**June 28, 2024 Education Working Group Call**

Attendees: Alyssa Willson, Jody Peters, Antoinette Abeyta, Alyssa Willson, Mary Lofton, Rachel Torres, Saeed Shafiei Sabet, Jason McLachlan, Caz Kowalski

Agenda/Notes:

1. Share Sloan proposal (Jason)
    a. Mentoring networks and building data science tools for Indigenous communities
    b. New thing - microcredentials from ESIL (https://clas.ucdenver.edu/esil/) - the credentials come from U of Colorado, Denver. Have lots of courses, but does not have many data science courses. People have options to continue to stack up the microcredentials to eventually get a degree from UC, Denver
        i. Example - people need to write reports (e.g., water quality report for EPA) so a set of microcredentials could be writing reports - how to analyze the data and include it in the report
        ii. Rachel has taken one of the ESIL courses. The course was over a number of weeks with 2 hour live zoom calls each week. Could do the tutorial on own or through the zoom calls. Zoom calls went slow because many participants had to get caught up on how to use GitHub. Also had office hours available each week.
2. The range of people's computer experiences is a imit for in person workshops.
    a. From EFI2024 Conference Forecast Challenge workshop
        i. Is there a code free, GitHub free forecast challenge that could be developed?
            ● Could invite Dan Keefe to give presentation - has lots of thoughts about technologies that don't include coding
                ○ https://processing.org/
                    ■ Processing is a flexible software sketchbook and a language for learning how to code. Since 2001, Processing has promoted software literacy within the visual arts and visual literacy within technology.
            ● How far could you go without a
            ● Nick Record does some of this with his forecasting challenges and courses
            ● Freya's work that could be transformed into a Shiny format - using CI with code under the hood, but user is not using code
        ii. Workshop was given from 3 personas (someone participating, someone setting up a challenge, and an analyst)
            ● Good to keep in mind the personas/target audience. Who is going to use the tool and why
        iii. Interesting to see how to get people to the forecast challenge stage without being rooted in ecology and data science

- Think about the goal - we want people to know about forecasting and want to include more people to make the forecasts better
    - There are so many things that people can do with their time (e.g. as students in school or people not in school)
        - Want people to be able to fall into forecasting by mistake from many more backgrounds and more demographics
b. EFI2024 Education workshop recap from Mary
    i. Do not want to have DEI and Education workshops overlap or be in competition with the tech workshop
    ii. Next steps for Macrosystems EDDIE
        - Partnering with community college to do modules targeted to students who will be drinking water managers. Codeveloping with the instructor based on what her needs are. It is an RShiny module in Canvas that people can access who use Canvas
            - General feedback about this on an upcoming call this summer or fall
                - Will schedule for the July call
        - Would like non-US sites represented in the modules - will be working on including that - both lakes and terrestrial sites that people can add their own sites if they have the data
        - New module - knowledge guided machine learning. How do we incorporate domain knowledge about ecology in machine learning.
            - Targeted audience - data analytics students at VT first
            - May not be applicable to EFI community, but
3. Ideas for topics for future calls
    a. Perhaps this fall semester - chatGPT/AI: What would you do with it in your coursework?
        i. Assignment with where we know things are going in the field