

INQUIRY PROCESS: SELECT

Lesson Plan

Purpose: Students will learn how to identify the best hits/results from an Internet search by reading the title, description, and web address on a results page. The criteria they should focus on at this point in the process are the source's *relevancy* to their little question and a quick judgment about their *quality*. These sources will be evaluated for other criteria in the next lesson.

OUTCOMES

LESSON GOALS

Students will be able to...

- Refine search strategies as needed to retrieve precise results.
- Use sound judgment to determine potentially relevant and credible sources following successful searches.
- Scan URLs to help determine a source's quality.

QEP COMPETENCIES

Arts Education: Visual Arts

3 – To appreciate works of art, traditional artistic objects, media images, personal productions and those of classmates

Languages: English Language Arts

- 1 To read and listen to literary, popular and information-based texts
- 3 To represent her/his literacy in different media
- 4 To use language to communicate and learn

Cross Curricular

- 1 To use information
- 3 To exercise critical judgment
- 5 To adopt effective work methods
- 6 To use information and communication technologies
- 8 To cooperate with others
- 9 To communicate appropriately

Materials:

- Interactive whiteboard with Internet access.
- Computers with Internet access.
- Cue cards/index cards.
- Marker or Pen.
- Optional: Worksheet of the Select exercise (see the teacher resources page for the worksheet).
- Optional: Take your students to the school library and use the resources available to you there (including the OPAC).
- Optional: Worksheet of the Bibliographic Information Reference (see the teacher resources page for the worksheet).

READING RESULT PAGES - DEMONSTRATION

1) Gather the students around the interactive whiteboard. Explain that you will be demonstrating how to read the information from a search results page to determine which sources are best. Inform students of the Little









Question that you will be using to help illustrate this. You can use a topic that you are covering in class that is not related to their task, or you can use one of the following suggestions:

- How does cloud formation relate to precipitation and the water cycle?
- How did the feudal system shape the economy of the Medieval times?
- 2) *Project* a search engine on the interactive whiteboard. Select a search engine from our suggested list of search engines and directories.
- 3) Conduct a search using a search string that students will not be using. You can use a topic that you are covering in class that is not related to their task, or you can use one of the following from the suggestions above:
 - clouds AND (precipitation OR rain) AND "water cycle"
 - ("feudal system" OR feudalism) AND ("medieval times" OR "middle ages") AND economy

Teacher Tip

Determine if now would be a good time to also teach some of the advanced features of the search engine. For example, you can enclose phrases within quotations (as seen above), you might want to show them how to change the language from "any language" to "English", or if they are on a search engine that is targeted towards adult users, then show them how to filter for reading levels; such as Google's "show only basic results".

- 4) Point out the number of hits (total & page) and ask students how to decide to select from the list.
 - Lead students to understand that it is important to scan and read the results rather just click on any hit/result on the page. This saves time and improves the efficiency of searching. Reading the description of a hit/result will allow you to determine whether that particular site will provide the information you are looking for. You can also review the elements that are likely to appear on search result pages: sponsor sites/advertisement section, different search types such as images or videos, and where to find the advance feature buttons.
- 5) Read the title of the first hit/result.

 The title will provide information about what the site is about.
- 6) Read the description of the first hit/result. This provides further information about what to expect from the site.
- 7) Read the web address of the first hit/site.

 This will provide information about what organization is providing the information.





Teacher Tip

Here are some of the likely domain suffixes that students will encounter:

.ca - Canadian.com - commercial.edu - educational.gov - governmental.info - information.mil - military

.net – network .org – organizational site .us – United States

Refer to the worksheet entitled Deconstructing Webpage Addresses, for more examples and a reference sheet you can provide to students.

- 8) *Have* the students read the hits/results on the first page. Review the title, description, and address to determine if the site would be useful.
- 9) Come to a consensus, as a class, about which 3 sites would be the most relevant to the Little Question. Students should articulate why they have chosen those 3 sites.
- 10) *Click* on each of the sites and determine if it is a good choice. Have students defend their opinions on why or why not the sites are appropriate.
- 11) Review how to find the bibliographic information on a webpage.

 Show students where they can typically find information about the author, date of publication, title, URL, and so forth.

Optional: To help explain the bibliographic information on a website, you can also provide students with the worksheet Bibliographic Information of Websites. This document is located on the teacher resources page.

FINDING AND MARKING SOURCES

- Have students log into IS-21.
 Students navigate to the task that they created, and are now on the SELECT step.
- 2) Determine the intended audience and format of their final product and what materials they will need to achieve it. They will be asked to review and edit as needed in the **Produce** step. However, they should begin thinking about this now as it could influence their searching.

Teacher Tip

You could suggest that students look up examples of the medium that they will be using for their final product. Preferably ones aimed at the same target audience. These can be used as models.

Students should also consider the keywords that would be found in the medium or format of their intended final product. Would that format use formal language, natural language, or slang? If so, they should consider their keywords and synonyms for the type of language the medium is likely to use.





- 3) Click on the tab of one of the Little Questions.
- 4) Review the strategies used in the EXPLORE step. Have students focus on the ones they felt were successful. As this lesson will be focused on Internet sources, direct them to their search engine or directory strategies.
- 5) Select a search engine or directory and conduct a search.
 Students should continue to search for sources by continuing their successful searches. You can suggest a particular tool for them to use or send them to IS-21's list of recommended search engine and directories. For the latter have them click on Web icon .
- 6) Skim through the results.
 Students should first review the results page and then view the content of any site they feel has potential.

Teacher Tip

Once students are on a webpage, you can recommend that they use find feature to locate their keywords on the page. Press Control + F (PCs) or Command + F (MACs). Students type in the keyword (one at a time) and any instance where it appears on the page will be revealed to them.

- 7) Revise the search strings as needed.
- 8) *Mark* sites that are relevant to their topic. When students have found a source that is relevant to their Little Questions, they should input it in the tool for safekeeping and later review.
 - Students click on the 'mark a source' button Mark a New Source. They select what type of source it is and then enter information in the required fields. Remind them where to locate this information on a website.
- 9) Find sources for each Little Question. Sources can be used for more than one Little Question. Suggest that they also mark a source if they have found books from their visit to the school library or some they brought from home.

Teacher Tip

This lesson focused on Internet sources but you could also take them to the school library or have them brainstorm potential experts they can request an interview with.

Parking lot is the place where students can mark a source that they are unsure if it will be useful for a particular question but they feel still has potential. They can store





the information in the tool so that they do not lose the source and review it at a later date to determine if it is useful for their task. However, if they want to use a source, they should eventually connect it to a Little Question.

10) *Use* the **Report** feature of IS-21 to review the students' work.

ePEARL Users

Remember the Report may also be viewed in a student artifact. Think about viewing it there and providing feedback through the Teacher Feedback feature.

REFLECTION

For students that have completed the step quickly, suggest they use the extra class time to begin reflecting. Direct them to the reflections window in IS-21 and suggest they use the prompts as needed. There are additional prompts listed on the teacher resource page if you would like to have them broken down by each step.

This is an individual task. Students should not be completing this portion with their group member(s). Even if reflection is not a big part of your classroom, we recommend that you have students reflect at least once.

ePEARL Users

There are two locations that students can reflect- either within their IS-21 task or within the ePEARL artifact that is automatically created whenever a new IS-21 task is started. The reflection ends up in the same place though!

This lesson is an adaptation of a lesson from AT&T/UCLA's Initiative for the 21st Century Literacies' teacher resources. It was modified with permission.

