

## January 13, 2025 Education Working Group Call

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

### Agenda/Notes:

1. Jason working with Salish Kootenai College to write grant on curriculum for their master's natural resources program
  - a. Jason will send out more information to EFI more broadly to send updates about this
2. EFI2025 (May 19-22, 2025) Conference; <https://bit.ly/efi2025>
  - a. Submission deadline: Jan 22; Registration opens Feb 14
  - b. See the Conference handbook in the "About the Conference" section of the conference website for more information
  - c. Working group idea: What would it look like to create a remote asynchronous EFI undergrad degree?
    - i. Rachel drafted some text to follow up on January call
    - ii. Discussion from the January call
      1. What we will do in a half day working group - introductions, talk through big picture, brainstorming ideas, breakout groups and synthesis
        - a. The project could inspire people and it will continue to get worked on, but nice to have something synthesized from the conversation which could go on the EFI webpage
        - b. Could also talk about next steps - but it will depend on people's interest in the room and who has time
        - c. Blog post would be big win - we revisited and reintroduced ourselves to this vision and the existing resources. Based on this vision and what existed, here are gaps and tangible next steps for the gaps (ordered from low hanging fruit to pie in the sky goals)
        - d. Have there been NSF program officers who are
          - i. Could Zoom NSF program officers in for part of it to think about funding potentials
          - ii. Maybe NSF PO can't sit in the whole time, but if they could Zoom in to help us with the priorities that could help make EFI more concrete.
          - iii. Diana knows everyone. We should ask her who to contact
        - e. Once workshop is accepted then we can do advertising to push it to them

2. Resources page on EFI website - in good shape, but good to update and use as a springboard for ideating and to help with vision
  - a. Use the next few working group meetings to update the resources
3. Spend time in the conference - discussing options, breakout groups, don't get bogged down looking
4. Intro video idea - how do we introduce to people the resources. Can a deliverable from the working group be to identify a list of resources to communicate what resources are available and what our vision of EFI University for Everyone is
5. Want to make the working group appealing and let people know what is going on, but not provide lots of homework.
6. Include Design Justice Principles.
  - a. Add language to put us on the hook for DJP: In previous EFI meetings, DJP have been a formal mechanism for thinking through activities.
  - b. As we get closer to the conference have Sean help with his and get his thoughts
7. Do we want to include universal design principles as well?
8. Could add links and reference the DJP and UDP frameworks.
9. Who will submit the proposal?
  - a. Can be whoever. If Rachel submits it, it doesn't require her to lead it, since we will lead as a group
  - b. Rachel can clean up the text and can share it with the DEI working group

Here are notes about this from the December call

- iii. Pretend we are at EFI University for Everyone. Redefine the curriculum so it works for everyone and applies to communities it matters to. What is actionable in your realm of influence
- iv. Ahead of conference do homework to compile a list of resources that exist already - know we are not starting from scratch
  1. Add to list: <https://www.indigenouslandstewards.org/> from David Dominique Chavez
- v. Want to know how inequity in the system affects what we want to do but don't want to limit the conference discussion to just this
  1. Recognize the inequities and strategize for them, but keep the brainstorming focused on what we can concretely do to make forecasting equitable
- vi. During the working group can we have 1 minute flash talks or run down of what already exists - prime people for what is available and what can be built on

- vii. During working group - what are guiding values. What are we using to guide how we design the curriculum, e.g., pain points are used for progress, normalize that open ended questions are good and there is no penalty for being wrong - sometimes there are no right answers and just want people to think and not be worried about being wrong
    - 1. Storytelling
    - 2. Often think of the core content and key principles, but the pedagogical values behind it too
    - 3. Probably have this written down or in our own minds but sharing it would be valuable
    - 4. From Mary's experience with her modules being used at community college, the open ended questions are daunting for students
  - d. Mary is willing to help with coordinating the compilation of materials within and outside of EFI
3. Code Review Blog Post Text (Jody)
- a. Thank you to people who have given feedback! It is looking good!
  - b. Remaining tasks
    - i. get Quinn's okay on docker text referencing his materials (Mary and Jody have pinged him)
    - ii. Check with the group on a few more comments, mainly in the pain points section
      - Alyssa and Mary will work on pain point 1 text base on our discussion today
    - iii. Do we want to say anything about using AI to create code and the continued need to check that code? Jody thought of this following the Stats seminar by Ben Weinstein on Jan 6
      - Yes! Mention it!
      - Jody will consider how to include this on her next read through
    - iv. Think about how to include the point that these recommendations are also helpful for educators teaching students to code
    - v. Be clear that the blog post is focused on internal review, but the considerations about external reviews as well.
      - Is this for internal or external review?
      - This is for an internal code reviewer (e.g., lab mate).
      - 
      - It is materials that is too big for GitHub, and isn't at the stage to put on Zenoda/FigShare for an external reviewer.
      - 
      - Intermediate outputs - what do people recommend for external reviewers? Do you include intermediate outputs for external reviewers?

- Mary has had external reviewers try to rerun code and get stuck. Don't want that.
- External reviewers don't want to spend days rerunning your code.
- How do you steer an external reviewer that demonstrates what you have done and will run in a reasonable amount of time. This will be different for different workflows.
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- Instead of specific advice for internal vs external review - do what you need to do for your goals for review both internally and externally.
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- For journal, if you are asked to review a paper. The journal will have guidelines about this.
- There is a need for journals to have policies in place.

2. EFI NEON Tutorial materials has been published!!

- <https://jose.theoj.org/papers/10.21105/jose.00259>

3. ***Follow up on this task as we have time to do so - not necessarily on this call:***

Developing scaffolding material to help people in the EFI community know what code is available in the [EFI GitHub repo](#)

- Project - can add a description that is more useful for the EFI project
- Not sure if there is an overall ReadMe
- Could make repo that is a guide to resources
- It is possible to do a collection of code repos in Zenodo - could do one bin in Zenodo to see all the code that is published from EFI.
  - Community in Zenodo
  - Provide benchmarks of the code
- GitHub repository option
  - <https://docs.github.com/en/organizations/collaborating-with-groups-in-organizations/customizing-your-organizations-profile>

Other resources

- Padlet with list of the working group activities the group had been thinking about in 2023. Jody still needs to update it to add what has been done. She has updated to add some color coding for activities in progress and those that have been worked on.
  - <https://padlet.com/jmurray716/brainstorming-efi-education-wg-activities-p78o4h18zdk397nk>