the program.

First, the purpose of the website should be stated clearly and the website should explicitly connect the resources the program offers with the needs of the target audience. In the case of school-based programs, this takes the form of clearly demonstrating how the educational materials offered meet educational standards in the state(s) where the target audience is located. In the same way that teachers are far more likely to use educational materials when those materials will help them meet state standards, individuals in general are more likely to engage with a program when it is clear that the program will help them better do their job or accomplish their goals. Depending on the program's target audience, these benefits may take the form of cost savings, improved equipment performance, or an appreciation of the social and environmental impacts of conservation. By making clear the site's purpose, website designers can more effectively communicate to potential participants how the materials the program offers could fit into their work environment or lifestyle.

The second criterion for evaluators to consider examines how easily program participants would be able to access and take advantage of the materials and information provided through the website. In order to facilitate participants' use of a program website, the site should provide a full description of the content or resources that are available and give details of any potential outreach activities related to the program. The broad overview that this information provides helps participants and potential participants decide whether the program's resources are relevant to their situations and directs them to those resources that will be most useful for them. The website should also make clear the unique characteristics of the program and the resources that it offers. These unique characteristics will help persuade potential participants to take advantage of the resources a program provides, rather than approaching the program's area of influence another way.

The third area in which a website must clearly present information in order to help program participants meet their goals has to do with the regulations and guidelines governing how visitors can use the resources the website provides. The website should have a clear Acceptable Use Policy, covering each of the audiences it hopes to reach, and it should present copyright guidelines, permissions, and public domain notifications for any content that visitors may want to reproduce as they take advantage of the site's content. By presenting these rules effectively, efficiency program websites make clear what visitors can and cannot do with each of the resources provided, making it easier for visitors to use the website as a resource in their work or as a guide to home energy-saving behaviors.

Finally, efficiency program websites should provide links to sponsoring organizations, so that participants can gain a greater understanding of the organization providing the information and pursue additional resources as necessary. By providing this type of information, a program lets users know to whom they should address questions and concerns. In addition, the source of any incentives may be important to businesses with public relations efforts associated with their corporate social responsibility programs.

Both of the case study websites made their purposes clear and effectively communicated what visitors could do with the content the sites provided. However, while an analysis of the educational resources on one of the sites revealed that those resources addressed state science and math standards, the website's content failed to make this connection clear. In addition, the site did not mention areas where the content it offered might fit into academic standards across the multiple states where the program operates. This failure to explicitly make the connection between the academic resources offered and the states' standards is a lost opportunity for an educational website. Teachers focused on meeting state requirements may turn away from academic resources that do not offer clear and direct benefits in terms of achieving those goals.

While the first area of evaluation related to an efficiency program's website focuses on presentation of the program itself, the second area of evaluation examines the information and content that the program provides, focusing on the quality of the materials available on the website. The information contained in the

materials should be accurate, relevant, and valuable to its intended audience. It should be presented in a way that demonstrates expertise, showing a depth of information and supporting details. The information should draw from a variety of sources, both taking advantage of credible and authoritative secondary sources, and presenting primary sources, including interviews, surveys, personal observations, original artwork, and media recordings. The website should provide diverse viewpoints and clearly differentiate between opinion and fact. Sources should receive credit for the information they provide in citations that are thorough enough that readers can verify their contents. In addition, the information should be current, with the site showing that it has been updated within the last two months.

Finally, all of the content a website presents should contribute to the site's overall purpose. For educational websites, such as those presented as case studies, this involves presenting content designed to stimulate awareness on a local, national, and global scale, and informing program participants of ways they can act to help solve the problems and address the issues that the program's educational materials present. Efficiency program websites may also encourage participants to engage with others as they put the knowledge they gain from the program into action.

While these two areas of evaluation take a general focus on the types of content that websites should present, to meet their goals and accommodate the needs of their intended audience, each efficiency program will be required to provide additional content or to present content in a specialized way. For example, the case study websites, which supported K-12 education programs, faced the added challenge of providing materials that would be effective as teaching tools. Their content had to be informed by educational theory and all of the media elements had to demonstrate best practices of technology use in education. Websites for programs targeting other sectors may need to meet equally stringent standards in order to serve as an effective information resource for program participants.

Areas 3 & 4: Organization and Presentation

A website's organization determines how easily a visitor will be able to find the information they seek. In order to provide information effectively, a website must have strong organization on multiple levels. The organization of an energy efficiency program's website takes on added importance when the program seeks to reach multiple audiences who may have different information requirements.

In the broadest sense, the individual pages that make up the website must be organized in a way that is intuitive and easy for the user to navigate. The homepage should provide a map of the site or a logical structure that allows visitors to begin exploring an area of interest. Once they have begun exploring the site, visitors should be able to find pages on related topics easily, and return to the homepage and pages they have previously visited without a great deal of effort.

To meet visitors' needs effectively, a website must be well organized, not only in terms of the outline of the site as a whole, but also in terms of the way information is organized on each individual page. Pages should be well organized visually, naturally drawing the reader's attention to the most significant information. The content itself should hold the reader's attention and smoothly transition to the next section or whichever area of the site to which it directs the reader.

A well organized site should also allow the reader to engage with the content in an active, constructive way—for example, through search functions, blogs that allow reader comments, user forums, and wiki pages that allow users to build and modify content of their own. Finally, each page should present contact information for the organization maintaining the site, the name of the site, and the revision date.

Like a website's organization, the way the site presents its content determines how effective the site will be in providing visitors with the information they seek. The site's presentation begins with search engine optimization; visitors must be able to easily find and identify the site through a keyword search. Once a visitor has found the site, each page must present information in a way that makes it accessible to the

visitor. The information should be laid out on the page in a way that is easy for the reader to follow. The site should use both text and visuals in a complementary way to present information, and graphical elements—such as icons, logos, backgrounds, and even the general page structure—should be consistent throughout the site.

Finally, while the most effective websites use colors, fonts, and layouts consistently and artistically, web designers should ensure that the backgrounds and text work well together to present information.

Table 2 summarizes criteria evaluators should consider when evaluating a website’s organization and presentation.

Table 2. Evaluation Criteria for Website Organization and Presentation

Evaluation Area	Criteria to Consider
Organization	The site’s design and layout make it easy to use.
	Every page is well organized visually.
	Content organization holds the reader’s attention and eases the transition between sections.
	The Home page provides a site map or logical structure for exploring an area of interest.
	The site allows for an active, constructive relationship to its content.
	Contact information, name of site, and revision date are provided on each page.
Presentation	The website is clearly identified and found easily through a keyword search.
	The overall layout is clear and easy to follow.
	Content and program characteristics are provided in text and visually.
	Backgrounds and text work together and make it easy to read content.
	Graphical elements are used consistently.
	Colors, fonts, and layout are creative and artistic.

Both of the case study websites showed significant strengths in their organization and layout. Both sites were organized consistently across all of their pages, with clear navigation bars. One site in particular stood out in terms of being effectively organized to reach the program’s audience, with a colorful presentation that included lots of visual elements—including photos, images and icons—and content organized into short chunks that easily transition from one to the next. Opportunities for improvement of the organization of the sites include adding more detailed menus and submenus to one of the sites, consolidating similar information found on multiple pages, and eliminating similarly named pages in order to make navigation easier and more intuitive.

Evaluation of these websites also highlighted the importance of creating broad search features, both in the site’s internal search function and in terms of its search engine optimization, so that users who do not know technical terms will be able to find the content they seek.

Area 5: Media Use

Multimedia elements can contribute to the emotional impact of a website's content and help visitors understand the information the site presents. However, multimedia elements will not significantly assist a website's efforts to spread knowledge relevant to an energy efficiency program unless all of the multimedia elements are used in a way that complements the rest of the site's content. Images, video, animation, games, and interactive features should be designed and selected to enhance the presentation of information, engage the user more deeply, and demonstrate key concepts. Website designers should avoid multimedia content that does not support the rest of the site's content in this way. In order to more effectively tie multimedia content to the rest of the information presented on a website, each multimedia element should also include a concise written synopsis that deepens understanding of the topic.

The criteria for program evaluators to consider when judging a website's media use are summarized in **Table 3**.

Table 3. Evaluation Criteria for Website Media Use

Evaluation Area	Criteria to Consider
Media Use	Multimedia is used purposefully to enhance the presentation of information, engage the user more deeply, and demonstrate key concepts.
	Media elements include a concise written synopsis that deepens understanding of the topic.
	All media elements are essential components, creating understanding or emotional impact.

The case study websites demonstrated effective use of media, especially in their pages directed at young people and students. The sites included: home schematics and information on potential energy savings in each part of the home; energy-use calculators; instructions on how to use the contents of program-provided energy conservation kits; creatively presented links to additional resources; and relevant games and activities. One of the sites also presented videos created by program participants, which have the potential to be effective tools in connecting with other participants and potential participants, and motivating them to act.

While the case study websites included many effective examples of media use, they also included some ineffective uses of media. For example, while one site included a *Hangman* game, which built users' knowledge of energy conservation vocabulary, it also included *Missing Square Puzzle* and *Blinking Light Sequence* games that, while entertaining, did little to build knowledge related to energy efficiency. The resources involved in designing and hosting these games could be devoted to improving other areas of the site or used in creating media elements with a greater focus on conveying information about energy efficiency.

Areas 6 & 7: Technical Aspects and Written Language Mechanics

The technical aspects of a website play a role in determining how easily visitors will be able to access the information the website provides. In distinction to criteria regarding a website's organization and presentation, which also relates to access, technical aspects include the ease and speed with which users can download and print documents, the availability of additional software or plug-ins that are necessary to view

the site’s content, the quality of the graphics, and the functionality of links. In addition, the site’s multimedia elements should work properly and the websites identified through links should be appropriate and informative.

While these technological elements are important in ensuring that users can take advantage of all a website has to offer, websites present the majority of their information through text. The text on a website should receive the same level of review in terms of grammar, usage, punctuation, and spelling that any other document an organization distributes to the general public would receive. In addition, writing on websites should be concise and easy to understand. Readers are likely to be repelled by long, unbroken blocks of text and overly technical information.

Table 4 summarizes criteria to consider when evaluating a website’s technical aspects and written language mechanics.

Table 4. Evaluation Criteria for Website Technical Aspects and Written Language Mechanics

Evaluation Area	Criteria to Consider
Technical Aspects	Printing or downloading documents is fast and easy.
	Links to related sites are appropriate and informative.
	Links are accessible and work effectively.
	Additional software or plug-ins are available as needed.
	Graphics are optimized.
	Multimedia resources work properly.
Written Language Mechanics	Writing is concise and easy to understand.
	Grammar and usage are correct.
	Punctuation and spelling are correct.

The technical aspects of the two case study websites generally performed well. However, the evaluation of the websites underscored the need for website managers to frequently check and update links to ensure they remain current. In addition, the sites evaluated, like many energy efficiency program websites, provide a large number of files in PDF format. Some users may benefit from links to Adobe or other free software applications that can read these file formats. Generally, there is no fee to place these links on a website.

Areas 8 & 9: Audience and Sensitivity

In order to communicate effectively with its audience, a website has to present information in a way that will be useful and engaging for the people the website hopes to serve. The website’s content must address the needs and interests of its users and provide links and information relevant to each of the groups that make up the website’s audience. Energy-efficiency program websites should feature the innovative activities and projects that the program carries out, and highlight the work and accomplishments of program participants. By featuring participants in this way, efficiency program websites are more likely to resonate with other participants and people considering participation. These audiences are likely to be drawn to stories about people with whom they can identify.

Past studies have found that efficiency program websites that provide users with a greater degree of personalized information attract more visitors and are more popular with their users (Pearsons, Lockwood &

Egziabiher 2003; Williamson 2009). Some efficiency program websites have taken advantage of the sponsoring utility’s online billing data to provide users with personalized information about their energy use and opportunities for energy savings (Williamson 2009). Other websites have included applications that allow users to enter data on their energy use in order to calculate precise estimates of the energy savings they could achieve through various energy conservation measures (O’Leary 2009). One study found that large industrial customers greatly appreciated simply having access to detailed information on their own energy use, because this information allowed them to more effectively identify opportunities for energy savings and monitor the results of their efforts (Pearsons, Lockwood & Egziabiher 2003). Each of these studies demonstrates the value audiences gain from websites that provide personalized information that meets their specific needs.

In order to present information in a way that recognizes the interests and needs of program participants and potential participants, website designers must present information in a way that recognizes the linguistic and cultural differences within the population the website hopes to serve. In many cases, a website may need to present information in a variety of languages to fully reach its audience. Links to these non-English resources should be displayed in a location that will be easy to find for people who may speak little or no English—likely on the website’s homepage. In addition, website designers may want to consider search engine optimization for search terms in languages other than English.

In addition to recognizing language diversity among a website’s audience, website designers should also consider economic and cultural differences. Website visitors are unlikely to identify with information that presents a worldview vastly different from their own, or to take actions that seem to require access to resources that are beyond their reach.

Finally, it is important that a website clearly addresses needs specific to the community it seeks to serve.

The criteria for evaluators to consider when examining a website’s audience appeal and cultural sensitivity are summarized in **Table 5**.

Table 5. Evaluation Criteria for Website Audience Appeal and Cultural Sensitivity

Evaluation Area	Criteria to Consider
Audience Appeal	The site addresses the needs and interests of the communities served.
	Relevant links are provided for the range of communities served.
	Program participants’ work is featured.
	Program activities and projects are featured.
Cultural Sensitivity	The site demonstrates awareness of and respect for the cultural diversity of the communities served.
	Language needs of the communities served are addressed.
	Sensitivity to the special needs of communities served is apparent.

The case study websites demonstrated strength in adapting their content to meet the needs of their intended audiences. Both sites presented information in a way that would be interesting and useful to teachers, one of their primary audiences. Both sites also had a significant amount of content designed to appeal to children, another audience group that both programs sought to target.

One site also encouraged teachers participating in the program to submit lesson plans related to program topics, which program staff would then review and post on the site. By posting lesson plans in this

way, the website publicly recognized the achievements of program participants and provided resources that would encourage others to participate. Both websites also posted information about innovative efforts that program participants had undertaken and what those efforts had achieved.

Both of the websites examined as case studies could have better met the needs of their audience by including additional features allowing users to contribute content and by providing links to other relevant online resources. Features that allow audiences to contribute content—like blogs that enable users to comment on posts and forums in which users engage with each other to discuss a given topic—can generate information that will resonate with the site’s audience. Audiences are likely to identify with the voices expressed in user-created content. By addressing the concerns that this content raises, program managers can ensure that they are providing information that meets their audiences’ needs. Providing links to other sites that address the audience’s interests and concerns is another way that a website can demonstrate a responsiveness to its audience, and a comprehensive list of links can help the site become a resource for people interested in its central topic.

The two case study websites both demonstrated an effort to respond to the unique needs of the communities they sought to serve; however, both sites could have significantly expanded these efforts in order to reach those communities more effectively. While one of the sites included more photos demonstrating the ethnic diversity of the program participants than did the other, both sites could benefit from additional photos showing ethnically-diverse individuals participating in the program. In addition to increasing the diversity demonstrated in their photos, the evaluation of the websites also recommended that the web designers extend this diversity to the images, avatars, and icons included in games and activities directed at young audiences. It is important that the images on a website reflect the diversity of the community it seeks to reach, since potential participants may lose interest if they cannot identify with anyone pictured on the website.

Both sites serve communities with large Spanish-speaking populations; and by presenting some information in Spanish, they demonstrated their recognition of the need for linguistic diversity. However, neither site provided links to this information from the homepage. Without these links, it would be difficult for someone who spoke little or no English to find these Spanish-language resources. In addition, students in the schools both programs sought to reach speak more than 22 languages at home. Both websites could better serve their audiences by presenting information in additional languages that are prominent in the communities they hope to serve.

Finally, both sites could better reach the full range of their target audiences by addressing a greater range of economic diversity. This could include providing information on funding sources or incentives available for energy efficiency retrofits to schools or homes, with a focus on energy-saving resources for low-income communities. This information could be included in the websites content or through links to relevant information and existing programs. As well as providing information resources for economically-diverse audiences, the websites could better serve their visitors by demonstrating greater economic diversity in the images and games they provide for children. Specifically, both sites feature interactive home tours in their sections directed toward children. These tours demonstrate a typical middleclass suburban or rural home. A child who lives in an urban environment, and especially a child in a limited-income household, may find it difficult to identify with this type of home. To reach these audiences, the sites could use a similar type of virtual home tour to present energy-saving tips for people who live in apartments or other types of housing.

Area 10: Originality

The originality of a website’s design and content influences the value that the website’s audience will derive from the information the site provides. At a very basic level, websites that largely present

original content will be more valuable to their users than websites in which the majority of the content is paraphrased or copied from outside sources. In addition, original photographs, artwork, and other elements are likely to better complement the website's other content than reproduced material created elsewhere. However, beyond simply providing original content, effective websites find creative ways to present information using unique structures, designs, and styles. An effective website has special features that will attract and engage users and help to communicate the topic in a creative and original way.

Table 6 summarizes the criteria evaluators should consider when examining a website's originality.

Table 6. Evaluation Criteria for Website Originality

Area of Evaluation	Criteria to Consider
Originality	The website is creative and original in its approach to presenting the topic.
	Written content, photographs, artwork, and presentations are original work.
	The majority of content is not paraphrased or copied from outside sources.
	The website structure, design, and style are unique and original.
	The site has special features that attract or engage users.

The two case study websites demonstrated a great deal of originality. While one site excelled for its use of animation and interactive features to present information and engage the audience, the other stood out as a source of original content. That website's original content not only made it a valuable source of information for its visitors, but the original content also helped the site stand out among its competition. A cursory review of 100 sites presenting information similar to that of the evaluated website found that more than half of those sites either linked to the evaluated site or presented content that originally came from that site. This frequent linking and use of the evaluated website's content in other places demonstrates that the site's audience, including other professionals, values the site's original content and views the site as an authoritative source of information.

Conclusion

To effectively reach its audience, a website must meet three broad requirements. First, the website must present high quality information that addresses the interests and concerns of all of its users. Second, the information must be presented in a way that engages the user and allows a user to find the information they seek. Third, all of the technical aspects involved in presenting the information must work, from download speeds to basic language mechanics of grammar and usage within the content. The evaluation criteria that this paper presents provide program evaluators with a systematic method for determining whether an energy efficiency program's website meets these requirements. Each energy efficiency program has distinct communications needs, and each program's websites will reflect the program's unique needs and unique characteristics. While the ten areas of evaluation presented in this paper provide broad guidelines for evaluating websites, the criteria under each area may not apply equally in every case. In addition, to truly judge a website's effectiveness in supporting an energy efficiency program, an evaluator must look beyond the site itself to consider the ways that program participants and potential participants use and interact with the site. Recognizing these limitations, the areas of evaluation presented here establish a

standard against which evaluators can compare efficiency program websites and gain a sense of whether these increasingly important elements of efficiency programs are meeting their full potential.

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