Lesson Plan: A Rhetorical Approach to Data Storytelling

Overview

This two-day lesson introduces students to the various communicative skills that data storytelling demands as well as a variety of genres and skillsets that are crucial for doing ethical, effective data advocacy.

Learning Goals

- Hone ability to rhetorically analyze data advocacy projects in order to better understand how to tell compelling data-driven stories
- Recognize different genres of data advocacy
- Deepen understanding about rhetorical situations and rhetorical choices deployed by data advocates

Sequence of Activities

Day 1 Activity: Rhetorical Analysis of Data Advocacy Projects

Day 2 Activity: Comparative Rhetorical Analysis of Data Advocacy Projects

Time Needed

1 hour and 15 minutes per Activity

Prerequisites

This lesson plan presupposes that students have already been introduced to data advocacy through a rhetorical data studies perspective. Students should have read "A Rhetorical Data Studies Approach to Data Advocacy" by Laurie Gries, which is licensed under CC BY-NC-ND 4.0 and accessible in the DA4All toolkit. This lesson also requires that students closely read over and become acquainted with the following examples of data advocacy.
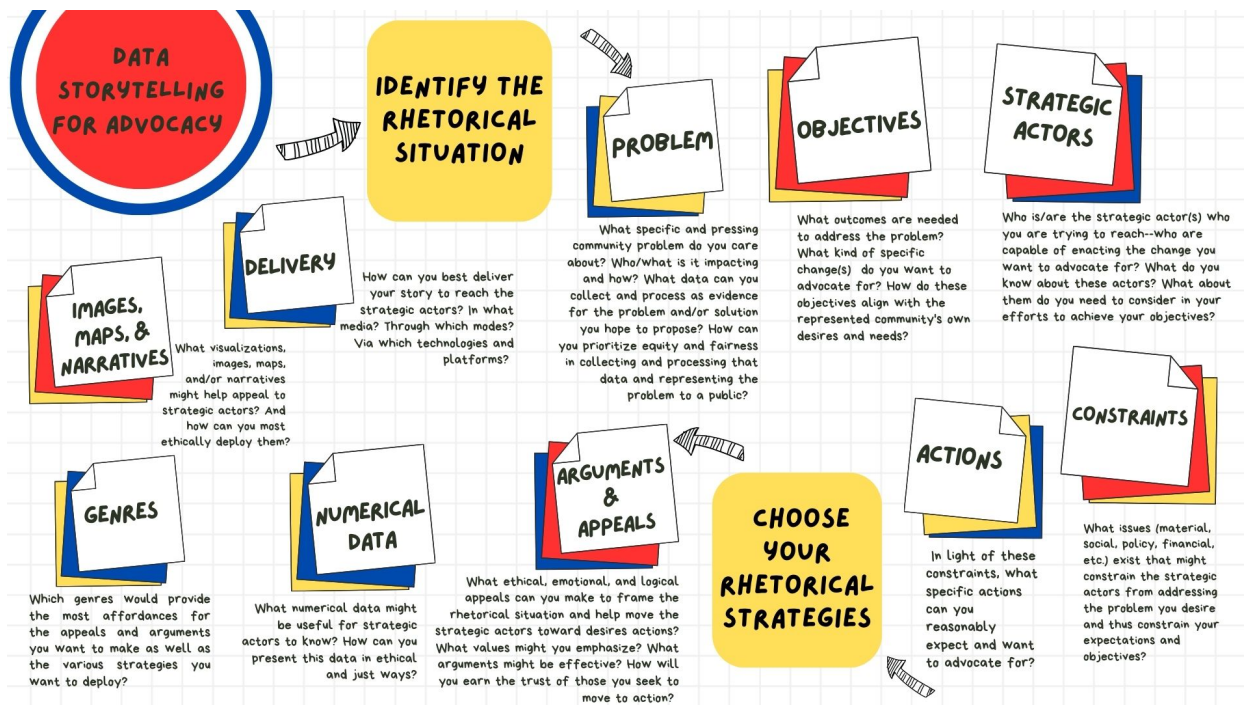
Instructor Note:

This lesson plan piggy backs well off the activity titled "Rhetorical Studies Bingo" or the lesson plan titled "Introduction to Rhetorical Data Studies," both of which are accessible in the DA4All toolkit.

Day 1 Activity: Rhetorical Analysis of Data Advocacy Project

A Road Map for Data Storytelling (15 minutes)

1. Begin this lesson by emphasizing to students that doing data advocacy requires the ability to tell compelling data-driven stories. Introduce and talk through the following model depicting a rhetorical approach to data storytelling to guide the discussion. Be sure to unpack certain concepts such as the rhetorical situation, appeals, constraints, genres, etc. Explain how this model can be useful to them when deciding to tell their own data-driven stories, but it can also be useful for analyzing how data advocates make certain rhetorical choices to address the rhetorical situation at hand.

Note: All of these concepts are unpacked in the reading "A Rhetorical Data Studies Approach to Data Storytelling and Advocacy" (Gries), so they should be familiar to students.

A Rhetorical Approach to Data Storytelling. Credit: Laurie E. Gries, 2024.

Activity 1.2: Practicing Rhetorical Analysis

Instructor Note: This activity uses the Mapping Police Violence Project as an example of a data advocacy website. Mapping Police Violence may be triggering for some students. You may choose another example of data advocacy for students to work with. If you plan to work with this example, you may take time to prep them for this project by having them read about gun violence in the United States and the disproportionate killings that Black Americans experience at the hands of police before exposing students to this project.

1. Identify the Rhetorical Situation:
Put students into groups and assign the Mapping Police Violence example of data advocacy from above to each group.

https://mappingpoliceviolence.org/

Ask students to collaborate and complete the following activity.

Take time to check out the Mapping Police Violence website, being sure to click on the three lines in upper right-hand corner to learn about the project. Using the Rhetorical Analysis Handout in Appendix A, do your best to identify the rhetorical situation of Mapping Police Violence.

Note: Because you do not have access to the authors of the project, you may choose to Google around to learn about the authors and to read about their intentions. Also, rely on your rhetorical analysis of the elements you see at work in assigned project to identify the rhetorical situation and various choices made by the designers. Be prepared to share and discuss your responses with the class as a whole.

2. Share and Discuss

Once students have been given adequate time to do this work, ask student groups to share their identification of the rhetorical situation. Pull up the MPV project as it is discussed.

3. Analyze Rhetorical Strategies
Now that you feel confidence that the rhetorical situation of MPV is clear, ask students to continue working on the Rhetorical Analysis Handout in their group to identify and analyze the various rhetorical strategies at work in the MPV project.

4. Share and Discuss

Once students have been given adequate time to do this work, ask student groups to share their identification of the various rhetorical strategies at work in the MPV project. Refer to the MPV project as it is discussed. Encourage students to stick to description not evaluation of choices at this point.

5. Evaluate

Based on the rhetorical situation and the targeted strategic actors, discuss with students whether they think the MPV project is successful in achieving its desired objectives and outcomes. Identify strengths and weaknesses and/or concerns/praise of the MPV project and possible other choices that could be made to further assist MPV goals.

HOMEWORK:
For homework, ask students to use the Rhetorical Analysis Handout in Appendix A to rhetorically analyze one of the following data advocacy projects. Split class into thirds to make sure each project has an equal number of eyes on it. Inform students that they should be prepared to share and discuss their analyses in class.

Data Advocacy Projects
https://www.sandyhookpromise.org/

https://www.nytimes.com/interactive/2017/11/06/opinion/how-to-reduce-shootings.html

https://www.k12insight.com/wp-content/uploads/2018/03/School-violence-infographic-FINAL-low-res.jpg

Day 2 Activity: Comparative Rhetorical Analysis (1 hour and 15 minutes)

1. Identify the Rhetorical Situation
Break students into groups based on which example of data advocacy from above they analyzed. Ask students to first identify and discuss the rhetorical situation of the project.

2. Share and Discuss
Once students have been given adequate time to identify the rhetorical situation, ask student groups to share their

identification of the rhetorical situation. Pull up each project as they are discussed. Compare and Contrast rhetorical situations. Make sure that students understand the rhetorical situations of these projects and be sure to emphasize how all of the authors are both responding to certain concerns in their communities but at the same, framing the rhetorical situation at hand in very strategic ways.

3. Identify Rhetorical Choices
Once you are confident that rhetorical situations of the three projects are adequately understood, ask students to identify and discuss the various rhetorical strategies at work in the assigned data advocacy project.

4. Share and Discuss
As a whole class, discuss the various rhetorical strategies used in the various data advocacy examples. As students to share their answers with the class as a whole, make sure they provide specific evidence from the examples of data projects to support their answers.

5. Evaluate
As a whole class, discuss the following:
- How does the rhetorical situation seem to impact the choice of genre and rhetorical strategies in each case?
- What ethical considerations for negotiating the rhetorical politics of accountability seemed to come up across all examples?
- Considering the authors' objectives, audience, and desired actions, which action of data advocacy do you think is most effective and why?
- What can we learn about telling data-driven stories and advocating with data from these examples?

Again, make sure students provide specific evidence from the action at hand to support their answers. Use this discussion to emphasize how genres of data advocacy are highly dependent on the rhetorical situation and that no single action of data advocacy is better than others per se, just more strategic considering one's rhetorical situation and needs for negotiating the rhetorical politics of accountability.

Instructor Note:
As a follow up to this assignment, you may choose to assign the assignment "Rhetorical Analysis" located in the DA4All Toolkit.

Appendix A: Rhetorical Analysis Handout

The Rhetorical Situation:
AUTHOR/ORGANIZATION: Who designed/authored the project? How do they identify themselves? What background information is useful to know about them to establish their credibility?

PROBLEM: What specific and pressing community problem(s) does the author/organization care about? Why does the author care about such problem? What impact on community is the problem having?

OBJECTIVES: What are the most ideal outcomes the author/organization envisions to address the problem at hand. What changes does the author/organization want for the community?

STRATEGIC ACTORS: Who are the strategic actors the author/organization is writing to and why? HINT: You can identify these actors by considering where the piece was published, looking within the text to see who the author/organization is directly or indirectly speaking to, and considering the objectives they are going for.

CONSTRAINTS: What constraints in terms of outcomes and strategic actions do you think the author considered in crafting this data advocacy text?

ACTIONS: What are the very specific actions the author/organization is advocating for? Note that these actions may vary depending on the strategic actors they are trying to reach.

Rhetorical Choices:
ARGUMENTS AND APPEALS: What kind of logical, emotional, and ethical appeals are being made in this data advocacy work? Which appeals are most often used, why, and to what effect?

NUMERICAL DATA What kind of numerical data is presented? Where do you imagine the author got this data? Does the data appear to be presented in ethical and just ways? What specific moves made within the text account for your answer?

GENRE(S): What is the main genre that this data advocacy project is structured in? Website, op-ed, feature article, etc.? What other data advocacy genres do you notice at work in this project? Stories, Maps, Visualizations, Reports, Article, etc.

IMAGES, MAPS, NARRATIVES: What kinds of images (photographs, visualizations, etc.), narratives, and or/maps stand out in this text that you think are particularly effective? What kind of ethical considerations do you think the author/organization made in deploying such rhetorical strategies to negotiate the rhetorical politics of accountability?

DELIVERY: Why do you think the author/organization chose the particular genre(s), media, and publication platform to do their

data advocacy? What did they afford/make possible? What other choices might they have made and why?