**Lesson Four: Research Tips and Evaluating Sources**

**Problem statement:** How do we make our school and community safer by identifying and responding to potential human trafficking situations (for selves and others)? What is the definition of human trafficking and how does it connect to us?

**Learning objectives:**

SWBAT:

* Utilize Boolean search terms to help narrow down and focus results
* Evaluate resources for relevance, credibility, bias, breadth, and depth
* Determine how resources can best be utilized based on this evaluation

**Lesson standards (NGSS, CCSS, CTE):**

[CCSS.ELA-LITERACY.W.9-10.7](http://www.corestandards.org/ELA-Literacy/W/9-10/7/)

Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

[CCSS.ELA-LITERACY.W.9-10.8](http://www.corestandards.org/ELA-Literacy/W/9-10/8/)

Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.

[CCSS.ELA-LITERACY.W.9-10.9](http://www.corestandards.org/ELA-Literacy/W/9-10/9/)

Draw evidence from literary or informational texts to support analysis, reflection, and research.

**If relevant to a single lesson, include:**

**Soft skills:**

Communication: summarizing the reading and report out to group, analyzing similarities and differences with other readings in conversation with mixed group

Critical Thinking: constant evaluation of the sources they are reading will inevitably result in broadening students’ critical thinking skills, as will determining how sources can be used in their project

**Locally and/or personally relevant for students:**

Not really present in this lesson

**Connections to career and educational pathways:**

Students may identify potential career options in their sources, but that is not the focus of this lesson.

**Materials:**

* Student access to computers with Internet capabilities
* Access to Youtube (videos linked below)
* Digital or hard copies of the [Boolean Scavenger Hunt worksheet](https://docs.google.com/document/d/1NJrPYj3WrtSD5pcvreVaKATtNKqgiH_PP0MoDV-bF_Q/edit)
* Digital or hard copies of the articles for evaluating sources jigsaw ([Article 1](https://www.pbs.org/newshour/show/legal-arguments-trumps-immigration-ban), [Article 2](https://qz.com/1736809/statistics-show-that-trumps-travel-ban-was-always-a-muslim-ban/), [Article 3](https://www.bbc.com/news/world-us-canada-38902650))
* The [graphic organizer](https://docs.google.com/document/d/1blySNtQg0aKuNs2XEjNm11zXJph8OFHR542ZTFvmtPM/edit) for evaluating sources

**Lesson preparation:** Prepare materials

**Time required:** approximately 120 minutes

**Grouping of students for instruction:**

Students mostly work individually, with chances to pair-share throughout. At one point, students will jigsaw the reading of three articles on the same topic in order to evaluate and present their findings to small groups (3 people).

**Procedure:**

**Using the Internet for research, tips and tricks (~30 minutes)**

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| --- | --- |
| **Teacher** | **Student** |
| Open lesson with a challenge. Who can be the first person to find a website that gives non-dairy milk options, but excludes soy milk.  Declare the winner (candy prize?) and have students share with neighbor what their strategy was.  Tell students that we will be looking today at ways to research more effectively and efficiently, using two videos. | Use the Internet to be the first to complete the challenge.  Describe strategies in using search engines to find the answer first. Debate what was and wasn’t effective. |
| Introduce the first [video](https://www.youtube.com/watch?v=BoujP8KoK7E) by telling students that this will help them to find the best resources to address their topic of research for their chosen problem.  After the video, return to the part when the video showed a web to identify key search words. Have students group up to do the same for their topic. | Students watch video.  Students work with the members of their group that are focusing on the same element of the problem statement to discuss what they want to find out for their problem statement and develop what the most promising key words are. |
| Bring the class back together and ask if anyone has ever asked a search engine something and felt that the search engine misunderstood what they were really looking for.  Introduce the second [video](https://www.youtube.com/watch?v=bCAULDuMcso) by explaining that this is a way to more effectively filter the results you get for a particular search.  After the video, tell the students that they will be going on a Boolean scavenger hunt. They need to use the Boolean search terms AND, OR, NOT, and () and “” to find a web resource that fits the criteria given on the Boolean Scavenger Hunt Worksheet. | Student responses.  Do the Scavenger Hunt, alone or in pairs.  Share out what they found and what challenges or insights they had while working. |

**This second part of the lesson could be done immediately after, or could take place a different day. It might be better to use some time after this to gather relevant sources and then evaluate those sources after the next activity.**

**Evaluating Sources (~90 minutes)**

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| --- | --- |
| **Teacher** | **Student** |
| Ask students:   * What is your definition of bias? * What are different types of bias one may encounter in sources? * How do you know something is biased?   Tell students that today we’ll be exploring how you evaluate the sources you find during research for bias, as well as for other things. Emphasize that there is no perfect bias-less source, and instead we need to focus on identifying what biases exist and how to navigate them to get a complete picture. | Students use Think-Pair-Share to respond.  Students and teacher discuss issues of bias in research and life. |
| Pass out or have students open a digital copy of the Evaluating Sources Graphic Organizer. Tell students that will be using the graphic organizer to evaluate the sources they find in their research, but first they will jigsaw articles on a different topic to practice this evaluation.  Model the use of the graphic organizer by reading the first few paragraphs for [Sample Article](https://www.usatoday.com/story/opinion/2020/02/26/trump-xenophobia-expanded-muslim-travel-nigeria-ban-column/4830617002/) and explaining how you evaluate as you go.  Teacher circles around, helping students understand the articles and asking additional guiding questions to build their evaluation skills. | Students get into groups of 3 and split up readings  Students read their assigned article and fill out the graphic organizer according to their findings. |
| Bring the class back together and read a short excerpt (like one paragraph) of the first article. Have all the students who had that article share what they wrote in their evaluations.  Do the same for articles 2 and 3.  After the activity, have students rate their confidence in evaluating sources on a scale of 1-5 in an exit ticket. Have them write down one thing they feel that they can evaluate well and one thing they need more help on, using the graphic organizer to help them if they are stuck. | Student responses.  Student responses. |

**Accommodations:** Teachers all know their own classrooms best and so can best decide whether student choice or student accommodations should take precedence.

**Extensions:**

After students use and discuss their results with the Evaluating Sources graphic organizer, teachers can have students choose one of the sources they have found (or find one now) for their own solution to the problem statement and evaluate that with the graphic organizer. Remind students that the goal isn’t to label the source as “good” or “bad”, necessarily, but to find the strengths and weaknesses in the source and determine how it can be used and what else needs to be found.

**Assessment:**

**Formative Assessment in the Lessons:**

Student understanding can be assessed with their search results using Boolean search terms, as well as their responses to the example web resources on Trump’s travel ban using the Evaluating Sources graphic organizer. Teachers can also use the graphic organizer to evaluate student evaluation of a source of their own choosing.

**Summative Assessment for the Unit:**

The work done in this lesson will continue the building of foundational knowledge that will lead to their problem statement and final product for the unit.

**References/Resources:**

Instructional Plan created by Emily Knight

Boolean search videos taken from: <https://www.youtube.com/playlist?list=PLjB7x34VHLf5ooJegDE5Jmt4V7iE8tm50>

Some text on the Evaluating Sources graphic organizer taken from <https://libguides.colostate.edu/howtodo/evaluatewebpage> and <https://library.fiu.edu/c.php?g=159967&p=1049237>