

Lesson Plan: Introduction to Data and How Data can do both Harm and Social Good

Overview

During this lesson plan, students will consider different conceptions of data and learn how data can both do harm and do social good through data advocacy.

Learning Goals

- Critically reflect on prior understandings of and experiences with data.
- Read and consider various definitions and perspectives of data.
- Explore how data can do harm and learn to identify data harms.
- Gain familiarity with data advocacy and learn how one can do social good through this communicative design practice.

Readings

“What is Data?” Slideshow [*Insert [Google Slides “What is Data” here](#)*]

“Data Harm Record (Updated).” (August 2020). Joanna Redden, Jessica Brand and Vanesa Terzieva. [Data Justice Lab](#).

Sequence of Activities

1. Introductory Discussion: What is Data? (15 minutes)

2. Activity: Data Harms (20 minutes)
3. Debrief (15 minutes)
4. Activity: What is Data Advocacy? (15 minutes)
5. Debrief (10 minutes)

Time Needed:

1 hour and 15 minutes

Activities

Instructor Note

For multiple activities in this module, including this lesson plan, you will be using Padlet. Please set up a free account with [Padlet](#) and train yourself how to create a new wall and wall shelf with sections. Don't forget to add students as members to your walls so students can contribute. And don't forget to share the link to your walls with students. In addition, you can save, download, and share your final padlet walls to distribute as in-class notes.

Pre-Instructional Activity

For this particular lesson, students will need to complete the following three-part Critical Reflection prompt.

Journal PROMPT #1

Please complete the following three part prompt, which asks you to reflect upon your own and others' conceptions of data. Be prepared to share your three part response in class with instructor and peers.

Part I:

Please describe your current understanding of and assumptions about data. Please also describe what

educational opportunities, work experiences, and/or personal experiences with data have impacted such understandings and assumptions. Finally, if you had to, what is a one sentence definition of data that you can offer at this time. NOTE: Please do not look up any definitions of data to complete this portion of the freewrite. There are no right or wrong answers; I simply want to know how you define data at this point of time based on your prior knowledge and experiences. If you are unsure how to define data, it's okay. Write about why you are uncertain and what you think it is.

Part 2:

View the Slideshow titled “What is Data?” [Insert [What is Data Slideshow?](#) Here]

Which of the quote(s) about data most resonates with you and why? In answering this question, please be sure to a.) unpack the quote, meaning explain what you understand it to be saying; and b.) explain why you find it compelling, true, and/or significant. NOTE: You can choose to focus on more than one quote.

Part 3: Go back to your original thoughts and definitions of data in the first part of this freewrite. Now, considering what you wrote about quotes and data in part 2 of this prompt, how has your conception of data changed, expanded, shifted? How might you define data now?

1. Introductory Discussion: What is Data? (15 minutes)

Begin this discussion with an explanation as to why it is important to develop a deep theoretical understanding of data in order to do data advocacy, emphasizing how data is often defined differently and thus not a simple concept. Also,

be sure to identify how in this lesson, you will be talking about data in the plural. Then, as a whole class, share and discuss student responses to all three entries for the critical reflection prompt they were asked to complete to prepare for this lesson plan (see instructor note). Be sure to unpack the quotes from the slideshow “What is Data?” together as well as discuss where student perspectives of data started out and where they are now. Emphasize that their current conceptions are not cemented, as they will be asked to reflect on their conceptions of data again in the final assignment for this module.

2. Activity: The Harm Data Can Do (20 minutes)

Introduce the interconnections between data, datafication, and data harms (see Data Harm Record). Then ask students to quickly peruse the examples of data harm described in the [Data Harm Record](#) and identify at least three ways that data can do harm. Ask students to record the three data harms they identify in a single Padlet Page and to be prepared to share with the class.

Instructor Note

You will need to set up a Padlet page prior to this activity. Also, to ensure a large number of harms are identified, you might choose to assign students specific examples to read about and be prepared to discuss with the class. You may also choose to break students up into specific groups so they can discuss specific data harms as a group before coming together into a whole class discussion.

3. Debrief (15 minutes)

As a whole class, share and discuss data harms. You will not be able to discuss all the data harms. However, on the Padlet, and through the discussion, it should become clear to students that data can do a lot of harm in this age of datafication. Let this conversation bleed into a conversation about the relations between data and power. End conversation by emphasizing that while data can do harm, data can also be leveraged for social good through data advocacy—the focus of this module—especially, and only if, it is done ethically.

4. Activity: What is Data Advocacy? (15 minutes)

Introduce students to data advocacy—the integrative practice of analysis, design, and communication in which insights from a dataset are effectively conveyed to raise public awareness and drive social change. Break students back into same small groups and ask them to do things:

1. Look over and discuss the following data advocacy website: <https://virulenthate.org/>. Instruct students to pay close attention what kind of data is being deployed, how it is deployed, and why? Instruct students to pay closest attention to the Trends Page.
2. Identify what they perceive to be the most pressing difficulties in doing this kind of data advocacy work. What are the ethical concerns they think these data advocates really had to consider and address?

5. Debrief (10 minutes)

Ask groups to share their analysis of the Virulent Hate Project in order to explore together how data can be leveraged for

social good. Discuss benefits of doing this kind of work as well as challenges and ethical concerns. Let this conversation bleed into a conversation about the connections between data, power, and action. Emphasize the importance of thinking about data as both a noun and verb, a form and an action, and why it's important to think about data as such when doing data advocacy. In addition, introduce students to data ethics and the public good, emphasizing how important it is to think ethically throughout all phases of a data advocacy project.

Follow up Activity: Ask students to revisit their definitions of data in Prompt 1 of their data studies journal and to extend, complicate, revise their definitions of data based on this lesson plan's activities and the discussion of datafication, data harms, and data advocacy.

Follow up Readings and Activities:

See Resources in the DA4All Toolkit under the following subdomains:

- Critiquing Data
- Acting Ethically with Data
- Doing Data Advocacy