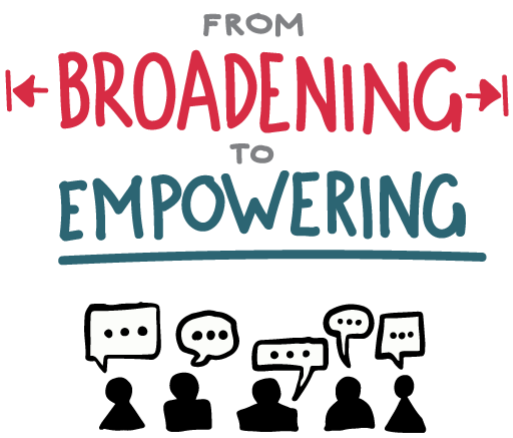
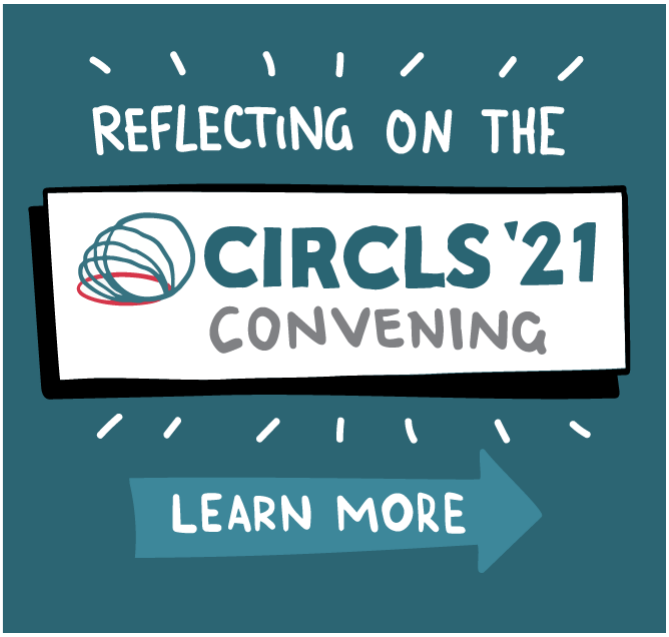
CIRCLS

Center for Integrative Research in Computing and Learning Sciences





CIRCLS'21 was not just a meeting to attend, but also a step towards community transformation. Attendees agreed that they already knew WHY emerging learning technology had to better address equity, but they weren't sure HOW their research could change. Together, the assembled community participated in eleven strategy sessions where they articulated what we can do differently. And along the way, our graphics artist produced some stunning illustrations. We now invite you to review the outcomes of CIRCLS'21 in our easy-to-read, visually gorgeous, and share-me-please web report. And we'd love to hear more from you: What will you do to prepare the next generation of researchers? To rethink the design process? To strengthen partnerships? To refocus broader impacts? Drop us a line via our contact form.

Indeed, we'd be happy to share any and all of your project news, so please write us.

CIRCLS Perspective

David Lockett is the Grants Proposal Development and Award Management Specialist at Meharry School of Applied Computational Sciences and an Albert Einstein Distinguished Educator Emeritus. His research interests include computer and data science, professional

development, computational thinking, artificial intelligence, and machine learning in healthcare. A fun fact about David is that he recently attended the SpaceX Inspiration 4 launch at Kennedy Space Center. Find out how he incorporates emerging technologies for teaching and learning into his work by reading his CIRCLS Perspective.

Expertise Exchanges

AI CIRCLS

AI CIRCLS is currently offering two opportunities to join our community!

AI CIRCLS will be hosting a "project incubator" on the topic of artificial intelligence and literacy, and are looking for community partners, learning scientists, computer scientists, and social scientists to apply to participate. Our aim is to bring together interdisciplinary teams, offer resources to support grant writing and ideating projects while centering community partnerships, equity and justice frameworks, and responsible/ethical AI. Apply by March 1, 2022.

You can also join us for our discussion series on community partnerships every other Friday, 1-2 pm EST (10-11 am PST). Our next session takes place on February 18 and features educators discussing the ins and outs of partnerships with schools and districts. Register here and see you there!

Emerging Scholar CIRCLS

This month's Featured Emerging Scholar is CIRCLS' own Dr. Aditi Mallavarapu, a Postdoctoral Researcher at CIRCLS and the Learning Sciences Research team at Digital Promise. In 2021, she graduated from the University of Illinois Chicago (UIC) with her Ph.D. in Computer Science. Her research projects all have the shared goal of building computational methods and tools to understand, support, and improve exploration-based learning in open-ended learning environments. To learn more about Aditi and her innovative work, please read Supporting Large Groups' Open-Ended Learning.

We are excited to announce the Winter 22 Emerging Scholar CIRCLS Mentoring Series! Our mentors for this series are Dr. Matthew Bernacki, Dr. Brian Smith, Dr. Colleen Megowan-Romanowicz, and Dr. Erin Ottmar. The one-hour small-group mentoring sessions are intended to foster informal and candid conversations among established scholars in the fields of computer and learning sciences and up to eight emerging scholars in each group.

Educator CIRCLS

Educator CIRCLS practitioners were excited to read about the work that the SchoolWide Labs team shared in the recent blog post led by Colin Hennessy Elliott: Supporting Computationally Rich Communication During Remote Learning: Lessons Learned. One educator who reviewed the post had done something a decade ago in her middle school science class and was thrilled with how the DaSH's were so much more affordable than the Vernier probes and Texas Instruments used then. She also loved the added component of programming and noted how the

support and work provided around debugging for teachers as they brought this into their classroom was essential for this kind of project to succeed. If you're a project who would like to think with educators, please reach out. We'd love to have more projects collaborate with us.

If you are interested in joining any of our Expertise Exchanges, please fill out this form.

CIRCLS Project Spotlight

The CIRCLS Project Spotlight is an opportunity for RETTL projects to introduce their work and share information about their project with the CIRCLS community that they might not otherwise get to learn about. Below is a sneak peek of our inaugural Project Spotlight:

Melissa Tehee and Breanne K. Litts at Utah State University, and Rogelio E. Cardona-Rivera at the University of Utah share more on their most recent NSF-funded RETTL project, Transformative Computational Models of Narrative to Support Teaching Indigenous Perspectives in K-12 Classrooms (#2119573).

This project aims to address the lack of representation of Indigenous culture, history, and stories in the classroom. It uses a community-driven process and is working to develop emerging narrative technologies from an Indigenous perspective to support teachers and classroom learning. Specifically, **the project is trying to determine, at the computational level, how to create representations of Indigenous narratives that support an Indigenous knowledge system rather than a Western knowledge system**. The project is also working to provide a VR experience that can be used by K-12 teachers who are less familiar with Indigenous history so that they are well equipped to implement the curriculum in a way that's respectful and appropriate. The project staff is working in partnership with the Northwestern Band of the Shoshone Nation (NWBSN) in Utah and hopes to expand this work in partnership with many Tribal Nations over time. They are approaching this work at a "deep human level," and are building on their previous work that examined biases that exist in the technologies that we use today.

Continue reading the full CIRCLS Project Spotlight.

Opportunities

- **Call for Submissions:** 2022 STEM for All Video Showcase: Registration to be a presenter in the 2022 STEM for All Video Showcase ends Friday, **February 11, 2022**, or earlier, if they reach capacity! Don't miss the opportunity to showcase your federally-funded work sharing research and innovations in STEM education. Register from the homepage of the 2022 STEM for All Video Showcase. Read more
- **Resource:** Learning Agency Launches Learning Engineering Hub: The Learning Agency recently launched a community hub for learning engineers and those interested in learning engineering. The hub includes a video series from leaders in the field, recordings of webinars and events they've hosted with learning engineers, and links to resources. You

can also participate in the Learning Engineering Google Group and join the conversations. Read more

- **Event:** CISE IIS Office Hours: The IIS Office Hours are for researchers interested in learning about programs and policies in the Division of Information and Intelligent Systems (IIS) in the Computer and Information Science and Engineering Directorate (CISE) at NSF. Office Hours are designed to give current and potential investigators a window into IIS. The CISE IIS Office Hours: Human-Centered Computing (HCC) programs will be **February 17, 2022, from 1 pm – 2 pm ET**. Read more
- **Call for Submissions:** The Connected Learning Alliance - call for proposals: The Connected Learning Alliance is seeking contributors for a Human Experience (HX) Essay Collection. This essay collection aims to bring together expert voices with a range of perspectives to articulate what HX is, why it is important, and how it can be supported among youth and people of all ages. Abstract submissions are due **March 25, 2022**. Read more
- **Job Opportunity:** Education Development Center (EDC): Multiple job openings at the Education Development Center (EDC), a global nonprofit that advances lasting solutions to improve education, promote health, and expand economic opportunity. Since 1958, they have been a leader in designing, implementing, and evaluating powerful and innovative programs in more than 80 countries around the world. Of particular interest to the CIRCLS community would be the job openings at the New York office, the Center for Children and Technology. Read more
- **Event:** The Center for Open Science 2nd Annual Unconference: The Center for Open Science is hosting its 2nd annual Unconference on Open Scholarship Practices for Education Research on **February 24 and 25**. The 2022 virtual Unconference will feature participant-led sessions analyzing the current state of open scholarship practice and interactive hackathons seeking solutions to identified problems. Participants will assess barriers to the adoption of open scholarship practices unique to the education community and brainstorm strategies for promoting greater awareness. Read more
- **Call for Submissions:** International Journal of Child-Computer Interaction: This call for submissions from the *International Journal of Child-Computer Interaction* is for a special issue on justice-centered design for youth. They welcome and encourage researchers in this cross-disciplinary field to submit original research articles reporting experiments, case studies, reviews, as well as theoretical work investigating the role of justice for children. The deadline for manuscript submissions is **May 13, 2022**. Read more

Stay tuned and be on the lookout for the most up-to-date opportunities on our website and Twitter

Have some news or resources that you want to share with the community?

Contact CIRCLS

Follow us on FACEBOOK I TWITTER I LINKEDIN

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