

May 10, 2024 Education Working Group Call

Attendees: Diana Dalbotten, Mary Lofton, Saeed Shafiei Sabet, Jody Peters, Cazimir Kowalski, Jason McLachlan, Rachel Torres

Regrets: John Zobitz, Abby Lewis

Agenda/Notes:

1. Resource for printing fabric posters at [Spoonflower](#). Mary has used this with success and has great rates.
2. June/summer schedule - keep the same time?
 - a. Jody is gone June 10-27
 - b. We will meet at the same time. Jody will send out new calendar invites
3. Follow up from AI discussion last month
 - a. From John: [Article about chatGPT](#) in math education (but also applicable more generally as well) which discusses the benefits and considerations for using ChatGPT/AI in the classroom.
 - b. tinyurl.com/AI-resources-for-instructors: link from the above article to another set of resources about AI on topics like
 - i. How does AI work
 - ii. What are large language models (LLMs) and how do they work
 - iii. General Overviews
 - iv. Sources for Instructors (AI Content Level)
 - v. Syllabus policies and guidance examples
 - vi. AI literacy
 - vii. Faculty resources from other campuses
 - viii. Resources for Students
 - c. <https://ditchthattextbook.com/ai-tools/>: another website Jody found while looking for the tinyurl resource. This has 30 AI tools for the classroom that briefly shares how they work and the cost (as of Nov 2023)
 - d. Jody added a section with a link to a Google doc providing a [list of AI resources](#) to the [Educational Resources](#) and [Education working group](#) EFI webpages. The goal was to avoid having the resources buried in the working group notes
 - e. Something that stuck out to the group was thinking about the accessibility of the AI tools and the idea that some tools cost money vs free tools and the concern that the paid versions will be “better” than the unpaid version and what that means for accessibility for students
 - f. VT example of someone who got a NAIRR grant from NSF which aims to make supercomputers more available to academic researchers:
<https://www.science.org/content/article/new-u-s-ai-network-aims-make-supercomputers-available-more-researchers>
 - g. From Jason: Want to teach students material that they can use in 5 years

- i. Ways to create models and use models will change rapidly with AI
 - ii. But knowing the process and ways to design projects, understanding questions and posing scientific questions will be important
 - iii. Ethical implications about what you are doing with data won't go away with AI and may be even more important when you may not know what is going on under the hood
 - iv. Trustworthiness and how to know about what is trustworthy in terms of the analysis as well as in terms of racism
4. Look at the histories of HBCUs
 - a. Jody shared info she compiled about HBCUs history – reach out and she can share it with you.
5. Upcoming Call
 - a. Share Sloan proposal
6. How did you learn about data and how to collect and analyze it? This self-reflection could be used to help the group think about biases when teaching other students data science
 - a. When and how did you learn about data and how to collect and analyze it?
 - b. Learning how math/stat/probability are applied can make it more concrete and usable longer (e.g., if concepts are taught in an applied manner in high school we may remember the math more now)
 - c. Tension about how much theory matters - knowing all the background theory vs being able to apply the concepts
 - d. Textbooks are often not oriented toward application
 - e. There is more data needs now. Data is so ubiquitous now. People may not understand what it is and what it is used for.
 - i. Students know definition wise what data is but don't know how to collect or obtain the data. Think this is because data is so easily gotten
 - f. Dear data tool - collect data on something and make a postcard to visualize and send it to someone
 - i. <https://www.dear-data.com/theproject>
 - ii. Like the opportunity to lean into both the data side and artistic side of things
 - iii. Data artist <https://www.jillpelto.com/>
 - g. Example of cognitive bias - music. Jason's music categories are not the same as the categories that students put music in which he thinks is in part due to the way students are getting the music (spotify) vs how Jason got it (radio based on what DJs played)
 - i. Spotify wrapped - having students look at this could be a good way to get them excited about data