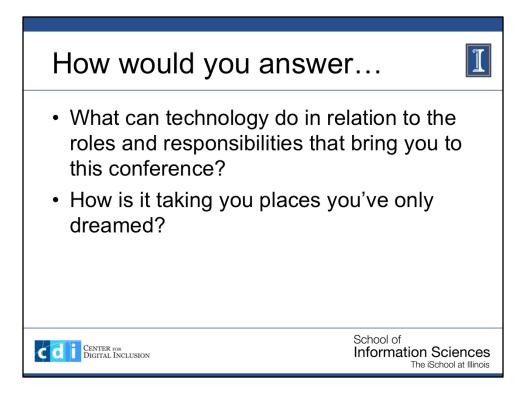


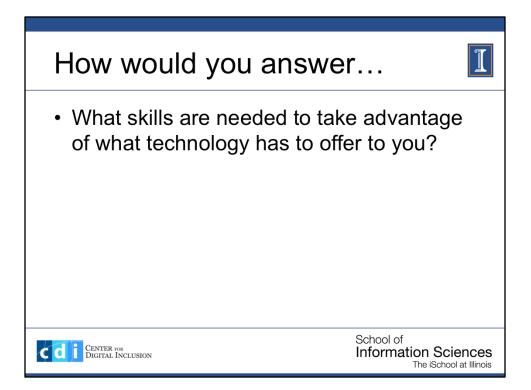


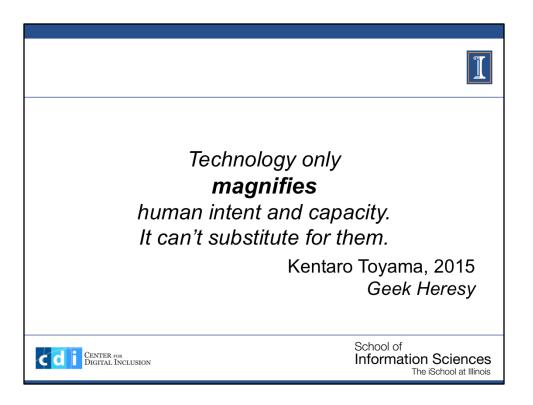
https://www.youtube.com/watch?v=qaOvHKG0Tio

What's your takeaway from this video? What do you see? What does it make you think about?

I see people doing hard, wonderful things; I see technology being given the credit.







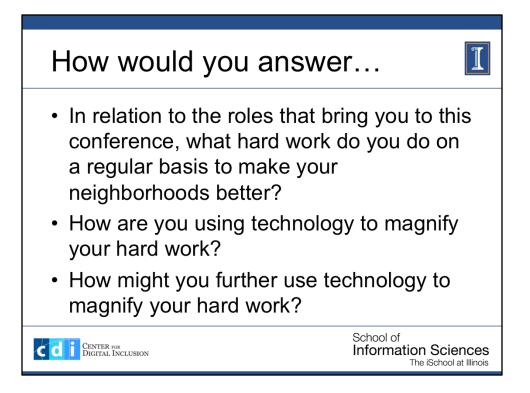
Thinking back to the video, what is some of the hard work being done by the people? Where is the credit being given?

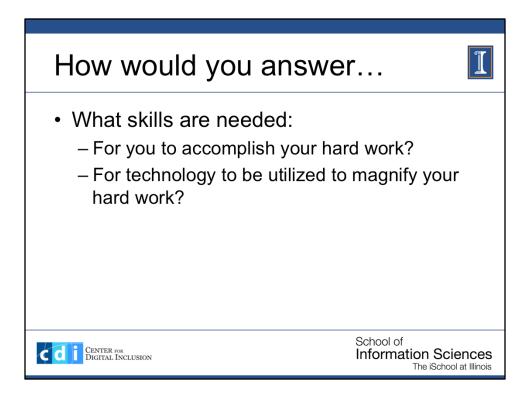
Technology does not have agency, people do.

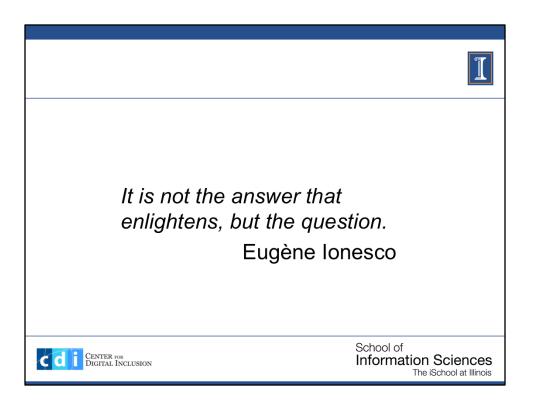
People can use technology to magnify their efforts to participate in society,

democracy, and the economy

This is not a critique of Microsoft, it is a critique of us. Microsoft has just captured this societal ill nicely in a 60 second video.

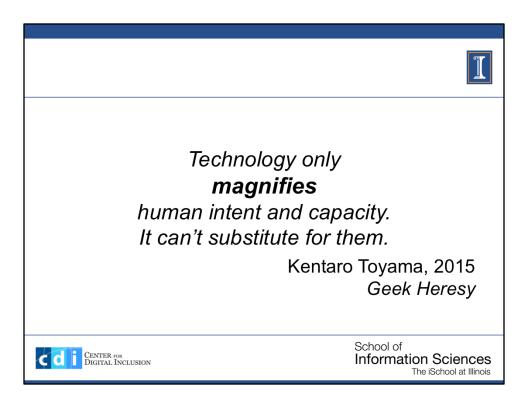






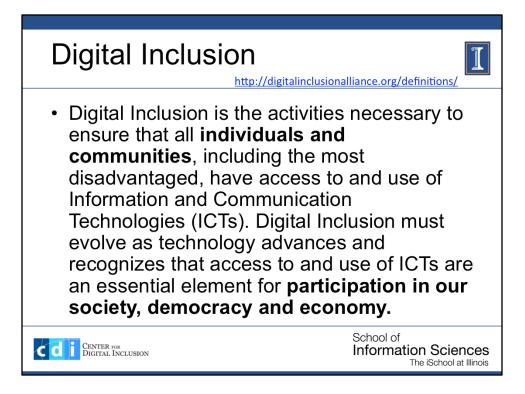
Seymour Papert noted in his 1987 paper "Technocentrism vs. Computer Criticism" that we don't ask how wood built such a great wall, or how a saw built such fine furniture.

What are some of the ramifications when we give agency to technology, rather than to the people?



If people have the agency, not technology, what is happening when technology sometimes worsens inequalities?

People's use of technology can also magnify historical, systematic, and structural barriers arising from past human intent

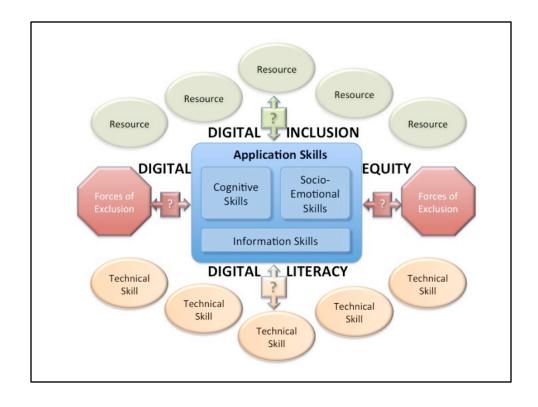






 Digital Equity is the ultimate outcome of full digital inclusion, with focused action and investments to eliminate historic, systemic and structural barriers that perpetuate disadvantaged individuals and communities. Digital equity recognizes our moral obligation to harness ICTs to address the needs of disadvantaged individuals, as well as community or neighborhoods, communitybased organizations and small businesses.

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If we are to encourage agency and participation, we need a different kind of digital literacy training!

Resources overlap and intertwine in complex ways that are more than just additive. Resources include: material, social, educational, financial, social, time, health, etc. As with technical skills, some may be necessary for people to have the capabilities to do that which they value. But they are by no means sufficient. For instance money may be helpful to acquire essential housing, medical care, and nutrition, but not if quality housing, medical care, and food isn't available within a community. On the other hand, social and natural resources may provide for quality housing and nutrition even if you have no funds.

Focusing primarily on either resources or technical skills over simplifies the issue and leaves much of what is really needed to foster agency untouched

Advancing capabilities requires focusing on cognitive, socio-emotional, and information skills through which individuals can actively participate in leveraging resources, developing needed technical skills, and identifying and challenging forces of exclusion.

Historical, systemic, and structural barriers that serve as forces of exclusion are complex, intersectional, and often hidden. All of us experience such forces to some degree, although some experience them in insurmountable ways.



Todd Lash, upper right, was librarian at Kenwood elementary in Champaign 2 years ago and became a champion for computational thinking for all learners

He has worked tirelessly with school administrators, unit IT, teachers, and students, providing vision, professional development, program development for teachers, and creative instruction to students.

GSLIS students provided considerable support this past year to Todd and to teachers. This past year, Todd took on the role of instructional coach and Miriam Larson became the school library media specialist, doubling the support.

Minsoo Park is the technology specialist assigned to the school.

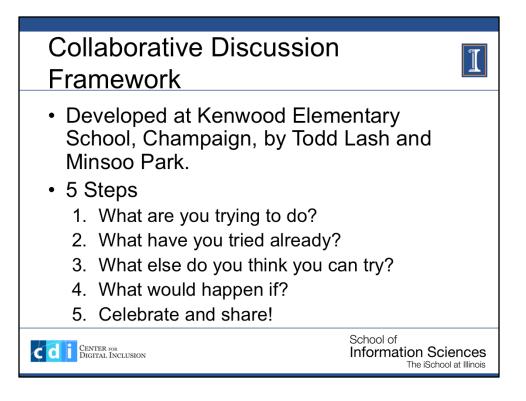
Kenwood serves 80% free and reduced lunch. They recently changed their vision to be "Technology and Literacy for the Community"

Computational thinking for all learners, then, is about reaching those most often left behind in all forms of education, and especially technology education

GSLIS engagement has been especially focused on issues of literacy and inclusion, including efforts to bridge the divide between home and school



Now capped at 20 or so kids before or after school, using a sign up.



Story of 4<sup>th</sup> and 5<sup>th</sup> graders from Kenwood presenting at statewide conference and using collaborative discussion framework with older students at conference



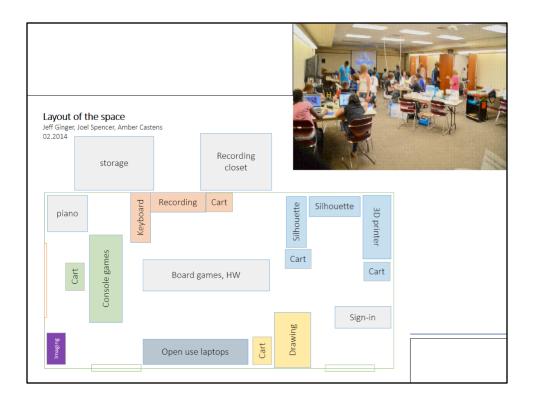
Amber Cox (formerly Castens) and Joel Spencer – GSLIS grads now adult librarians at The Urbana Free Library in charge teen programming

Joel and I did some dusty work together while he was at GSLIS as we refurbished a building and built a computer lab for a popular social entrepreneur in East St. Louis This led to a 2 semester project to redesign the 2<sup>nd</sup> floor computer lab, the furniture of which he and I then built in my woodshop

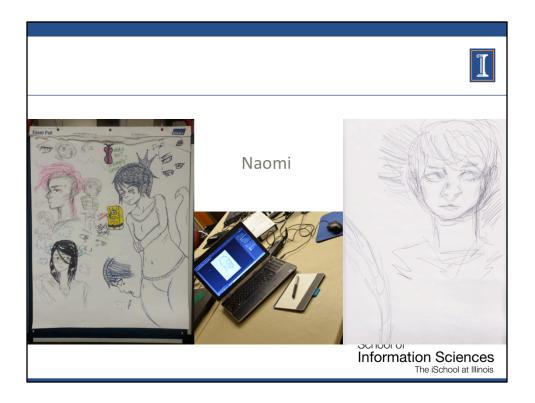
While many goals of Amber and Joel for increased collaborative spaces while decreasing chaos were met, improved intergenerational relations were note. Amber and Joel identified the auditorium as underutilized space, especially afterschool.

A grant I had received through the Illinois DCEO and their EDD program funded a mobile computer cart and some digital media equipment, and a research assistant The Champaign Urbana Fab Lab and Makerspace Urbana brought in additional resources

Teens led in key components of the design and program direction, and continue to have considerable freedom in how the space is setup on any given day.



The max number of teens who have been in this space at once is 50. Average about 15-20.



Naomi wanted graphics tablets to support drawing software

She learned to use it, then taught librarians, staff, volunteers, and other teens When she aged out, she wanted a way to continue to participate and Amber and Joel suggested she serve as a volunteer and teacher

Naomi responded that she had nothing to teach. They assured her she had already been such a strong teacher

A project that mattered, being an ally, reshaping the way this teen thought about herself



Sean and Marchond wanted to provide after-school computer and homework support and a safe place for youth. But through regular dialogue with clients and community members who hung out at the Barbershop, my students also discovered that many men there were ex-offenders, leading to a very different workshop. These two graduate students, a male from Africa and a white female US citizen, found a misalignment between expectations and reality, not just of their own thinking, but also that of the clients themselves. As such, the workshop was as much and more a demystification of the myths and misconceptions of black male life in the US, of being an "ex-offender", and of technology.

