

Inclusive Information Systems: Designing for Diversity

Cara Marta Messina

Prepared for Sarah Payne

First Year Writing

October 2018



Northeastern University
NULab for Texts, Maps, and Networks

Basic Definition of Information Systems

Information systems are the approaches taken to collecting, organizing, storing, distributing, and displaying information.

Principles of IS can be found across academic and professional disciplines. You see information systems in libraries, computer science, business, and more.

We also use information systems every day. **What are some information systems that you can think of?**

Google Activity

Open up Google and search “Greatest Authors.” Take a minute to scroll through the list that will come up at the top of the results.

Classroom discussion:

- What do you notice about these authors?
- How many authors have you read?
- How many of you agree with this list?
- Why do you think Google shows these results? Where do you think this information may come from?

Google Activity Continued

Now we're going to do a few more searches together and discuss the differences:

- Greatest women authors
- Greatest Black women authors
- Greatest Black authors
- Greatest white authors
- Greatest white men authors

“Greatest”

“Greatest”

The input data (lists of greatest authors) is already biased. These authors are part of the literary canon, which has been critiqued for its lack of diverse representation.

Marked and Unmarked Identities

“Black” is marked, while “white” is unmarked because “Black” is seen as *different* from the norm.

Think about when “Gluten Free” food is marked, but food *with* gluten are rarely marked with “Gluten.” Why is this?

Emily Drabinski, a Library Information Scientist, argues for the importance of marking *all* identities, even those that are seen as the “norm” (whiteness, maleness, straightness, etc.)

Information Systems are not neutral

Do white men really make better authors than white women, Black women, and Black men? According to the literary canon and Google, yes, they do! But should we just accept this?

Information systems are not neutral. They can reinforce and make explicit systemic, political, and cultural biases. They are affected by input data, the way that data is presented, how the data is interpreted by machines (which are built by us), and more. This means we also have the ability to challenge these biases and norms.

Design for Diversity: Education and advocacy for more inclusive information systems

Design for Diversity (funded by Institute for Museums and Library Services) is a project run by members of the Digital Scholarship Group in the Northeastern Libraries.

D4D has brought together librarians, archivists, digital humanists, museum professionals, and other people working intimately with different information systems to discuss ways practitioners can **advocate for building systems.**

Important Take-Aways

Change takes **collaboration among diverse voices, flexibility, and time.**

Collaboration: D4D is a collaborative initiative, but so many people have come forward to discuss the power of diverse representation at the table. Different populations will have different stakes and perspectives. Example:

<https://des4div.library.northeastern.edu/honoring-the-dead-a-digital-archive-of-the-insane-in-dian-asylum/>

Flexibility: In collaborating with others, you must be willing to *listen* and *change practices*. Example: Design for Diversity and moving beyond the “technical stack”

Time: Developing relationships and making organizational and systemic changes takes *time*. Example: <https://des4div.library.northeastern.edu/billey-drabinski-roberto-gender/>

So what can we do?

- Be cautious about the input data. What is included? What is not included? How will this influence results?
- Invite diverse perspectives and multiple stakeholders in the room
- Pay attention to what information is marked and unmarked.
- Push against the “black box” metaphor: When we rely on algorithms and information science as much as we do, we should always question a) what are the input data, b) how is it being measured, and c) the actual real life impacts of these algorithms.
- **Impact:** Always look at the real life impact of these algorithms. Always, always, always.