



Following the powerful [CIRCLS'21 convening](#), our team has been concretely extending our community's work on the theme of "Remaking Broadening." We published a CACM blog post, [Safe AI in Education Needs You](#), based on the work of our AI and Education Policy group. We analyzed the themes of the town hall session ("from broadening to empowering"), and produced graphics that organize our new strategies by the actors involved, for example, the graphic below about how RETTL researchers need to be prepared. We cooperated with NSF to invite more reviewers from this community for the next round of RETTL proposals, and if you [volunteer to be a peer reviewer](#), you can shape how the program evolves. Also, Jeremy Roschelle now serves on the EHR Advisory Committee and was able to directly share insights from our convening with top decision-makers in NSF. Finally, we intend to publish an illustrated web report on the convening in January, so you can share and build on what we accomplished together.



There is no major convening planned for 2022, and instead we will focus on our [Expertise Exchanges](#), such as Emerging Scholar CIRCLS, Educator CIRCLS, and a new AI CIRCLS series on establishing community partnerships. If you want to participate, or have an idea for an additional working group, feel free to [contact us](#).

CIRCLS Perspective



[Melissa Rasberry](#) is the Director of Professional Learning and Leading at the Friday Institute for Educational Innovation at North Carolina State University. Her research interests include online professional development, virtual learning for students, broadening participation, and computer science/computational thinking. She

recently served on the Program Committee for the CIRCLS'21 Convening. Learn more about how she attends to issues of equity in her projects and her passion for emerging technologies by reading her [CIRCLS Perspective](#).

Expertise Exchanges

AI CIRCLS

AI CIRCLS is hosting a [discussion series on community partnerships](#) for researchers who would like to learn more about building effective research-practice partnerships. The discussion series will have speakers with experience in partnerships in both formal and informal learning settings and will ask participants to bring in their own questions, concerns, and experiences with community partnerships. Registration will be open to anybody who wants to participate. Fill out our [community partnerships survey](#) to share your thoughts on what you'd most like to discuss and to receive future announcements about the series.

Emerging Scholar CIRCLS



Our Featured Emerging Scholar is Carly Leannah, a second-year doctoral student in the Ph.D. in Educational Neuroscience (PEN) program at Gallaudet University, in Washington, D.C. She holds a Master's degree in Secondary Education for Deaf & Hard of Hearing (DHH) students and a BS degree in Psychology from Rochester Institute of Technology. Carly is researching the influence of the American Sign Language acquisition on spatial perception and learning processes as well as how technology can influence

language development for DHH individuals. To learn more about Carly and her work, please read [Language Equality for Deaf Learners](#).

Educator CIRCLS

Share your project with educators! Educator CIRCLS would like to connect with new RETTL or existing projects thinking about emerging technologies for teaching and learning. If you are interested in having your project and work reviewed by educators and discussed on Educator CIRCLS, please let us know. Stay tuned for our unveiling of the first project blog in the coming weeks. We're building off of Kip Glazer's blog series this summer as she considered the [Conversations between Researchers and Practitioners](#) to bridge research with classroom practice and broaden the community of people involved in CIRCLS.

If you are interested in joining any of our Expertise Exchanges, [please fill out this form](#).

New Awards

Congratulations to the newest cohort of RETTL (formerly Cyberlearning) award recipients. Welcome to the CIRCLS community!

Recent NSF awards:

- [Using Augmented Reality and Artificial Intelligence to Improve Teaching and Learning Spatial Transformations in STEM Disciplines](#) PI: Wei Yan, Alabama A&M University. CoPIs: Francis Quek, Philip Yasskin, Dezhen Song, Heather Burte
- [Catalyst Project: Development and Implementation of Intelligent Adaptive Cyberlearning System for Minority Freshmen Students](#) PI: Salam Khan, Alabama A&M University. CoPIs: Peter Clarke, Jacob Oluwoye, Lydia Davenport, Anjan Biswas
- [EAGER: Collaborative Research: Second Language Speech Production: Formulation of Objective Speech Intelligibility Measures and Learner-Specific Feedback](#) PI: Stephen Looney, Pennsylvania State Univ University Park.
- [Combining Smartphone Light Detection and Ranging with Augmented Reality to Enhance Position-Based Teaching and Learning in STEM](#) PI: Colleen Megowan-Romanowicz, American Modeling Teachers Association. CoPI: Mina Johnson-Glenberg, Chrystian Vieyra, Daniel O'Brien, Rebecca Vieyra
- [Transformative Computational Models of Narrative to Support Teaching Indigenous Perspectives in K-12 Classrooms](#) PI: Rogelio Cardona-Rivera. University of Utah.
- [CAREER: Developing Computational Tools to Revitalize the U.S. Textile Manufacturing Workforce](#) PI: Fatma Baytar, Cornell University.
- [Using AI to Focus Teacher-Student Troubleshooting in Classroom Robotics](#) PI: Ross Higashi, Carnegie-Mellon University. CoPI: Jean Oh
- [Collaborative Research: Common Error Diagnostics and Support in Short-answer Math Questions](#) PI: Cristina Heffernan, Assisments Foundation Inc.
- [Integrating Artificial Intelligence with Smart Engineering and English Language Arts in Upper Elementary Education](#) PI: Jennifer Cross, Tufts University. CoPIs: Jivko Sinapov, Chris Rogers, Steven Coxon
- [Transformative Computational Models of Narrative to Support Teaching Indigenous Perspectives in K-12 Classrooms](#) PI: Melissa Tehee, Utah State University. CoPI: Breanne Litts
- [Collaborative Research: Common Error Diagnostics and Support in Short-answer Math Questions](#) PI: Neil Heffernan, Worcester Polytechnic Institute. CoPI: Stacy Shaw
- [Identifying and Extracting Meaningful Indicators of Children's Moment-to-Moment Programming Processes in Scratch](#) PI: Gregory Chung, University of California-Los Angeles. CoPI: Kilchan Choi
- [Targeted Infusion Project: Technology Enhanced Education and Practices for Success \(TEEPS\) in Undergraduate Organic Chemistry at Clark Atlanta University](#) PI: Dinadayalane Tandabany, Clark Atlanta University. CoPIs: Issifu Harruna, Conrad Ingram, Xinle Li
- [EAGER: Adaptive Digital Twinning: An Immersive Visualization Framework for Structural Cyber-Physical Systems](#) PI: Devin Harris, University of Virginia Main Campus. CoPIs: Jennifer Chiu, Bradford Campbell, Panagiotis Apostolellis

Opportunities

- **Solicitation:** [NSF National Artificial Intelligence Research Institutes](#): The third iteration of the National AI Research Institutes solicitation is now live and includes the continuation of the “AI-Augmented Learning” theme, led by EHR. This year, there is a new partnership with the Institute of Education Sciences (IES) at the Department of Education and the theme has a new focus of AI-Augmented Learning to Expand Education Opportunities and Improve Outcomes. This includes a focus on diverse learners, including those from disadvantaged or underserved communities, to address a grand challenge of “Education for All.” Preliminary proposal required by January 14, 2022. Full proposals are due May 13, 2022. [Read more](#)
- **Funding Opportunity:** [OpenSciEd Research Seed Funding Opportunity](#): Digital Promise and the Carnegie Corporation of New York are offering support for teams of researchers to develop OpenSciEd-enabled grant proposals. The OpenSciEd Research Agenda project will award between 6 and 10 seed grants of \$6,000 to \$10,000 to support scholars’ efforts to advance a proposal concept. The supported activities will result in the submission of a competitive grant proposal valued at \$250,000 or more to a federal program, philanthropic foundation, or other grant awarding organization. Priority will be given to early-career scholars and/or applicants who do not have an extensive history of research grant funding. The deadline for applications is **January 14, 2022**. [Read more](#)
- **Job Opportunity:** [Associate Director for Institute of Cognitive Science – University of Colorado at Boulder](#): The Institute of Cognitive Science (ICS) at the University of Colorado at Boulder is seeking applicants for an Associate Director to join their team. The Associate Director of the Institute will serve as the chief operating and financial officer, and in consultation with the Institute Director, will carry out a range of duties to support the mission and vision of the Institute. Review of applications will begin on **December 13, 2021**, and will continue until the position is filled. [Read more](#)
- **Job Opportunity:** [Assistant/Associate Faculty Curator of Museum Education and AI](#): The Department of Natural History at the University of Florida is seeking a 12-month, tenure track faculty member with research and teaching interests in science learning, museums, and Artificial Intelligence (AI). They invite applications from those with research programs focused on engagement within formal, informal, and/or community spaces as well as AI tools and applications as they relate to learning in and with museums. Review of applications will begin on **January 1, 2022**, and will continue until the position is filled. [Read more](#)
- **Job Opportunity:** [Postdoctoral Researcher Opportunity: Alliance for Identity-Inclusive Computing Education \(AiiCE\)-Duke University](#): The Alliance for Identity-Inclusive Computing Education (AiiCE) aims to increase the entry, retention, and course/degree completion rates of high-school and undergraduate students from groups that are historically underrepresented in computing through evidence-based, identity-inclusive interventions. The Alliance seeks candidates for a postdoctoral position at the intersection of identity and computing/STEM. The position is part of a national effort to broaden participation in computing through identity-inclusive strategies. The successful candidate will have the opportunity to interact with faculty and researchers from Duke University, the University of Oregon, Mount Holyoke College, the Kapor Center, Constellations Center for Equity in Computing at Georgia Tech, ABET/CSAB, Reboot Representation, and the Center for Inclusive Computing. Review of applications for this position will begin

December 15, 2021, and continue until the position is filled. Target start date is July 2022.

[Read more](#)

- **Job Opportunity:** [Postdoctoral Researcher Opportunity at Utah State University](#): Utah State University seeks a postdoctoral scholar to join a National Science Foundation-funded project (Award: 2119573). The scholar will join a multidisciplinary collaboration to address the lack of Indigenous representation in social studies curricula. In partnership with Tribal Knowledge Holders, the team will design Indigenous narrative technologies for the classroom. This position is a full-time appointment for 12 months, renewable at least 2 years pending satisfactory performance. Review of applications began on **December 1, 2021**, and will continue until the position is filled. The position would ideally start Spring 2022, but is negotiable. [Read more](#)
- **Call for Researchers:** Digital Promise is calling on researchers who have findings on the unanticipated effects of COVID-19 on teaching and learning. If you have (or know of) any research on the impacts of COVID-19 on teaching and learning please fill out [this form](#) and the CIRCLS team will share accordingly. The scope is very broad and we welcome research in both K-12 and higher education settings.

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**

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