





CREATE at the 2024 NARST Annual Conference

Sunday, March 17

Time: 3:00 - 4:30pm, Plaza Court 5

Jonathan Bowers, Emil Eiden (formerly with CREATE) "Fail Faster": How a Teacher Supported Students With Testing and Debugging Computational Models

Time: 3:00 - 4:30pm, Governor's Square 15

Leonora Kaldaras (formerly with CREATE), Tingting Li, Kevin Haudek, Joe Krajcik, Rubric Development for AI Scoring of NGSS Learning Progression-Based Scientific Models to Support Individual Opportunity to Learn

Time 3:00 - 4:30pm, Governor's Square 15

Tingting Li, Leonora Kaldaras, Kevin Haudek, Joe Krajcik, Utilizing Deep Learning AI to Evaluate Scientific Models: Overcoming the Challenges

Time: 3:00 - 4:30pm, Governor's Square 15

Peng He, Namsoo Shin, Joe Krajcik, Using Generative AI to Automatically Identify Students' Three-Dimensional Understanding in an NGSS-Aligned Learning Progression

Time: 3:00 - 4:30pm, Plaza Court 2

Peng He, Namsoo Shin, Jonathan Bowers, Joe Krajcik, (Mao-Ren Zeng, Mingchun Huang, formerly CREATE visiting scholars), Developing a Three-Dimensional Learning Progression for the Thermal Energy at Middle School Science

Time: 4:45 - 6:15pm, Governor's Square 15

Selin Akgun, Hee Rin Lee, Joe Krajcik, Kahyun Choi (Indiana Univ) Supporting Al literacy in K-12 Science Education: Raising Critical Consciousness towards Ethical Al

Monday, March 18

Time: 8:15 - 9:45am, Governor's Square 14

Joe Krajcik, Cory Miller, Sustained Professional Learning to Promote Teaching Elementary Science in Large Urban Schools

Time: 8:15 - 9:45pm, Governor's Square 17

Emil Eiden (formerly with CREATE), Jonathan Bowers, Interconnecting Modeling, System Thinking, and Disciplinary Core Ideas Using Computational System Modeling

Time 10:00 - 11:30am, Plaza Court 1

Christina Schwarz, Aman Yadav, Wanjoo Ahn, Zac Opps, Elementary Teachers' Use of Computational Thinking to Expand Student's Reflection and Epistemic Engagement in Science

Time 2:00 - 3:30pm, Plaza Court 6

Mingchun Huang (former visiting scholar), Peng He, Mao-Ren Zeng (former visiting scholar), Namsoo Shin, Jonathan Bowers, Joe Krajcik, Developing a Three-Dimensional Learning Progression for Properties and Structure of Matter at Middle School Level

Time: 7:00 - 9:00pm, Directors Row 1

Joe Krajcik, panelist: RAISE Book Talk: Uses of Artificial Intelligence for STEM Education

Tuesday, March 19

Time: 8:15 - 09:45am, Directors Row E

Namsoo Shin, Peng He, Joe Krajcik, Developing Three-Dimensional Learning Progressions of Energy, Interaction, and Matter at Middle School: A Design-Based Research

Time: 2:30 - 4:00pm, Directors Row J

Consuelo Morales, Jane Lee, Peng He, Irene Bayer, Emil Eiden (formerly with CREATE), Measuring Students 3D Learning and Transfer Using NGSS-Designed Life Science Assessments

Time: 2:30 - 4:00pm, Plaza Court 5

Wanjoo Ahn, **Christina Schwarz**; Exploring Preservice Teachers' Perspectives on Equity in Science Education in an Equity-focused Science Methods Course