**Student Handout: Data Source Evaluation Exercise**

**Objective:** To practice evaluating data sources for reliability and relevance in the context of data literacy.

**Instructions:**

**Step 1: Group Formation**

1. You will be working in small groups of 3-4 participants.
2. Choose a spokesperson for your group.

**Step 2: Choose a Topic and Research Question**

1. As a group, select a specific topic or subject area you'd like to explore (e.g., climate change, healthcare, education).
2. Define a research question related to your chosen topic (e.g., "What are the major causes of climate change?").

**Step 3: Identify Data Sources**

1. Conduct online research to find three potential data sources that are relevant to your chosen topic and research question.
2. Note down the URLs or references to these data sources.

**Step 4: Evaluate Data Sources** For each of the three data sources, evaluate the following aspects:

**Reliability:**

* Assess the credibility of the source. Is it a reputable organization or institution?
* Check the publication date. Is the data up-to-date and relevant to your research question?
* Evaluate the methodology used to collect and analyze the data. Is it sound and transparent?
* Consider any potential conflicts of interest that may influence the source's objectivity.

**Relevance:**

* Determine how directly the data source addresses your research question.
* Assess whether the data source provides the specific information you need to answer your question.

**Potential Biases:**

* Investigate whether there are any apparent biases in the data source.
* Consider factors that might introduce bias, such as the source's affiliations, funding sources, or political leanings.

**Step 5: Summary**

* Summarize your evaluation of each data source, including its strengths and weaknesses.
* Decide whether you would trust and use each data source to answer your research question.

**Step 6: Group Presentation**

1. Prepare a brief presentation to share your chosen topic, research question, and your evaluation of the three data sources with the class.
2. Be ready to answer questions and engage in discussion.

**Step 7: Debrief and Discussion**

1. After all group presentations, participate in a class discussion.
2. Reflect on the challenges you encountered during the evaluation process and the insights gained.
3. Discuss the importance of critical evaluation of data sources in data literacy.

**Conclusion:** Data literacy involves not only understanding data but also being able to critically assess the sources of that data. This exercise helps you practice these essential skills. Remember to apply your newfound knowledge to future data analysis endeavors.