

## Preface and Acknowledgments

Welcome to the sixth-annual Indiana STEM Education Conference, hosted by the Center for Advancing the Teaching and Learning of STEM (CATALYST, <https://www.education.purdue.edu/catalyst/>) at Purdue University. The theme for the 2021 conference was *STEM Education Meets a Global Challenge*. Since spring 2020, we have been facing health, environmental, and social challenges at a global level. This year's Indiana STEM Education Conference provided opportunities to learn about effective STEM education strategies, curriculum, and resources to help teachers and students navigate learning STEM disciplines during the global pandemic.

It was a small challenge to hold the Indiana STEM Education Conference in 2021. Because it was not possible to have an in-person conference in 2021, the planning and organizing team developed a virtual conference featuring 64 presentations, 23 exhibitors, 12 research posters or briefs, and approximately 440 participants. A particularly useful feature of the virtual format is that all recordings and resources from the Indiana STEM Education Conference will stay posted for several months in the Socio Event Platform. This will allow participants to watch the presentations and to view the resources multiple times long after the conference ends.

The keynote speaker for the conference was Dr. Jennifer Richardson. Dr. Richardson is a Professor of Learning, Design, and Technology at Purdue University. Her research focuses on strategies for teaching, social presence, and gauging learning in online environments. She is the Director of the Purdue Repository for online Teaching and Learning (PoRTAL, <https://www.purdue.edu/innovativelearning/supporting-instruction/portal/>). PoRTAL is an open educational resource site for online evidence-based teaching practices including instructor strategies, design tips, pedagogy, and procedures. Dr. Richardson's presentation will focus on strategies for online teaching and learning for K-12 classrooms.

Exhibitors are important sponsors of the conference. This year we were fortunate to have Comcast - Internet Essentials (<https://internetessentials.com/>) as a premier sponsor.

Published proceedings are a new feature of the Indiana STEM Education Conference. The 12 research posters or briefs have been published through Purdue e-Pubs (<https://docs.lib.purdue.edu/instemed>).

K-12 STEM educators have faced enormous challenges since spring 2020. Thank you to all of the attendees for all you do and for making time to grow as a professional through this conference. In addition, we thank Socio for helping us create the virtual conference; Information Technology at Purdue (IT@P), Ed Dunn, and his group for providing technology support; and Purdue Conferences, Pamela Walker-Stokes, and her colleagues for organizing the all of the conference details.

See you in 2022!