



LESSON PLAN

Level: Grades 7 to 12
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This lesson was produced created with the financial assistance of the Canadian International Development Agency.

Finding and Authenticating Online Information on Global Development Issues



This lesson is part of USE, UNDERSTAND & CREATE: A Digital Literacy Framework for Canadian Schools: <http://mediasmarts.ca/teacher-resources/digital-literacy-framework>.

Overview

In this two-day unit, students learn strategies for using the Internet effectively to research global development issues. Students discover how to determine the truth and accuracy of online information and learn effective ways to obtain balanced sources of information. Students learn to ask, and search for answers to, the questions: Who is presenting this information and why?

Learning Outcomes

Students will demonstrate the ability to:

- find various sources of online information and determine which is most appropriate for use for a variety of purposes
- apply different search skills to researching a global development topic
- evaluate online information on a global development topic
- find multiple sources of information on a global development topic and determine which is most appropriate for a variety of purposes

Activities Overview

Day One: Effective Searching

Activities:

- a) Class discussion and definitions of “developing nation” and “global development” (*optional*, 20 minutes)
- b) Class discussion: what is “good” online (20 minutes)
- c) Effective search techniques (35 minutes)

Day Two: Purposes and Uses of Online Information

Activities:

- a) Review of *Evaluating Online Information* handout (20 minutes)
- b) Class discussion: why things are online (25 minutes)
- c) Evaluating an example of persuasive information (30 minutes)

Preparation and Materials

- Prior to beginning this unit, review the *Internet & Mobile: Authenticating Information* section on the MediaSmarts website: <http://mediasmarts.ca/internet-mobile/authenticating-information>.
- See also the following websites and Web pages:
 - The Boolean Machine: <http://www.kathyschrock.net/boolean.html>
 - Boolean logic searching: a primer <http://www.slideshare.net/cswetzel/boolean-logic-searching-a-primer-7698820>
 - Say No to Terminator Seeds: <http://www.progressio.org.uk/content/say-no-terminator-seeds>
- Have lined paper on hand
- Arrange for access to computers or a computer lab with Internet connections
- Photocopy the following handouts:
 - *Tips for Effective Online Searching*
 - *Online Search Worksheet*
 - *Evaluating Online Information*

Procedure

Day One: Effective Searching

On Day One, students will learn how to judge online information and how to search the Internet effectively, using the following:

- Boolean search terms
- the Triangle Method
- a broad variety of search tools

Definitions of “developing nation” and “global development”

Note: This activity may be omitted if you have completed Unit One, Beyond Media Messages: Media Portrayal of Global Development.

Provide students with the following definition of a “developing nation”:

A country with a low standard of living, generally indicated by severe poverty, low income and education levels, high birth rate, and poorly developed social, economic, and technological infrastructure. —PBS

To make the concept more concrete to students, explain that many people in developing nations lack many of the basic amenities we take for granted, such as plumbing, clean drinking water, education, health care, and reliable electricity or public sanitation. Stress that we use the term “**developing** nation,” and give some examples of nations that have advanced significantly in providing these amenities in different ways (South Korea in economic terms, India in terms of democracy, Bhutan in terms of transition to modernity, etc.). Also touch on the differences between the terms “developing nation” and the older term “third world”: what negative stereotypes are associated with the older term? Discuss with the class what might be meant by the term “global development.” What might be various aspects of global development? (For example food aid, disaster relief, promoting women’s rights, building infrastructure and ensuring access to clean water.) How can countries like Canada be involved in helping less developed nations become more developed? What types of people or organizations, other than governments, may be involved in global development? (For example: individuals, non-governmental organizations, the United Nations and celebrities drawing attention to a cause.)

What is “good” online?

Ask students to define what makes online information “good”. They should first do this in groups of four and then as a class. In each group of four, students should be designated to fill each of the following roles:

- Timekeeper – times each speaker according to whatever time the teacher or class decides, thereby ensuring that no one person monopolizes the discussion
- Recorder – records major points, as in minutes, raised in the discussion
- Traffic director – keeps track of who speaks after whom to ensure that every student has the opportunity to speak
- Reader – reads the minutes of the group’s discussion to the class

Answers should be categorized and grouped so that the final list of criteria is a summation and collation of what the individual group members contributed.

Make sure that you cover the following questions during the class discussion:

- How can you determine “good information” when you are unfamiliar with the subject matter?
- Is the information on the site current?
- Does the site provide a full understanding of the topic?
- Can the information on the site be used for different purposes?

Effective search techniques

Distribute and review the handout *Tips for Effective Online Searching*. Tell students they will be researching a global development topic using the search techniques covered in the handout. A suggested topic is “terminator seeds” (seeds that are sold to farmers and that produce only one year’s crop), but you may use another global development topic, such as:

- safe drinking water in the developing world
- child labour in India
- deforestation in Haiti or Africa
- the AIDS epidemic in Africa
- women’s rights in Afghanistan

Distribute the *Online Search Worksheet*. Direct students to find three different sources on their topic, and to report on each source using the handout. (You may choose to make the “Challenge” section optional, for bonus points, or omit it altogether.)

Day Two: Purposes and Uses of Online Information

Working as a class, students will learn to assess the purposes and possible uses of online information through considering one specific example.

Evaluating information

Distribute two copies of the handout *Evaluating Online Information* to each student and review it with the class. How closely does it match the outcome of their discussion on “good” online information from Day One?

Why things are online

Discuss the different purposes people can have for putting information online, including to inform, to entertain, to persuade and to sell a product. How might these different purposes affect how information is presented? (For instance, a source meant to persuade might be more likely to present only one side of the information; a site meant to entertain might leave out important information that is deemed “uninteresting.”)

Evaluating an example of persuasive information

If you have not already done so, briefly introduce the subject of terminator seeds (seeds sold to farmers that only produce one year’s crop.) Show the class (or distribute as a handout) the Web page “Say No to Terminator Seeds” (<http://www.progressio.org.uk/content/say-no-terminator-seeds>). Evaluate it as a class, using the criteria found in the *Evaluating Online Information* handout.

If that site is unavailable, you may use a similar site such as:

- http://www.thirdworldtraveler.com/Transnational_corps/TerminSeeds_Monsanto2.html
- <http://www.righoncanada.ca/?p=173>

The handout addresses the following five points:

1. What is the website’s purpose? How do you know? *This website is clearly intended to persuade, since it openly pushes a particular point of view and attacks the opposing view.*
2. Who is behind the screen? *An organization called “Progressio,” but no further information or names of individuals are given; link search showed that most of the links to the site were from private pages or blogs.*

3. Is the information biased in any way? *The organization is closely tied to the site's viewpoint. It uses emotional language and images, and no opposing viewpoints are provided or linked to.*
4. Is the information up to date? *It was last updated in November 2014.*

Discuss with the class the different reasons we might have for gathering information: for a research report, news article, persuasive essay, creative piece, etc. How does knowing our purpose help us decide what we need from a source of information? How do we know whether a particular source is good for each purpose?

Return to the *Evaluating Online Information* handout and ask students to apply this final question to the "Say No to Terminator Seeds" Web page:

5. What purpose would we use this information for, and why? What strategies would we use if we were to draw on this information? It is most valuable for a persuasive essay; verify all facts through the Triangle Method, and research alternative or opposing points of view.

Tips for Effective Online Searching

Use Boolean Search Terms

Most search engines allow you to add special words to your search that limit the results. These words are AND, OR and NOT.

Including AND between two words means that you will get only results that include both words. This helps eliminate many irrelevant results.

Example: Deforestation AND Africa

Including OR between two words means that you will get results that include either word. This is good when you have two words that are synonyms or close in meaning.

Example: Safe water OR clean water

Placing NOT before a word means that you will get only results that do not include that word. This helps eliminate many irrelevant results.

Example: Terminator NOT Schwarzenegger

You can also search for a whole phrase by placing it within quotes. This means you will get only results in which those words occur in that order.

Example: "Child labour"

Use the Triangle Method

To confirm that your information is accurate, locate at least three independent sources that point to the same answer. This is called the Triangle Method. Check where your sources got their information, to be sure that all of them did not get it from the same source.

Example: Three different sources on the total coffee production worldwide in 2013:

- 146 million bags (Coffee Network) <http://www.bloomberg.com/news/2012-03-09/global-coffee-production-seen-reaching-record-in-2012-13.html>
- 150 million bags (US Department of Agriculture) <http://apps.fas.usda.gov/psdonline/circulars/coffee.pdf>
- 145 million bags (EGSI World coffee production forecast) http://www.rcmfutures.com/docs/default-document-library/world-coffee-report_november20134EED87A48CB9.pdf?sfvrsn=2

All three sources give a number around 145-150 million, so we can accept that number as reliable.

Use Different Search Tools

It is important to use different types of search tools because no search engine captures more than 16 percent of the entire Internet (all search engines combined capture less than 50 percent of online information). Also, each search engine gathers and groups information in its own way.

Be careful when using Wikipedia as a source. Although it has been found to be as accurate on some topics as the *Encyclopædia Britannica*, its user-generated format means that hoaxes are often played, some of which persist for hours or even days—making Wikipedia a good example of a source that needs to be checked against other sources.

Various search tools and sources of information include:

- Noodle Tools: www.noodletools.com/debbie/literacies/information/5locate/adviceengine.html
- meta search engines such as www.clusty.com or www.dogpile.com
- search engines such as www.google.com, www.altavista.com or www.yahoo.com
- specialized versions of search engines such as <http://scholar.google.com/> or <http://ca-fr.altavista.com>
- directories such as www.awesomelibrary.org, <http://www.kidsclick.org/> or <http://www.ipl.org/>
- searching wikis: http://en.wikipedia.org/wiki/Main_Page
- news outlets
- online encyclopedias

Example: Top search results for “AIDS in Africa” include:

Google: HIV and AIDS in Africa. The epidemic of HIV & AIDS in Africa: includes info on the impact of AIDS on Africa, country profiles, and answers to frequent questions. www.avert.org/aidsinafrica.htm.

Wikipedia: The [HIV/AIDS](#) epidemics spreading through the countries of [Sub-saharan Africa](#) are highly varied. Although it is not correct to speak of a single African [epidemic](#), Africa is without doubt the region most affected by the virus. Inhabited by just over 12% of the world’s population, Africa is estimated to have more than 60% of the AIDS-infected population. Much of the deadliness of the epidemic in Sub-Saharan Africa has to do with a deadly synergy between HIV and [Tuberculosis](#).^[1] In fact, Tuberculosis is the world’s greatest infectious killer of women of reproductive age and the leading cause of death among people with [HIV/AIDS](#).^[2]

Online Search Worksheet

Fill in the blanks below for three different sources of information on your topic.

Source #1

Title of website: _____

Web address: _____

How you found it (e.g., Google, Wikipedia): _____

Search words or phrase you used to find it (remember to use Boolean terms):

Three key facts (to be checked against other sources):

Source #2

Title of website: _____

Web address: _____

How you found it (e.g., Google, Wikipedia): _____

Search words or phrase you used to find it (remember to use Boolean terms):

Three key facts (to be checked against other sources):

Source #3

Title of website: _____

Web address: _____

How you found it (e.g., Google, Wikipedia): _____

Search words or phrase you used to find it (remember to use Boolean terms):

Three key facts (to be checked against other sources):

Bonus Challenge

Find another source of information on your topic that is an individual or organization in the developing world.

Title of website: _____

Web address: _____

How you found it (e.g., Google, Wikipedia): _____

Search words or phrase you used to find it (remember to use Boolean terms):

Three key facts (to be checked against other sources):

Evaluating Online Information

To decide whether the information on a website is useful to you, first consider what you will be doing with the information. Are you writing a research paper? A persuasive essay? A short story?

Once you know that, you can find out whether the site is useful by considering the following questions:

1. What is the website's purpose?

- Is it to inform, entertain, persuade or sell something?

- How do you know?

2. Who is behind the screen?

- Has someone taken responsibility for what is written there?
- Is information about the author clearly stated?
- Are there links to detailed information about the author or organization?
- Who links to the site? (Go to a search engine and search "link:" and the site's URL)

3. Is the information biased in any way?

- Is there a connection between the author's viewpoint and the organization he or she represents?
- Is emotion a big part of what the site uses to try to persuade you?
- Does the author use **loaded language** (words that get a strong emotional reaction) or make broad statements not supported by evidence?
- Can the information be verified from other sources?
- Does the site offer more than one point of view, or links to other points of view?

4. Is the information up to date?

- Is it important that information about your topic be up to date?
- Does the site show when the information was created and last updated?
- Do all the links still work?

5. What purpose would you use this information for, and why?

Check each possible purpose for which you feel the site would be appropriate, and briefly explain why you think so.

A research report _____

A news article _____

A persuasive essay _____

An ad campaign _____

Student Evaluation Rubric

	Below Level 1	Level 1	Level 2	Level 3	Level 4
Knowledge/ Understanding	Fails to show an understanding of the different purposes and uses of online information	Shows a beginning understanding of the different purposes and uses of online information	Shows a developing understanding of the different purposes and uses of online information	Shows a competent understanding of the different purposes and uses of online information	Shows a confident understanding of the different purposes and uses of online information
Thinking/Inquiry	Fails to show an ability to evaluate online information on a global development topic	Shows a beginning ability to evaluate online information on a global development topic	Shows a developing ability to evaluate online information on a global development topic	Shows a competent ability to evaluate online information on a global development topic	Shows a confident ability to evaluate online information on a global development topic
Communication	Fails to show an ability to find multiple sources of information on a global development topic and determine which is most appropriate for a variety of purposes	Shows a beginning ability to find multiple sources of information on a global development topic and determine which is most appropriate for a variety of purposes	Shows a developing ability to find multiple sources of information on a global development topic and determine which is most appropriate for a variety of purposes	Shows a competent ability to find multiple sources of information on a global development topic and determine which is most appropriate for a variety of purposes	Shows a confident ability to find multiple sources of information on a global development topic and determine which is most appropriate for a variety of purposes
Application	Fails to show an ability to apply different search skills and sources to researching a global development topic	Shows a beginning ability to apply different search skills and sources to researching a global development topic	Shows a developing ability to apply different search skills and sources to researching a global development topic	Shows a competent ability to apply different search skills and sources to researching a global development topic	Shows a confident ability to apply different search skills and sources to researching a global development topic