

Meta-Study: Political Brains

Objective:

Students will examine scientific studies to come to a conclusion.

Students will:

- Interact with science writing
 - Critically analyze science writing
 - Create hypotheses
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Resources/Materials:

- 2020election.procon.org
 - “[Differences in Conservative and Liberal Brains](#)” ProCon.org resource
 - If preparing a scientific examination, teachers may want to obtain some or all of the scientific articles cited in the above resource
 - internet connection
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Preparation:

- This lesson plan can work as an unscientific examination of the studies presented, in which case students may examine the excerpts provided by ProCon.org. However, this lesson plan can work as a scientific examination, in which case teachers may want to obtain some or all of the articles cited for students to read and examine more technical aspects such as methodology.
 - This activity may be completed in-class or as homework, even as an extended assignment.
 - This activity may be completed individually or in small groups, or as a whole class discussion.
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Activity:

1. Ask students to consider whether they have observed polarization in the country, and to list some examples of times they may have noticed that people with different political views had a different reaction to the same event. For example, how did people of different political affiliations react to COVID-19 (coronavirus)?
2. Have students record whether they think there are differences in the brains of people who identify as liberal or conservative. Ask why they think that, and why it might matter if there are physiological differences in the brains of people with opposing political views.
3. Students should review the studies (or a selection thereof) presented in “Differences in Conservative and Liberal Brains.”
4. Students should compare and contrast the studies, noting how the results are presented and how the studies were conducted.
5. Students should come to a reasoned conclusion about whether (and how) liberal and conservative brains are different.
6. Students should then hypothesize about the impacts of such differences (or lack thereof).

If a more scientific examination is preferred, have students:

- a. Formulate the research question.
- b. Optional: search for additional studies.
- c. Create and execute inclusion and exclusion criteria.
- d. Critically examine the included studies findings.
- e. Analyze findings from all included studies.
- f. Synthesize and interpret results

Source: Zina O’Leary, “[Steps in Meta-Analysis](#),” The Essential Guide to Doing Your Research, study.sagepub.com (accessed Feb. 5, 2020)

Evaluation:

1. Ability to compare and contrast studies
2. Quality of examination
3. Ability to form a conclusion and hypothesis