**Instructor Guide: Data Source Evaluation Exercise**

**Objective:** To guide students in practicing the evaluation of data sources for reliability and relevance in the context of data literacy.

**Duration:** 60-75 minutes

**Materials Needed:**

* Computers or access to the internet for students
* Projector or screen for group presentations (optional)
* Markers and whiteboard or flip chart (for debrief and discussion)

**Instructions for the Instructor:**

**Step 1: Introduction (5 minutes):**

* Begin the session by explaining the importance of understanding data sources in data literacy.
* Emphasize that this exercise will help students practice evaluating data sources for credibility and relevance.

**Step 2: Independent Data Search (15 minutes):**

1. Instruct students to individually access the Data.gov Dataset Catalog (<https://www.data.gov/dataset>).
2. Ask each student to browse the catalog and select a dataset that interests them or is related to their chosen topic.
3. Have students note down the dataset title, description, and URL.

**Step 3: Group Formation (5 minutes):**

1. Form small groups of 3-4 students each.
2. Ask each group to choose a spokesperson.

**Step 4: Choose a Topic and Research Question (5 minutes):**

1. Instruct each group to select a specific topic or subject area related to the dataset one of their group members selected.
2. Have each group define a research question related to their chosen topic (e.g., "What insights can be derived from the selected dataset?").

**Step 5: Evaluate the Data Source as a Group (20 minutes):**

1. Guide the groups to evaluate their selected dataset by considering aspects such as reliability, relevance, and potential biases.
2. Encourage discussion within each group to reach a consensus on their evaluation.

**Step 6: Group Presentation (10 minutes):**

1. Have each group prepare a brief presentation to share their dataset evaluation and research question with the class.
2. Optionally, use a projector or screen for group presentations.

**Step 7: Debrief and Discussion (10 minutes):**

1. After all group presentations, facilitate a class discussion.
2. Encourage students to reflect on the challenges they encountered during the evaluation process and the insights gained.
3. Discuss the importance of critical evaluation of data sources in data literacy.

**Step 8: Conclusion (5 minutes):**

* Summarize the key takeaways from the exercise and emphasize their relevance to data literacy.
* Encourage students to apply these evaluation skills in their future data analysis endeavors.

**Additional Notes:**

* Ensure that students have access to computers or devices with internet connectivity for the independent data search phase.
* Encourage active participation and discussion during group evaluations and presentations.
* Emphasize the importance of objectivity and critical thinking when evaluating data sources.
* Provide feedback to students on their dataset evaluations and presentations to reinforce learning.