Britannica

WHITE PAPER SERIES

BUILDING CAREER AND COLLEGE READINESS SKILLS

HOW TO EVALUATE ONLINE SOURCES

B

knowledgeable

INTRODUCTION

EDUCATORS ARE HIGHLY FAMILIAR WITH THE ADVANTAGES AND CHALLENGES ASSOCIATED WITH USING THE INTERNET AS A LEARNING TOOL

Empowering students to access desired information in mere seconds offers an opportunity to enrich curiosity and knowledge like never before. However, most agree that the immediacy at which information can be obtained via commonly used search engines doesn't always produce the best outcome. In fact, many students unquestioningly accept the legitimacy of the online sources they find, instead of critically scrutinizing the quality and accuracy that 21st century information literacy demands.

This white paper is designed to help educators address this issue. It presents a suggested lesson for teaching students how to effectively evaluate the online sources they come across while working on homework assignments, school projects, or personal knowledge-building.

Within the following lesson, you will find step-by-step guidelines for introducing the topic and illustrating how students can use one of the tools provided to conduct an evaluation of online sources. This lesson, which is tied to the Common Core standards, incorporates Britannica Digital Learning's online information resource, *Britannica School*, as one model for applying the rubric and building these important digital literacy skills. Educators can use the lesson as written or modify it for other sources of online content, other evaluation tools, or students at other grade levels.

BUILDING SKILLS FOR OBJECTIVE EVALUATION OF ONLINE SOURCES
GRADE LEVEL 6-12

OBJECTIVE

Students Will:

Be able to objectively evaluate online sources for credibility and accuracy before using them for research.

Length: 1-2 class periods

KEY STANDARDS ADDRESSED
(examples):

CCSS.ELA-LITERACY.CCRA.W.8 Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

additional standards addressed:

CCSS.ELA-LITERACY.CCRA.R.1
Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

CCSS.ELA-LITERACY.CCRA.R.7
Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

CCSS.ELA-LITERACY.CCRA.SL.1
Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

CCSS.ELA-LITERACY.CCRA.SL.4
Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

MATERIALS

Copies of an appropriate tool for evaluating online sources. Reproducible templates of possible tools to use are provided in Appendix A.

Access to *Britannica School* or other online sources in the classroom, library, computer lab, or outside of the school setting.

ADDITIONAL NOTES

To simplify the process for younger students or for students who need additional support, please consider the following suggestions:

a. Complete Step #4 before Step #3 to give students an understanding of how the ratings are applied before they analyze the rating scale itself.

b. In Step #4, skip the discussion of non-whole number scores – only allow students to give scores of 0, 1, 2, 3, or 4; ask students to choose the score that is the 'best fit.'

c. In Step #5, ask students to evaluate fewer than 5 sources, and consider doing at least one of the evaluations together as a group before asking students to work independently.

PRE-LESSON PREPARATION

1. Make one of the following evaluation tools available to each student:

   a. **Source Educational Evaluation Rubric** (SEER) published by Turnitin
   www.turnitin.com

   b. **The Five W's of Web Site Evaluation**
   (©2001-2009. Kathy Schrock)

   c. **Internet Content Checklist**
   This checklist is available through Britannica School and is based on the web site "Evaluating Information Found on the Internet" written by Elizabeth E. Kirk and published by Johns Hopkins University's Sheridan Libraries
   http://guides.library.jhu.edu/evaluatinginformation

2. Develop evaluations of two online sources using the evaluation tool you've selected to share during the lesson. *(It is best to choose sources on opposite ends of the rating scale; e.g., Britannica School from Britannica Digital Learning and Wikipedia.)* If you do not have access to *Britannica School* through your school or library, you can access it temporarily for this lesson. **http://school-preview.eb.com**

   USER NAME sepreview
   PASSWORD sepreview
   E-MAIL edsupport@eb.com
   (*to extend this preview*)

PROCEDURES

1. In a large group, ask students to list the online sources they most often use when conducting research for an assignment or project. Collect and record at least 5-8 sources based on students suggestions.

2. Tell students that a key component of choosing appropriate sources requires understanding whether a source is credible and accurate. Ask students how they know whether the sources

they currently use fit these criteria. Collect students' ideas about how they might best evaluate online sources for credibility and accuracy and the things they would look for to make this determination.

3. Introduce students to an evaluation tool from the three listed above or another you prefer either by projecting it on a whiteboard or distributing hard copies to each student. (This lesson uses the Source Educational Evaluation Rubric (SEER) for illustrative purposes but the procedure can be easily adapted to another evaluation tool if preferred).

    a. Begin by reviewing the 5 categories for assessing online sources in the SEER rubric: authoritative, educational value, intent, originality, and quality. Discuss each term to ensure that students understand the meaning of each one, particularly in this context.

    b. Divide the class into 5 smaller groups. Assign each group one category and ask them to closely read the 5 different ratings in that category that a source could receive. Specifying an appropriate timeframe within which the groups will do this activity, ask each group to create a list of items that might be present in an online source that would make it eligible to

receive the highest rating in this category; e.g., what does the 'perfect' source look like? Also, ask each group to create a list of at least 3 different questions that students could ask before checking the relevant box for that category. For example, the questions for "authoritative" might include: Do the authors of the source have expertise in the area they are writing about? Are the sources available well cited? Is the source regarded as reputable? For the "originality" category, questions might include: Does the source contain original content? Does the source provide citations for any content that is not original? Where does the content of the source come from?

    c. When the time limit for the activity is up, ask each group to share with the rest of the class their list of items that may be present in a 'perfect source' as well as the list of questions to ask while making an evaluation in their assigned category. Create and record their responses on the whiteboard or a flipchart.

4. Using the information you developed in #2 of the pre-lesson preparation, share these examples with the students to demonstrate the evaluation and scoring procedure. Tell them that when assigning the rating for a source within a particular category, their ratings may fall between a 3 and a 4, for example, and can be given a numerical score that reflects this; e.g., a highly credible source may not receive a perfect score of 4 but rather a 3.8 or 3.5 depending on how closely it fits the given criteria.

5. Divide the class into five groups again. Provide students in each group with the name of an online source you'd like them to evaluate using the SEER tool (or another evaluation tool you prefer), along with blank copies of the rating chart (Appendix B). This rating chart corresponds to the SEER rubric but can be adapted to any other evaluation tool you prefer.

Use the sources from the list generated at the start of the lesson or provide others, but be sure to give each group a different source and include sources that will produce a diverse range of scores. Allow students enough time to evaluate each source and calculate their rating scores. Remind students that ratings will be discussed when completed and that they should be prepared to explain their rationale for giving a score to the source they were assigned.

PROCEDURES (contd.)

They should also make a note of instances in which they struggled to score a source in a given category. (The evaluation/scoring part of the lesson can be completed in small groups or individually, either in class or as homework. Having each student complete a rating sheet will provide more data and also illustrate how people may rate a source differently even though they are using the same rubric.)

6. If students have completed their evaluations individually, ask them to come up with a single rating for each source in their group. Ask individuals to note instances in which classmates convinced them to change the ratings they gave or when there was strong disagreement around scores.

7. Bring the class together to share their group ratings. Have each group post their ratings on a chart (see Appendix C for a chart template you may want to use for this part of the lesson). Discuss any 'outliers' in the data – ratings that are vastly different and stick out from the group. Ask students to comment on which sources were easiest to rate as well as which ratings were most challenging and why.

8. Discuss as a group how the rating activity was useful in assessing the credibility and accuracy of online sources and how students can use this information as they do future research online.

ASSESSMENT

→ During the class and small group discussions both before and after completion of ratings, observe students and note their level of participation in discussion, clarity of reasoning when explaining their thinking with others, and overall understanding of the evaluation process.

→ Collect students' ratings charts with notes as a work product.

→ Ask students to complete an additional rating of an online source (one they may or may not be familiar with) on their own to hand in. Require students to explain, in writing, the score being given for each key category, as well as the overall score. Ask students to explain why or why not this source would be appropriate to use for research (and if so what kind of research would be most appropriate).

APPENDIX A
SOURCE EDUCATIONAL EVALUATION RUBRIC (SEER)

	HIGHLY CREDIBLE ◀········ ········ CREDIBLE ·········· ·········▶ DISCREDITABLE				
	4	**3**	**2**	**1**	**0**
AUTHORITATIVE	Highly-regarded site that is referenced and linked to by others. Information is well-referenced, cited, and written by authors with expertise in the content area.	Well-regarded site that is well-known in the category. Information is referenced and cited, with experts generating content.	Regarded site that has reputable information that is referenced and cited.	Site is slightly regarded – does not necessarily have information that is researched, referenced, or cited.	Site is not regarded – information or resources provided are not researched, referenced, or cited.
EDUCATIONAL VALUE	Site is a leading source of content that exceeds instructional goals.	Site is a regarded source of content that meets instructional goals.	Site content meets instructional goals.	Site content does not meet instructional goals.	Site content is inappropriate or actively subverts instructional goals.
INTENT	Site is a highly-respected source of content provided to inform users.	Site is a well-regarded source of information whose job is to inform.	Site provides content to inform users.	Site promotes content; the goal of the site is not to "inform" users.	Site actively sells content.
ORIGINALITY	Site is a primary source of original content and viewpoints.	Site offers original content and viewpoints.	Site offers some original content, combining it with repurposed content.	Site aggregates or repurposes content.	Site aggregates or repurposes content without appropriate citation or references.
QUALITY	Site content is high quality (vetted, researched, and informed) and enough content is provided to establish good coverage.	Site content is of good quality and there is a good content area coverage.	Site content is of quality and there is some broader content coverage.	Site content quality is lacking and good content is in limited quantity.	Quality of content is questionable. Lack of quality information available.

The SEER rubric is published by Turnitin (www.turnitin.com), a service of iParadigms, LLC, 1111 Broadway, Oakland, CA 94607.
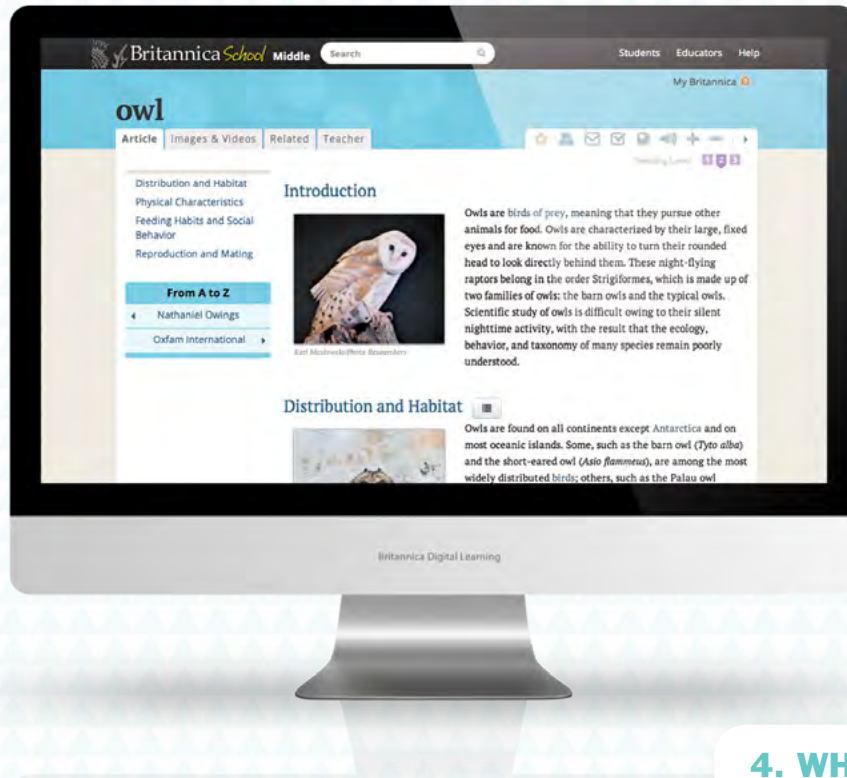
A BREAKDOWN

THE FIVE W'S OF WEB SITE EVALUATION

1. WHO...

...Wrote the pages and are they an expert? Is a biography of the author included? How can I find out more about the author?

5. WHY...

...Is this information useful for my purpose?

...Should I use this information?

...Is this page better than another?

2. WHAT...

...Does the author say is the purpose of the site?

...Else might the author have in mind for the site?

...Makes the site easy to use?

...Information is included and does it differ from other sites?

4. WHERE...

...Was the site created?

...Does the information come from?

...Can I look to find out more about the sponsor of the site?

3. WHEN...

...Was the site created?

...Was the site last updated?

INTERNET CONTENT CHECKLIST

"Caveat Lector" means "Let the reader beware." When you are doing research for a report or a project, it is important to have a variety of reliable, accurate, unbiased, and current sources of information. Always take the time to take a critical look at your Internet sources. This checklist will ensure that the sources you are using are the very best for your topic.

RESEARCH TOPIC: _____

WEB SITE NAME: _____

WEB SITE ADDRESS: _____

CRITERIA	QUESTIONS	YES	NO
AUTHORSHIP	Is the author an authority or a reliable source on your subject?		
PUBLISHING BODY (Publisher)	Is the Web site from a recognized organization or publisher?		
POINT OF VIEW OR BIAS	Is this Web site neutral and unbiased?		
REFERRAL TO AND/OR KNOWLEDGE of the Literature and Verifiability of Details	Does the Web site include a bibilography and acknowledge its sources? Can the information on the Web site be confirmed or verified?		
CURRENCY	Is the information current and up-to-date?		
CONCLUSION	Is this Web site a good source of information for this research project?		

APPENDIX B

EVALUATING ONLINE SOURCES
RATING CHART TEMPLATE (BASED ON THE SEER RUBRIC)

NAME: _____ DATE: _____

ONLINE SOURCE EVALUATED: _____

Enter the score for each rubric section in the appropriate column on this rating chart. Use the space at the bottom and on the back of this page to write any notes that you may need to explain your ratings to classmates later.
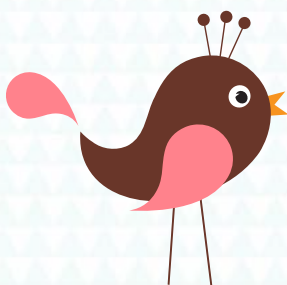
	HIGHLY CREDIBLE ◀·········	CREDIBLE ·········▶		DISCREDITABLE	
	4	**3**	**2**	**1**	**0**
AUTHORITATIVE Rating ___	Highly-regarded site that is referenced and linked to by others. Information is well-referenced, cited, and written by authors with expertise in the content area.	Well-regarded site that is well-known in the category. Information is referenced and cited, with experts generating content.	Regarded site that has reputable information that is referenced and cited.	Site is slightly regarded – does not necessarily have information that is researched, referenced, or cited.	Site is not regarded – information or resources provided are not researched, referenced, or cited.
EDUCATIONAL VALUE Rating ___	Site is a leading source of content that exceeds instructional goals.	Site is a regarded source of content that meets instructional goals.	Site content meets instructional goals.	Site content does not meet instructional goals.	Site content is inappropriate or actively subverts instructional goals.
INTENT Rating ___	Site is a highly-respected source of content provided to inform users.	Site is a well-regarded source of information whose job is to inform.	Site provides content to inform users.	Site promotes content; the goal of the site is not to "inform" users.	Site actively sells content.
ORIGINALITY Rating ___	Site is a primary source of original content and viewpoints.	Site offers original content and viewpoints.	Site offers some original content, combining it with repurposed content.	Site aggregates or repurposes content.	Site aggregates or repurposes content without appropriate citation or references.
QUALITY Rating ___	Site content is high quality (vetted, researched, and informed) and enough content is provided to establish good coverage.	Site content is of good quality and there is a good content area coverage.	Site content is of quality and there is some broader content coverage.	Site content quality is lacking and good content is in limited quantity.	Quality of content is questionable. Lack of quality information available.

9

APPENDIX C

EVALUATING ONLINE SOURCES
CUMULATIVE CLASS RATING CHART

STUDENT GROUP NUMBER	ONLINE SOURCE EVALUATED	AUTHORITATIVE	EDUCATIONAL VALUE	INTENT	ORIGINALITY	QUALITY	TOTAL RATING
1							
2							
3							
4							
5							

ADDITIONAL INFORMATION

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