

A forum for emerging voices in the Learning Sciences to share and develop ideas.

# October 19th & 20th 2017

### Indiana University Bloomington

School of Education 201 N Rose Ave, Bloomington, IN 47405

Social Science Research Commons 1100 E 7th St, Bloomington, IN 47406

> www.lsgsconference.com lsgsconference.slack.com @lsgs\_conference #lsgsc



#### Thursday, October 19th

2:00 PM Registration

Social Science Research Commons

4:00 PM Conference Kickoff

Welcome by Dr. Cindy Hmelo-Silver, Indiana University Introduction by Dr. Daniel Hickey, Indiana University Kickoff Lecture by Dr. Kylie Peppler, Indiana University Social Science Research Commons

5:00 PM Poster Session & Reception
Social Science Research Commons

6:30 PM Dinner around Town with an Affinity Group

#### Friday, October 20th

9:00 AM Breakfast

School of Education Atrium Balcony

9:30 AM Roundtables

School of Education

11:15 AM Workshops

School of Education

12:15 PM Lunch with an Affinity Group

Tour of the Make, Innovate, Learn Lab (MILL)

School of Education

2:00 PM Keynote

Introduction by Dr. Daniel Hickey, Indiana University Keynote by Dr. Susan Yoon, University of Pennsylvania Social Science Research Commons

3:30 PM Faculty Panel

Dr. Paula Hooper, Northwestern University

Dr. Leilah Lyons, University of Illinois at Chicago

Dr. Rosemary Russ, University of Wisconsin-Madison

Dr. Tesha Sengupta-Irving, Vanderbilt University
Social Science Research Commons

5:00 PM Closing Words

7:00 PM Optional Dinner



**Dr. Cindy Hmelo-Silver**Barbara B. Jacobs Chair of Education and Technology & Professor of Learning Sciences, Indiana University



**Dr. Daniel Hickey**Program Coordinator & Professor of Learning Sciences,
Indiana University



### Keynotes



**Dr. Kylie Peppler**Associate Professor of Learning Sciences, Indiana University



**Dr. Susan Yoon**Associate Professor of Teaching,
Learning, and Leadership, University of Pennsylvania



**Dr. Paula Hooper**Assistant Professor of Instruction, Northwestern University



**Dr. Leilah Lyons**Assistant Professor of Computer Science and Learning Sciences, University of Illinois at Chicago; Director of Digital Learning Research, New York Hall of Science



**Dr. Rosemary Russ**Assistant Professor of Science Education, University of Wisconsin-Madison



**Dr. Tesha Sengupta-Irving**Assistant Professor of Mathematics Education and Learning Sciences, Vanderbilt University



- (1) Thinking about Race and Power in History: A Think Aloud Study

  Allena Berry, Northwestern University
- (2) Reexamining PSETs' Reluctance towards Science Education: Helping Students by Not Teaching Science

Jocelyn Nardo & Minjung Ryu, Purdue University

(3) Spatial Sewing: The Relationship Between Fashion Design and Three-Dimensional Spatial Rotation Skills

Sophia Bender & Kylie Peppler, Indiana University

(4) Positioning and Engagement of an Elementary Student in an Engineering Activity

Karen Miel, Tufts University

(5) Orchestration of Conversational Agent Support and Team Formation in a Group Learning Environment

Sreecharan Sankaranarayanan & Carolyn Rose, Carnegie Mellon University

(6) Teachers' Use of Learning Analytics Dashboards in Immersive Digital Learning Environments

Tiffany Herder, Zachari Swiecki, & David Williamson Schaffer, University of Wisconsin-Madison

(7) Pre-made vs. Freeform Annotation Tools: Benefits and Drawbacks of Constraining Students' Scientific Observations

Xintian Tu, Megan Humburg, Bria Davis, & Joshua Danish, Indiana Unversity

- (8) Artifact Analysis in a Human-Centered Robotics Curriculum

  Erin Tolar, Andrea Gomoll, & Benjamin Oistad, Indiana University
- (9) Accessibility and Inclusivity in Making: Engaging Learners with All Abilities in Maker Activities

Jooyoung Seo, Penn State University

(10) Someone to Read with: Design of and Experiences with an In-Home Learning Companion Robot for Reading

Joseph Michaelis & Bilge Mutlu, University of Wisconsin-Madison

(11) Seeing Through the Chaos: Real-Time Observational Coding of Middle School Students' Engineering Design

Andrea Gomoll, Joey Huang, Erin Tolar, Charlie Mahoney, & Ben Oistad, Indiana University

(12) Understanding Teachers' Knowledge and Supporting Teachers' Learning about Science Practices

Nicole Martin & Sadhana Puntambekar, University of Wisconsin-Madison

(13) Tracing Middle School Students' Conceptions of Thermal
Conduction from an Embodied and Complex Systems Perspective
Nitasha Mathayas, David Brown, & Robb Lindgren, University of
Illinois at Urbana-Champaign

(14) "Making" a Difference: Project Based Approaches to STEM engagement in Middle School

Sherry Yi, Susan Kelly, & Emma Mercier, University of Illinois at Urbana-Champaign

- (15) Promoting Cooperative Attitudes through Board Games

  Yu-Chi Wang & Jenifer Doll, Purdue University
- (16) Laughter as a Lens for Participation in After School Science Settings

  Casey Wright & Minjung Ryu, Purdue University
- (17) Finding Her Niche in Making, One Youth's Interest Development Over Multiple Years of Working in a Makerspace

Ryan Cain, Abigail L. Phillips, & Victor R. Lee, Utah State University

(18) Catching up for joining: Examining learning in a cycling community of practice

Joel R. Drake & Victor R. Lee, Utah State University

- (19) Makerspace Analysis with Multimodal Learning Analytics
  David Bar-El, Kit Martin, & Marcelo Worsley, Northwestern
  University
- (20) Nature of Science Conceptions: A Longitudinal Comparison Between Grades Two and Twelve Jessica McKeown, Indiana University Bloomington
- (21) Identifying Recent Temporal Context in Discourse Data
  Brendan Eagan, Amanda Siebert-Evenstone, & David Shaffer,
  University of Wisconsin-Madison
- (22) Ensemble Performance as Expressive Mathematics

  Lauren Vogelstein, Vanderbilt University
- (23) Using Learning Analytics Dashboard to Support Facilitation: from Instructors Perspective

Yuxin Chen & Gurpreet Birk, Indiana University

(24) Gesture Production, Mathematical Learning, and a Motion-Capture Video Game

John McGinty & Mitchell Nathan, University of Wisconsin-Madison

(25) Black Girls Can Fly
Ginnie Logan, University of Colorado



#### Friday, October 21st - 9:30AM School of Education

### Motivation, Identity, and Communities of Practice Room 2140

"Ohhhhh, now I can do it!": Exploring Children's Persistence and Playful Engagement in a Mathematical Playground – Lara Jasien & Ilana Horn, Vanderbilt University

Learning and Identity in Critical Pedagogy: Understanding the Role of the Educator in Mediating Youth Learning and Development – Ava Jackson, Northwestern University

Viewing Interdisciplinarity through the Lens of Communities of Practice – Meng Yang Matthew Wu & Minjung Ryu, Purdue University

Becoming a Healthy Person: The Role of Personal Narrative in Learning within Community – Robbin Riedy, University of Colorado

# Supporting Science Reasoning Across Representations and Embodied Simulations Room 2277

Investigating how students learn by drawing visual representations – Sally Wu & Martina Rau, University of Wisconsin-Madison

Exploring embodied earthquakes: Examining the effect of an embodied science simulation on students' gestures and conceptual growth – Sahar Alameh, Jason Morphew, & Robb Lindgren, University of Illinois at Urbana-Champaign

Emergent Participant Structures During Group Use of Gesture Augmented Simulations – Robert Wallon, University of Illinois at Urbana-Champaign

Learning Progressions in Context: Tensions and Insights from a Middle School Science Curriculum Designed to Support Modeling Practices – Ashlun Karan, Vanderbilt Universitu

### Computational Thinking and Learning in Computer Science Contexts Room 2275

Retrospective on Group Work in Introductory Computer Science – Alexander Brooks & Debra Deppeler, University of Wisconsin-Madison

Learning to Transfer Computer Programming Semantics with English and Scratch – Christina Zdawczyk, University of Minnesota

Exploring Computational Thinking Practices of Expert and Novice Users through Analyses of Computer-Mediated Discourse in the Scratch Online Community – *Joey Huang, Indiana University* 

## Understanding Maker Practices and Identities Room 2260 (MILL)

Mayhem and The Rockstar Dress - *Naomi Thompson, Indiana University* 

A Research-Practice Partnership Around Making – *Emily Schindler, University of Wisconsin-Madison* 

Making of a Maker – Connections and Community in Makerspaces – Vishesh Kumar, University of Wisconsin-Madison



#### Friday, October 20th – 11:15 AM School of Education

#### Building a 3D World

Room 2277

Kit Martin, Northwestern University

# Quantitative Ethnography in R: An Introduction to rhoR and R-ENA

Room 2140

Brendan Eagan, Zachari Swiecki, Amanda Siebert-Evenstone, Tiffany Herder, & David Williamson Shaffer, University of Wisconsin-Madison

#### Communicating Your Research

Room 3017

LuEttaMae Lawrence, University of Urbana -Champaign

# Graduate Scholarship in the Learning Sciences in a New Era of U.S. Nationalism

Room 3275

Suraj Uttamchandani & Naomi Thompson, Indiana Univeristu

# Mentoring in Writing: Junior-Senior Partnerships for Developing Writing Skills

Room 2260 (MILL)

Catherine Dornfeld Tissenbaum & Joe Michaelis, University of Wisconsin-Madison

#### Scholarly Writing in the Social Sciences

Room 2275

Kirstin Helström & Samantha Demmerle, Indiana University



### LSGS Conference 2017

### Expanding Apprenticeship

#### Conference Committee

Amanda Bell, Vanderbilt University
Allena Berry, Northwestern University
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Wisconsin-Madison

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