Lesson 6

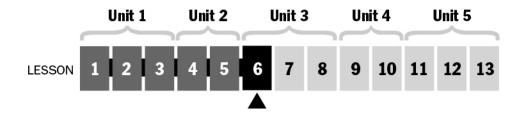
Conducting Effective Online Research

In this lesson, students consider what they already know about online research. Through an interactive presentation, they learn about the effective use of search engines and how to evaluate a site to determine if it is a reliable source. Students practice developing study questions as a technique for preparing for a quiz, and then take a brief quiz on what they have learned.

Advance Preparation

- Class Period 1 includes an interactive PowerPoint presentation. Before class, prepare the notes you will use during this presentation using Teacher Resource 6.2, Interactive Presentation Notes and Instructions: Using the Internet for Research.
- The optimal way to present the interactive presentation in this lesson is to use an interactive whiteboard, so that you can visit various websites and highlight examples of what the presentation is explaining. As an alternative, you could cue a few websites to show students from your computer using a projector. In this case you will need to briefly collapse the PowerPoint in order to show the websites.
- You will need to use a interactive whiteboard or computer and projector to display two sites to your students as part of Lesson Step 3. Double check to make sure these sites (http://www.whitehouse.gov/ and http://www.whitehouse.net/) can be accessed from your computer before beginning the lesson.

This lesson is expected to take 2 class periods.



Lesson Framework

Learning Objectives

Each student will:

- Summarize how to tell what the goal of a website is
- Explain how to determine whether a website is expressing opinion or fact
- Distinguish between legitimate, reliable online resources and those that are not
- Display understanding of how to conduct online research effectively
- _ Describe how to cite sources properly

Academic Standards

Effective Online Research is a cross-cutting skill that applies to a ranges of inquiry activities, academic projects and assignments.

For a relevant correlation, see the 21st century skills listed below and consult the P21 Skills Frameworks, in particular Information Literacy (http://www.p21.org/overview/skills-framework/264).

21st Century Skills

This lesson focuses on the following 21st century skills:

- Technological literacy: Students demonstrate comfort with technology used in college and careers
- Critical thinking and communication skills: Students demonstrate listening, speaking, reading, writing, presenting, and non-verbal communication that clearly demonstrates their skills and knowledge

Assessment

ASSESSMENT PRODUCT	MEANS OF ASSESSMENT
Quiz on using the Internet for research (Teacher Resource 6.3)	Answer Key: Quiz on Using the Internet for Research (Teacher Resource 6.4)

Prerequisites

- Basic familiarity with navigating online
- _ Active listening skills

Instructional Materials

Teacher Resources

- Teacher Resource 6.1, Guide: Conducting Online Research
- Teacher Resource 6.2, Interactive Presentation Notes and Instructions: Using the Internet for Research (includes separate PowerPoint file)
- Teacher Resource 6.3, Quiz: Using the Internet for Research
- _ Teacher Resource 6.4, Answer Key: Quiz on Using the Internet for Research
- Teacher Resource 6.5, Key Vocabulary: Conducting Effective Online Research
- Teacher Resource 6.6, Bibliography: Conducting Effective Online Research

Student Resources

- Student Resource 6.1, Reading: Using the Internet for Research
- Student Resource 6.2, Worksheet: Using the Internet for Research

Equipment and Supplies

- Whiteboard or blackboard
- LCD projector and computer for PowerPoint presentation
- interactive whiteboard (optional)

Lesson Steps

CLASS PERIOD 1

STEP 1, THUMBS UP, THUMBS DOWN CONDUCTING ONLINE RESEARCH

10 minutes

SET-UP

Review Teacher Resource 6.1, Guide: Conducting Online Research.

PURPOSE AND CONTEXT

In this short activity, students address some possible assumptions about Internet sources in preparation for learning how to research effectively online.

INSTRUCTION

- Begin class by explaining that you will read several statements aloud. Students need to listen carefully
 to each statement and determine if they think the statement is true or false.
- Read the first statement. If students think the statement is true, they should give a "thumbs up." If they think the statement is false, they should give a "thumbs down." If they aren't sure, ask them to give a "shaky hand" or "so-so" gesture. Repeat this process with the rest of the statements.
- Tell them that they will get to check their responses in the next activity. Do not share the answers with them yet.

DIFFERENTIATION

Have the statements translated into students' primary language(s) and distribute them as a worksheet to help students with limited English to participate fully.

Take this opportunity for direct vocabulary instruction. Identify words from the true/false activity and/or the presentation that may be unfamiliar to both English learners and non-English learners. Try multilingual vocabulary building. For example, state a vocabulary word in English and define it, and then ask an English-fluent bilingual student to translate the word into Spanish, Vietnamese, etc., for other less English-fluent students. This helps the less fluent students to understand the vocabulary better, exposes English-speaking students to words in other languages, and challenges the bilingual students to make sure they fully understand the words they are translating.

STEP 2, PRESENTATION
USING THE INTERNET FOR RESEARCH

30 minutes

SET-UP

Before this class period begins, review Teacher Resource 6.2, Interactive Presentation Notes and Instructions: Using the Internet for Research. It may be helpful to print the resource out; it contains suggestions for activities to accompany particular slides.

Determine the citation format you want students to use. If you do not have a preference, consult with the English/Language Arts department about their preferred format.

You will also need to prepare copies of Student Resource 6.2, Worksheet: Using the Internet for Research.

PURPOSE AND CONTEXT

This activity introduces students to basic Internet research skills and focuses on the importance of seeking legitimate and reliable online sources.

INSTRUCTION

- Have students read through Student Resource 6.2, Worksheet: Using the Internet for Research, so that they will know what information to look for in the presentation. Also remind them to keep their true/false responses in mind as they watch (or read).
- Show the presentation (or have students read Student Resource 6.1). Use the suggestions in Teacher Resource 6.2, to stop at key points and conduct brief activities with the students. This will help students understand the content and help to keep them engaged with the material.
- Once the presentation is complete, revisit the true/false questions. For each one, ask for a show of hands to see who thinks the statement is true and who thinks it's false now that they have seen the presentation. Share the answers from the "Answer Key" section of Teacher Resource 6.1. Use this time to clarify any misconceptions.
- Remind students that they will have a quiz on this material in the next period, so they should put their worksheet in their notebook and use it to study for the quiz.

DIFFERENTIATION

If you have a large number of English learners, utilize the "Stop and Summarize" strategy rather than having students read or view the slides as described above. Put students into groups. Make sure that each group has at least one student who is a strong English language speaker. Ask students to read the first slide (or page of the reading) silently. Then work together to write a one-sentence summary of that slide (or page). While students are doing this, circulate through the classroom to make sure students understand what to do. Shift to the next slide or ask students to turn to the next page. Have them repeat the read-stop-summarize process. Use this process to work through the entire reading. Once students have finished, review their summaries before they complete the worksheet. This approach will take additional class time, but ensures that students fully comprehend the passage.

As an alternative, put students in pairs or small groups, making sure each group has at least one bilingual student with good English skills. Have the worksheet translated into students' primary language(s). View the presentation as a class (or have students read it in their groups) and ask students to work together in their groups to complete the worksheet in English.

STEP 3, GUIDED PRACTICE RECOGNIZING A LEGITIMATE SITE

10 minutes

SET-UP

Prepare to display the actual White House site (http://www.whitehouse.gov/) and the fake site (http://www.whitehouse.net/). Make sure to keep the focus on the home page for each site, rather than moving through different pages on each site.

Note: The fake White House website changes on a regular basis, so you should check what it looks like on the day you do this activity so you are prepared. (Try copying and pasting the address more than once into the browser if the site claims to have been hacked.) The site is an obvious joke, so recognize that students will probably catch on quickly to which one is fake. However, the goal should be to get them to apply the specific tools they learned from the PowerPoint to evaluate the site thoroughly.

PURPOSE AND CONTEXT

The purpose of this activity is to have students apply what they just learned about using the Internet by evaluating two websites and determining which one is reliable.

INSTRUCTION

- Tell students that they are going to practice identifying whether or not a site is legitimate. Explain that you are going to show two websites—one which is legitimate and one which is not. Students need to identify specific clues that tell them which site is legitimate.
- Display one site and give students a moment or two to look at it. Then display the other site and give students a moment to look at that one. Ask students to vote on which site is the real one.
- Students are likely to recognize very quickly which site is false, since the false site often includes statements that the White House has been re-painted a different color, or that the president has decided to sell advertising space on the lawn, etc. Acknowledge these obvious clues, but display the fake site again and push students to look for more subtle clues. Clues to review include:
 - The domain is .net, while the real site's domain is .gov. All major US government sites are .gov.
 - The site frequently mentions President Bush as the current president.
 - The site typically includes unlikely or even silly suggestions about "current events" at the White House.
 - The site doesn't have any photographs of anyone who is currently in the government displayed.

- The menu links on the side include something that says "Whodunit," which is not a typical menu link.
- Then display the real site. Point out that it has the correct domain (.gov) and refers to the correct president being in office, both in words and pictures. The current events and topics look plausible.
- A viewer can substantiate the veracity of various news stories by looking at sites for reputable newspapers.
- Emphasize to students that most "fake" sites are not this obvious, so it's important for them to look closely at a site before they use it for a resource.
- —At the end of the class period, encourage students to take time at home to review their notes (Student Resource 6.2) to prepare for the quiz. They can also review the presentation itself by reading Student Resource 6.1, Reading: Using the Internet for Research.

CLASS PERIOD 2

STEP 4, QUIZ REVIEW
USING THE INTERNET FOR RESEARCH

15 minutes

SET-UP

Have students take out their worksheets from the previous period to use as review aids for the quiz.

PURPOSE AND CONTEXT

At the beginning of class, give students several minutes to review their worksheets on Internet research. By doing so, they learn an effective technique for studying for quizzes and tests.

INSTRUCTION

- Have students pair with a neighbor so they can review information on Internet research together.
- Let students know that the quiz they will be taking consists of short-answer questions. (Offer an example of a short-answer question similar to one found on the quiz, if necessary.)
- Instruct pairs to come up with three potential questions they think might be asked on the quiz. After pairs have devised their questions, have them team up with another pair and quiz each other.
- Once groups have finished, have students return to their seats and prepare to take the quiz.

DIFFERENTIATION

Initially, pair students homogeneously and allow them/encourage them to review for the quiz in their primary language. Divide the pairs and reassign them to work with a new partner. Make sure English learners' new partners have good English skills. In these new pairings, ask students to work together to brainstorm potential questions. Follow the rest of the instruction steps as described.

STEP 5, QUIZ

USING THE INTERNET FOR RESEARCH

35 minutes

SET-UP

Prepare copies of Teacher Resource 6.3, Quiz: Using the Internet for Research.

PURPOSE AND CONTEXT

The purpose of this activity is to have students apply what they have learned about Internet research and web resources. By solidifying their understanding of what makes a reliable web resource, they will be prepared for future research assignments.

INSTRUCTION

- Have students complete the quiz.
- After students have finished, collect quizzes for assessment with Teacher Resource 6.4, Answer Key: Quiz on Using the Internet for Research.
- Then, go over each quiz question as a class. Call on volunteers to share what they believe to be the correct responses. Clarify any questions or misconceptions students may have about this material.
- —As the class period comes to an end, point out that students should be able to use this information in all of their classes. They will probably need to do research in their English or history classes, and all of these guidelines for effective online research apply to those assignments as well. Let students know that in the next lesson they will be using these research skills to help them learn more about possible future careers.

DIFFERENTIATION

Have the quiz translated into students' primary language(s) but ask them to respond in English.

If your class includes a large number of newly arrived students or students with very limited English, provide a revised version of the quiz for them. The quiz should cover the same content, but ask questions that are easier for students with limited English to answer. For example, adjust questions to offer more "yes" or "no" answers or revise questions so they can be answered with a short phrase

rather than complete sentences. You can also revise the quiz to provide sentence frames for English learners to complete.

Extensions

Enrichment

— Have students test several commercial and nonprofit job search websites, such as Monster.com or CareerBuilder.com, and Idealist.org and OpportunityKnocks.org, respectively. Then have them write a short comparative analysis. How do the commercial sites compare to the nonprofit ones? Which site is the most user-friendly? Which one turned out the best results for your searches? How could the weaker sites improve?

Cross-Curricular Integration

English/Language Arts: Have students practice their research skills by conducting a research assignment on a topic of high personal interest. For example, students could research a controversial issue that matters to them, the biography of a person they admire, the history of a sport or activity they enjoy (the history of video games, the history of basketball), etc. Give students specific guidelines about the number of resources they should obtain and the types of bibliographic information and notes they need to obtain. Then give students class time to conduct their research. Have students turn in their research notes and bibliographic information to you for assessment, and allow students to give a brief oral summary to the rest of the class on what they learned through their research.