Good afternoon and thank you for this opportunity to share a little about this amazing teach and engagement journey that I’ve been on. I’m borrowing from Sue Noffke to talk about the professional, personal, and political aspects of this journey because ultimately technology education is so much more than about the technology ... or at least *I* think it is. But more about that in a minute. First a little about the course.
We must rapidly begin the shift from a thing-oriented society to a person-oriented society. When machines and computers, profit motives and property rights, are considered more important than people, the giant ripples of racism, extreme materialism, and militarism are incapable of being conquered.

Martin Luther King, Jr., Beyond Vietnam
April 4, 1967

The Center For Digital Inclusion
Context of learning – Tools in support of community consistent with future librarians

Outcome objective –
• An understanding that will be relevant for tomorrow’s technology
• A gourmet chef understanding that allows movement into new contexts and still build a perfect meal for the occasion given what’s in the cabinet

Collateral Learning Objectives –
• People-centered approach -> technology only a tool
• Technological Utopianism
• Asset-based, participatory approach
• Learning and service is bi-directional
A 12-year Journey with Service-Learning

- 23 semesters, ~ 500 students
- 98 different community organizations
  - 50 churches
  - 4 libraries, including 1 in Sao Tome & Principe, Africa
  - Various social service agencies, shelters, schools, and daycares
- ~1,250 refurbished computers

The Center For Digital Inclusion
University of Illinois Engaged Scholarship Context

- Prairienet Community Network => Center for Digital Inclusion (est. 1993)
  - Informed e.g. by Dewey, Addams, Bishop, Bruce, Stoecker, Schuler

- East St. Louis Action Research Project => Action Research Illinois (est. 1987)
  - Informed e.g. by Freire, Alinsky, Kretzman, McKnight, Reardon

Prairienet - mission to help people get online, to have the skills to do what they want when online, to have community content available, to help organizations build that content, and to build consortia of content providers.

ESLARP working in East St. Louis, a highly marginalized community in central Illinois, since 1987 using highly participatory process and action research.

In 1999 community asked for help addressing the digital divide. Focus groups led to the goal of a public computing center within 5 minutes walking distance of anywhere in the region. I was identified as a source for helping to accomplish. I identified my students as a source for helping me to accomplish.

Today the Center for Digital Inclusion and Action Research Illinois continue the work of Prairienet and ESLARP, respectively.
1. Readings, lectures, and hands-on activities introduce basic technology concepts. This semester, we’ve already
   • Disassembled and reassembled a computer
   • Added memory
   • Partitioned a hard drive
   • Added Linux to a Windows computer to discover how to explore new operating systems
   • Networked and broke a network of computers
   • Learned how to use command line tools like Ping to troubleshoot

   In the coming couple of weeks:
   • Operating system security
   • Routers, last mile technologies, the command line tool Trace Route to troubleshoot

2. Visits with community partners starting early- to mid-semester
3. Students work to customize computer lab design while refurbishing computers, and sometimes space and furniture
4. Computer delivery at end of semester, train community partners
   • Class exercises are necessarily more component oriented. The service project allows for more of a system view.
   • It also moves us from the controlled lab environment to the unpredictable real world. Regular class presentations help us maximize learning across
The political is to recognize that technology can be detrimental as well as helpful, for instance in reinforcing and expanding historic inequalities.

The political is also to begin learning the agency at hand to confront and change how technology is done to challenge structural inequalities.

The Center For Digital Inclusion

Formal Course Evaluations


Their research was done right about year 6 of 12 and provided a perfect assessment of whether I was meeting the stated and collateral learning objectives Nazarova used surveys, interviews, and grounded theory An used ethnographic study
Take home from Nazarova’s research is the course was a very successful professional
development course, preparing students for librarianship and informing the discipline

Ours is the #1 library and information science program in the nation along with north
Carolina. Students often find themselves in leadership positions. Engaged
scholarship informing the way students think about the LIS profession and how they
work in community means a major ripple effect

But are they identifying and joining in a social movement to challenge historic
injustices?? We need to look at An to see if students are being prepared for this.
Personal & Political: An

- **Link between service and technology education = valuable extension**

- **Limits**
  - Time and distance = unidirectional relationships
  - Missed opportunities (honey bee) = superficial understanding of culture & issues of intentional marginalization
  - Romanticization of final project impact

Strategies to overcome limitations

- **Reciprocal relationships**
  - 1st trip = de-emphasize technology
  - Encourage more trips
  - Ask students about possible interest in future engagement when assigning team
    - Now regularly oversee practicums, independent studies, and volunteer opportunities for students following up on projects

- **Seizing opportunities SUBTLY**
  - Is it a good computer? + ‘Do Artifacts Have Politics’
  - We must rapidly begin the shift from a thing-oriented society to a person-oriented society. When machines and computers, profit motives and property rights, are considered more important than people, the giant triplets of racism, extreme materialism, and militarism are incapable of being conquered.
  - Devil’s advocate: everything online -> why do we need community -> how do we design for community -> what is the impact of everything becoming networked so that we don’t need to leave home?

- **Romanticization**
  - More clearly mapping out existing programs
  - Working to predict the short and mid-term outcomes of technology design
Traditional service learning has clearly defined roles and spaces – the school, the community. The sweet spot is to maximize opportunities for all.

What if we expanded the sweet spot by seeing the community as everyone and breaking down the traditional roles?

- Emphasizing that the students come with undergraduate degrees that would put them up several rungs if they weren’t in academia
- More class discussion to encourage students to contribute their wealth of academic and real-world experiences

What model in classroom is more likely to be applied when meeting community

Example from last week: Gloria welcomed us learned people. I responded her 50 years of social work experience was more likely equivalent to 2 advanced degrees and that we had much to learn from her. Students reflected on this later.
I began service learning because the community had a goal, I was asked to help, and my students made a good army to carry out the work.

I did not start with a theory or considered pedagogical framework. But it’s been helpful to experiment with many different theoretical frameworks myself, with my students and with community. It brings different aspects of praxis into clearer view while obscuring others.

Using different lenses individually and corporately has helped to eventually bring more and more into the forefront to build progressively authentic engagement.
A participatory, asset-based approach to technology implementation in community provides a necessary critical assessment of IT.

Technology, if not critically evaluated, can be detrimental as it reinforces existing inequalities of power while potentially disrupting existing assets.

Levels of participation
• Consultant -> one way presentation of ideas
• Collaborator -> Still may mean we bring in the expertise regarding technology while community contributes ... food?
• Equal exchange -> Maybe our key social challenges are because we haven’t brought in the community lenses, instead depending on our own thing-oriented, hyper-individualistic framing???
Participatory design of technology and its implementation is foundational if we are to effectively support digitally inclusive initiatives for more just communities.

Difference is a resource.