

# THE WWWDOT APPROACH TO IMPROVING STUDENTS' CRITICAL EVALUATION OF WEBSITES

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*This article presents a framework for increasing students' awareness of the need to and skill in critically evaluating websites as sources of information.*

Peter (all names are pseudonyms), a fourth grader, was assigned to write a report on the respiratory system. He did a quick search through Google and identified two websites to read. One was a three-page website with many color drawings by a child for a class project, and the other was a comprehensive website by the American Lung Association. After spending half an hour reading the one with many drawings and a few minutes browsing the comprehensive one, he started to write the report.

## The Importance of Website Evaluation

The Internet has increasingly become one of the most widely used information sources in people's daily lives. As of 2003, nearly half of all children used the Internet to complete school assignments (National Center for Education Statistics, 2006), and the percentage has likely grown since then. One common

use of the Internet is to search for information for school projects such as reports (Eagleton, Guinee, & Langlais, 2003)—and rightly so, as there is an enormous amount of valuable and timely information on the Internet on any number of topics. However, there is also a great deal of untrustworthy and outdated information on the Internet, even more than with printed text. Unlike printed text, information on the Internet is unfiltered. In theory, anyone can put anything on a website. Students need to learn how to critically evaluate websites to increase the likelihood

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that they are drawing on high-quality information.

Peter in the preceding scene did not know how to evaluate the trustworthiness of a website. He chose a website with little evidence of trustworthiness, written in fact by a child, as the main source of information for his research project. Studies show that most students do not take a critical view toward information on the Internet (e.g., Killi, Laurinen, & Marttunen, 2008; Kuiper, Volman, & Terwel, 2005; New Literacies Research Team & Internet Reading Research Group, 2006).

When students do evaluate websites, they do not have appropriate criteria to use (Lorenzen, 2001). For example, some students equate quantity with quality (Agosto, 2002), and some judge a website's trustworthiness on the basis of whether the website is attractively presented (Lorenzen, 2001). As more and more students are using the Internet as an information source, it is crucial to teach students how to evaluate the trustworthiness of websites as sources of information.

Many scholars have offered valuable suggestions for improving students' website evaluation skills (e.g., Bailbon & Bailbon, 2008; Coiro, 2003; Eagleton & Dobler, 2007; Graesser et al., 2007), mostly, although not exclusively, with students of middle-school age or older. For example, some have suggested particular dimensions on which websites should be evaluated, such as the authority of author, the website content, evidence of bias, evidence of the authenticity of information, quality of presentation, and currency (e.g., American Library Association [ALA], 2002; Fitzgerald, 1997; National Educational Technology Standards Project [NETS] & Brooks-Young, 2007).

Some have suggested techniques for teaching critical evaluation; for example, teaching students to ask a series of questions about the website, such as who are the authors; where do they work; what organization, business, or school do they represent; what agenda (if any) does the author have; and so on (e.g., ALA, 2002; Hawes, 1998; NETS & Brooks-Young, 2007). However, until recently none of these suggestions had been tested in an experimental study with elementary-age students.

Recently, we tested the impact of a specific framework—the WWWDOT framework—designed to increase elementary-age students' awareness of the need to critically evaluate websites and improve their ability to do so. In the following section, we briefly describe that study (for a detailed report of the study, please see Zhang & Duke, 2010, 2011). We then describe the WWWDOT framework and how it can be taught through a series of four 30-minute lessons.

### A Brief Summary of Our Test of the WWWDOT Framework

Our study involved 12 fourth- and fifth-grade classes from an urban, a suburban, and a rural school district, for a total of 242 students taught by 6 teachers: Two computer teachers (one with four classes, one with two classes), two full-day classroom teachers, and two classroom teachers who switched students for some subject matters (having two classes each). Six classes received instruction in the WWWDOT framework, and six classes did not receive instruction in the framework. In the experimental group, teachers taught the WWWDOT framework in four 30-minute lessons, described in detail later in this article.

Students who received instruction in the WWWDOT framework became more aware of the need to evaluate information on the Internet for trustworthiness. Many came to realize that information on the Internet is not necessarily accurate or trustworthy. Because this insight is fundamental to students' future learning about and disposition toward website evaluation, we believe this is the most important outcome for elementary-age students.

But notably, students' website evaluation skills also improved in that they took many more factors into consideration when evaluating websites than students in the control group. Experimental group students'

### Pause and Ponder

- There is an enormous volume of information on the Web, which many students have become accustomed to viewing and using for their own education. What is your assessment of the quality of this information?
- When on the Web, there is a temptation for students to grab any content they can use to complete a report or other school assignment, or to jump from page to page, without taking the time to evaluate content. How can we help students to recognize that it is sometimes important to carefully reflect on the trustworthiness of what they are watching, reading and hearing on the Web? How can we help students to recognize times when this is not so important?
- How do you or will you engage your own students in developing critical evaluation skills for Web content?

overall judgment about whether a specific website was trustworthy did not improve—we believe more practice is needed for that—although it did improve for a subset of students (those identified by teachers as being well suited to serve as website evaluation tutors for younger students). Again, more details about the study are available at Zhang and Duke (2010, 2011).

### The WWWDOT Framework

The WWWDOT framework was designed to teach students to attend to at least six dimensions on which that they can collect information to help them evaluate websites:

1. **Who** wrote this and what credentials do they have?
2. **Why** was it written?
3. **When** was it written?
4. **Does** it help meet my needs?
5. **Organization** of the site?
6. **To-do** list for the future.

These dimensions are consistent with expert recommendations in the literature. We chose these specific dimensions over others because we thought they were most appropriate for, and most likely to be useful to, elementary-age students. For example, we have observed that elementary-age students often forget to think about whether the website is a good fit in terms of providing the particular information they need, so we have included the dimension “Does it meet my needs?”

Similarly, we chose not to include a dimension on checking the site against background knowledge because we thought that many elementary-age students' background knowledge is not yet extensive enough to serve as a good check against information on a website. In fact, students' misconceptions (e.g., that the Earth is closer to the sun in the

winter) might lead them to erroneously conclude that a website is inaccurate and thus untrustworthy. We thought that corroboration with other websites (“To-do list for the future”) would be a better framework to emphasize in the elementary years.

We chose to use an acronym, WWWDOT, in hopes that it would help students remember the dimensions on which to evaluate websites, although we also have a sheet they can use that reminds them of those dimensions. Acronyms are commonly used as heuristics to help students remember steps in a reading or writing process (e.g., Graham & Harris, 2005). The following is a justification for each of the six dimensions.

#### ***Who Wrote This and What Credentials Do They Have?***

It is very important to identify authorship and the author's or the organization's credentials when reading on the Internet, where filtering or sanctioning bodies for publishing often do not exist (Burbules & Callister, 2000; Burke, 2000; Eagleton & Dobler, 2007). Examining what perspective(s) the author holds and by what funding source he or she is supported is also crucial.

There are occasions when no author or organization can be identified. In this case, the website content itself could indicate whether the author or organization is qualified to write this. For example, self-contradictions and

spelling and grammatical errors on a website may indicate an unqualified author, or at least that the author was not serious in providing the information.

#### ***Why Was It Written?***

It is important to judge whether the information on the Internet is objective (to the extent that this is ever possible) and accurate (Burbules & Callister, 2000; Hawes, 1998). Identifying the author's writing purpose is crucial because writing purposes to a large extent affect the thoroughness and accuracy of the content.

#### ***When Was It Written and Updated?***

Information and works can be different in terms of timeliness. Some information and works are timeless, such as classic literature. Some have a limited life because of rapid advances in its field or discipline, such as psychology and biology. Some require quick updates, as with news and technology (Harris, 2007). It is important to attend to the date of the information when its timeliness is important (ALA, 2000; Eagleton & Dobler, 2007). Asking “When was it written and updated?” is especially relevant when news and technology-related information is searched.

#### ***Does This Help Meet My Needs (and How)?***

Readers could spend a number of hours reading on the Internet, but not get

*“Findings show that students who received instruction in the WWWDOT framework became more aware of the need to evaluate information on the Internet for trustworthiness.”*

what they originally wanted to find. One reason can be that they do not evaluate the websites they are reading in terms of whether and how they meet their information needs (Choo, Detlor, & Turnbull, 2000; Henry, 2007). Of course, readers first need to know what information they are looking for and then need to evaluate the likelihood that the website will provide that information.

For elementary school students, an additional but important step in evaluating whether a website meets one's needs is to judge the reading level of the materials (Henry, 2007). It can be challenging for elementary school students to locate websites that are written at appropriate reading levels; a question that students should ask as a part of evaluating whether a website meets their needs is, "Is this too difficult for me?"

### **Organization of Website**

One of the challenges of accessing information online is navigating within sites. Not surprisingly, given that text structure knowledge facilitates comprehension of printed text, being aware of the organization of the website helps readers navigate the site, find useful information, and understand the content (e.g., Calisir & Gurel, 2003; Coiro & Dobler, 2007; Rouet & Levonen, 1998). Being aware of where graphs and photos are can also potentially enhance readers' understanding of the information on the website (Baskin, 1997; Card, Mackinlay, & Shneiderman, 1999).

### **To-Do List for the Future**

Good Internet readers employ multiple sources to verify the information they find on the Internet (Zhang & Duke, 2008). Comparing the information a website provides with information from

other websites or print sources is crucial in evaluating the trustworthiness of information. Furthermore, there is often a great deal of information available on any given topic on the Internet.

Readers can easily get disoriented or forget other sources and activities that could help them learn the topic (McDonald & Stevenson, 1996, 1998). Developing a to-do list for future activities while reading on the Internet may help readers manage their learning. The to-do list can include additional websites and other texts to read, and it can also include activities that do not involve further reading, such as asking a librarian a question, sharing what they learned with a family member, and so on.

### **Teaching the WWWDOT Framework**

In our study, the WWWDOT framework was taught in four 30-minute lessons. More instructional time would likely result in stronger website evaluation skill, but, of course, there are many demands on teachers' time. As you are considering how much time to devote to teaching this framework, keep in mind that students, and by extension, teachers, are likely to waste a lot of time and learning opportunities if they are not critically evaluating websites.

In the following sections, we describe four 30-minute WWWDOT lessons as taught by one teacher (not involved in the study), Ms. Kate Thompson, to fourth-grade students.

### **Teacher Preparation**

Ms. Thompson arranged for each of her students to have access to a computer with a fast Internet connection during the lessons. She also made sure that a working Internet browser was installed on the computers to which the students had access and bookmarked a few websites she was going to use. For example, she planned to use websites that focused on immigration, an important topic commonly taught in fourth or fifth grade, and to use some websites that were relatively trustworthy and others that were less so, based on the dimensions in WWWDOT.

### **The Four 30-Minute Lessons**

**An Overview.** Ms. Thompson spent two lessons explaining why students should evaluate websites and teaching the WWWDOT framework. In the other two sessions, students were asked to apply what they learned by evaluating authentic websites using the WWWDOT worksheet and by preparing for and holding a debate about the trustworthiness of specific sites.

**Session One.** Ms. Thompson began by asking her students "Have you read on the Internet before?" Most of her students said yes. Then she asked, "Who can tell me the difference between the Internet and the books you find in the library?" Ava said reading on the Internet needs a computer. Jay said that the stuff on the Internet is free. No one talked about differences in the quality of information.

*"Good Internet readers employ multiple sources to verify the information they find on the Internet."*



Ms. Thompson next told them that they were going to explore a few issues about reading on the Internet. She wrote down the acronym WWWDOT on the blackboard and told the students it is important to know whether the information they read on the Internet is accurate. Ms. Thompson asked her students why that is important. Kevin said, "I want to know what I know is true, like with the election stuff." Ayesha commented on Kevin's answer by saying "but even then, do you know it's true? Can't anyone lie?" Ms. Thompson chimed in and said, "Right, Ayesha, it is important to know that the information on the Internet is not regulated by anyone. The information is sometimes unsanctioned. That means there isn't anyone out there making sure things are true."

Many students were surprised. They talked with each other, trying to find someone who is responsible for the trustworthiness of web content. Some were wondering whether government or courts regulate that. Ms. Thompson stood back and allowed her students to talk among themselves for a few minutes. Then she said,

If we know that there are no rules on the Internet and no one is regulating what people write or say on the Internet, then how can you be sure the things you read on the Internet and the things you put in your school reports are true, and how can you trust what you find on the Internet? I want everyone to think about that and talk to your partner and then share one way that you can make sure what you use can be trusted.

The students talked about strategies such as asking parents and judging whether it makes sense. Selena said information found on Google is good information. Ms. Thompson then introduced the WWWDOT framework and let the students know they were going to use this system/framework

*"Developing a to-do list for future activities while reading on the Internet may help readers manage their learning."*

to think through how they can trust or identify credible information on the Internet. (At this point, some teachers who have taught the WWWDOT framework use hoax websites to underscore the importance of critically evaluating information on the Internet. Ms. Thompson chose to do this at the end of session 2.)

Next, Ms. Thompson explained the WWW part of the framework. She indicated that the question "Who wrote this?" focuses on the authorship of a website. It could be a person or an organization that wrote a website. Sometimes, she explained, a website has the author's name on it and sometimes it does not. If the website was written by a person, the follow-up question should be asked, "What credentials does the author have?" Ms. Thompson explained what *credentials* means.

She also led a discussion with students about where the author's affiliation, occupation, title, and contact information are usually displayed. Ms. Thompson told her students to identify which organization is responsible for the website if there is no author name on the website. If no author or organization name could be identified, she told her students to ask this question: "Does the website content show whether the author or organization is qualified to write this?"

Ms. Thompson began her explanation of "Why was it written?" with an introduction to different purposes for writing, such as to entertain, to share, to educate, to support, to inform, to sell, and to

persuade. Ms. Thompson showed the students several examples, each with different purpose(s), and she asked the students to judge for what purpose(s) the website was written. She also explained that some websites are written with multiple purposes.

Regarding "When was it written or updated?", Ms. Thompson told her students that the importance of the timeliness depends on the topic. She identified different categories of information and told her students that it is especially important to check on the timeliness of news and information on technology. She pointed out to the students that the timeliness of a website also reflects whether the author is still maintaining an interest in the page or has abandoned it.

Ms. Thompson told her students that the last-updated date is usually presented at the bottom of a page or at the top of a page. Ms. Thompson used some of the example websites in explaining this part of the framework. To end the session, Ms. Thompson reviewed key points about the importance of evaluating the trustworthiness of information on websites and the three parts of the WWWDOT framework that she had taught thus far.

**Session Two.** Ms. Thompson began session 2 by telling her students they were going to continue learning the WWWDOT framework and then get to apply the framework to websites. She asked, "Does anyone remember what the letters WWW stand for?"

Lauren answered, "I don't remember what order, but the Ws are who wrote it, when did they write it, and why did they write it." Ms. Thompson praised Lauren's response and wrote down the WWWDOT framework on the blackboard for all students' reference.

Ms. Thompson then explained the *DOT* part of the framework using examples. For "Does the website help meet my needs?", she took three steps in guiding students to evaluate the relevance and trustworthiness of websites. First, she asked students to think about the information they want or need from a website by asking themselves the question, "What is it about immigration that you want or need to know?" Second, she guided students to judge whether the website had the content, accessible to them (e.g., readability), that helped meet their needs. Third, she reminded students that part of what it means for a website to meet their needs is that its information is trustworthy—so they need to use what they learned about WWW to evaluate the website's trustworthiness.

To explain "Organization of website," Ms. Thompson navigated two websites with students and called their attention to the structure or layout of the websites. She showed the students where the tabs were, the sections of the sites, where the graphs and photos were, where the internal and external links were located, and which parts contained the advertisements (if there were any). Then she asked the students to evaluate the usability of the organization, such as whether the website is confusing, clear, difficult or hard to navigate, and so on.

To teach "To-do list for the future," Ms. Thompson highlighted the importance of checking information students find on the Internet against

other sources. She indicated that two things they might want to do after reading a website are (1) find another website to verify the information on the first website, and (2) find a book or other resource in the library to verify the information.

She encouraged her students to think about other things they might want to do next based on their website reading, such as the following:

- Read another part of the website
- Go to an external link on the website
- Ask the librarian a question
- Share what he or she learned with a friend (or family members)

After she finished teaching the *DOT* part of the framework, Ms. Thompson reminded the students of the fact that anyone can put anything they want on the Internet. She told her students that they were going to walk through a website and try to figure out whether they can trust it. She next pulled up a hoax website about "Pacific Northwest Tree Octopus." The students all started talking at once, expressing their doubt about a tree octopus.

Ms. Thompson asked, "Who created this website? How can we tell?" Tom said, "Go to the bottom. Usually there is information about who and when at the very bottom of the page." Among other things, the students looked up the university the author said was associated with the site, only to find out that it does not appear to exist—listings just brought them back to the Tree Octopus site. Students ultimately recognized that this was a hoax site, underscoring for them how important it is to evaluate the trustworthiness of information found on the Internet.

**Session Three.** Ms. Thompson asked her students to remind the group

what each of the letters in WWWDOT stands for. Then she explained that they were going to use WWWDOT to evaluate three websites on the Underground Railroad. She introduced the Underground Railroad to her students and asked her students to ask themselves: "What is it about the Underground Railroad that I want to know?" Then, she asked her students to evaluate the three websites using WWWDOT sheets. (Ms. Thompson had opened the three websites on the computers the students were using before the class started.) She said:

Use your worksheet and refer to the board if you need to. [Ms. Thompson had written WWWDOT and what each letter stands for on the board.] I will be here when you have questions, but I really want you to try this on your own. Work through the worksheet and see what you find. Remember, you are supposed to judge the websites for trustworthiness.

See Figures 1 and 2 for sample WWWDOT worksheets.

**Session Four.** After the students finished evaluating the three websites and completed a WWWDOT worksheet for each website, Ms. Thompson asked students to discuss which one of the three websites was the most trustworthy and which one was the least (some teachers frame this as a debate). To make sure the students grounded their statements in evidence, Ms. Thompson said, "I would like you to really think about the three websites you visited. You can look at your worksheets. I would like you to discuss which are the best and which are the worst websites. Also, try to give specific reasons for your opinions."

Following are some excerpts from the students' debate:

Cassie: I looked at the second-grade one and it is a real school [www2.lhric.org/pocantico/

**Figure 1** A Student's WWWDOT Worksheet on the Most Trustworthy Website

Name \_\_\_\_\_ Date \_\_\_\_\_  
 URL www.NationalGeographic.com  
Rail Road  
 WWWDOT: A Tool for Supporting Critical Reading of Internet Sites

Who wrote this (and what credentials do they have?)  
National Geographic  
Well known, magazine

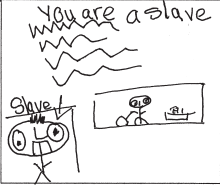
Why did they write it?  
To teach people about the  
underground railroad. To show people  
real things.

When was it written and updated?  
1996-2009

**Figure 2** A Student's WWWDOT Worksheet on the Least Trustworthy Website

If I wanted to learn about  
the underground railroad and slavery,  
it would help me.

Organization of site (you can write and/or draw.)  
Its Organized  
Its interesting  
Tons of real life  
things.



To do list for the future  
Maybe someday I'll use it.  
Good for reports or school  
work. Would not go for fun.

tubman/timeline2/timeline.htm, written by a second grader]. There is a Ms. Taverna at that school, so I know that information is true.

Katie: OK, it might be true. But a second grader wrote it. How

good is it for us? We are in fourth grade.

...

Cassie: Yeah, but they must have gotten the information from somewhere, probably a teacher.

Juan: OK, but do we know where that teacher got the information? What if the teacher got it off the Internet from, like, the tree octopus?

...

Paula: Does anyone find it suspicious that there was no date on the Rochester one?

Ms. Kate: Why does that bother you, Paula?

Paula: If the information is important to go through all the trouble and money to make the website in the first place, they should care enough to put the date on it.

Ava: And without the date, we don't know if it is old information or new.

...

Jon: If I was going to vote, I would say the one from National Geographic.

Ms. Kate: Why is that, Jon?

Jon: I know National Geographic. I watch them on TV and I have books by them. Besides, there are tons of their magazines at school.

Mason: But couldn't someone steal their name and the look and put it on the Internet? What about the ads?

Cassie: I don't know. I think if we had to vote, I'd say the truest is the little second-grade project but the best was National Geographic.

Ayesha: Yeah, but seriously, do you want to trust second graders to teach you something that you need to get a good grade on?

...

Luke: I think I would vote for National Geographic, too. It was written just a couple of months ago and on their website I can find what I want to read.

Over the course of the debate, students invoked many parts of the WWWDOT Framework and demonstrated a critical stance toward information. As noted earlier, additional sessions beyond the initial four would likely further strengthen students' website evaluation skills.

### Suggested Strategies for Assessing Students' Awareness of the Need to Critically Evaluate Websites and Their Skill at Doing So

As in many areas of instruction, assessment before and during WWWDOT instruction may be helpful. One area for assessment regards students' awareness of the need to critically evaluate websites. You may be able to learn about this by observing students, for example, noticing what students look at on websites and what sites they select for projects. Interviews or informal conversations with students may be revealing as well. A brief questionnaire may also be informative. For example, the questionnaire we used in our study included these items, among others:

The information on the Internet is always accurate and true.

- Strongly agree
- Agree
- Neither agree nor disagree

- d. Disagree
- e. Strongly disagree

These same five choices were also offered for the following items:

- I always look on the website and see who created it.
- I always look on the website and see when the information on the site was created or updated.
- While browsing a website, I usually can tell how the website is organized.
- As long as the website contains information I am looking for, I do not care who wrote the website.
- While I read things on the website, I am aware of the author's purpose of writing/creating it.

As noted earlier, we believe that the awareness that information on the Internet is not necessarily accurate and trustworthy and the disposition to thus critically evaluate websites is the most important outcome for elementary-age students. However, you may also want to assess students' actual skills in evaluating websites as sources of information. Examining students' WWWDOT worksheets may be one way to do this.

If you are looking for a somewhat more formal approach, you may want to consider a Single Website Evaluation Task, such as one of the two that we used in our research, which began, "Suppose that you are looking for information about pandas on the Internet and come across the following website: [www.cnd.org/Contrib/pandas/...](http://www.cnd.org/Contrib/pandas/)" You may notice that students grow in their ability to justify their judgment about a site. For example, Liz, a fifth grader, wrote on the Single Website Evaluation Task before she received instruction in the WWWDOT framework:

I do not think this is a good website because there are spams all around, like Congrats! You have won our

hourly Prize!, so if you click on one of those, it could mess up your whole computer.

After receiving instruction, she wrote the following when asked to evaluate another website:

On this website, they spell behavior two ways. The last time it has been updated is January 14, 1999, created on May 17, 1995. I have no idea what the department of EECE, UNM is [the author's affiliation written on the website]. The person who make this website put the wrong homophone in. It should be to, not too. The organization isn't bad, could be better. I would probably take some of this information off this website and then clarify it on a trustworthy website, like National Geographic.

A Website Ranking Task may also be a useful tool for assessing students' website evaluation skill. In this tool, students are given a set of websites and asked to rank order them for most trustworthy to least trustworthy and then to explain why the most trustworthy and least trustworthy sites were designated as such. Before receiving the instruction, Courtney's reasons for choosing one as the most trustworthy were that there were "a lot of information and a lot of links." Her reasons for choosing another as the least trustworthy were that there was "little information, only a few links." After receiving instruction in the framework, Courtney provided a very different analysis:

I trust A the most because it is created by the American Lung Association. It was created to educate, not to sell. It also says that it was updated Nov. 2006. It does meet my needs by giving me facts on the respiratory system. It is also organized nicely.

I choose this one [B] as least trustworthy because it is created by some one called Steve Paxton and it gives no information on who he is on this page. It does not say when it was updated. It has too many links and I think it is kind of hard to navigate through.

## TAKE ACTION!

After reading about WWWDOT, how can you quickly implement the strategies outlined in your classroom?

1. Determine whether your students would benefit from instruction in WWWDOT. You might use tools such as those described in the final section of the article, or you might ask general questions such as, "How many of you use the Internet at school? At home?" "How do you know whether information is true or trustworthy?" "What kinds of questions do you ask yourself when reading information from the Internet?"
2. If you decide to teach WWWDOT, make sure you have access to hoax sites (e.g., [zapatopi.net/treeoctopus/](http://zapatopi.net/treeoctopus/)) and to all the materials and types of websites mentioned in the article.
3. Plan at least four 30-minute sessions to teach the WWWDOT framework, two focusing on elements of the framework and two engaging students in evaluating websites and debating their trustworthiness. See the article for specific suggestions. Be sure to give students opportunities to explore and talk about websites in small groups. We have found that students are capable of challenging each other for clarification of opinions or beliefs about Web content.
4. Evaluate the impact of your instruction, adding lessons or strategies as needed.
5. Continually review and reinforce the habit of critically evaluating websites—as well as print materials—as sources of information.

Although these responses are not ideal (e.g., she holds on to the notion that "too many links" is inherently bad), they certainly reflect substantial improvement in terms of the number and type of considerations that went into her evaluation of a website as a source of information.



## A Critical Need

Even our youngest students have unprecedented access to information. Although in large measure this should be viewed as a positive development, the unfiltered nature of information on the Internet creates a new urgency for teaching students to critically evaluate sources of information. The WWWDOT framework provides a research-tested approach to enhancing students' awareness of the need to and skill in critically evaluating websites as sources of information. This kind of instruction is essential to helping students make wise use of the riches of our Information Age.

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## Supporting Information

Additional supporting information may be found in the online version of this article:

**Research Supplement:** Overview of the Study.

## MORE TO EXPLORE

### ReadWriteThink.org Lesson Plan

- “Skimming and Scanning: Using Riddles to Practice Fact Finding Online” by Nancy J. Kolodziej

### IRA Journal Article

- “SEARCHing for an Answer: The Critical Role of New Literacies While Reading on the Internet,” by Laurie A. Henry, *The Reading Teacher*, April 2006

### Even More!

- “Help Children Play and Stay Safe Online” (Parent & Afterschool Resources): [www.readwritethink.org/parent-afterschool-resources/tips-howtos/help-children-play-stay-30668.html](http://www.readwritethink.org/parent-afterschool-resources/tips-howtos/help-children-play-stay-30668.html)