# National Center for Education Research (NCER) Research Grant Presentations

### American Educational Research Association (AERA) 2014 Annual Meeting April 3-April 7, Philadelphia, PA

### Thursday, April 3, 2014

### 12:00pm-1:30 pm

The Effect of Diagnostic Assessments on Student Achievement
Spyros Konstantopoulos, Wei Li, and Bing Tong, Michigan State University; Shazia R. Miller, and Arie J. van der Ploeg, American Institutes for Research

Teachers' Perspectives of the Florida College and Career Readiness Initiative Christine Mokher, Louis Jacobson, Jen Atkin, Maria DiFuccia, Center for Naval Analysis

Catching Up Underprepared Students in Early College High Schools: Reducing the Performance Gap

Larry Bernstein, Northeastern University; Julie A. Edmunds, University of North Carolina - Greensboro; Fatih Unlu, Abt Associates Inc.

#### 2:15pm-3:45pm

Aquatic Science, Hybrid Structure, and Metacognitive Strategies: Innovative Aspects of a Science Professional Development Program

Joanna Philippoff, Kanesa Seraphin, Thanh Truc Thi Nguyen, George M. Harrison, and Paul R. Brandon, University of Hawaii - Manoa

Applying Cognitive Science Principles to a Middle School Curriculum: Comparing Two Approaches to Increasing Student Achievement

Rui Yang and Andrew C. Porter, University of Pennsylvania; F. Joseph Merlino, The 21st Century Partnership for STEM Education

Poster Session: Engaging Students in Literary Reasoning and Argumentation Candice Burkett, Teresa Sosa, Allison H. Hall, and Susan R. Goldman, University of Illinois at Chicago

The Impact of Project GLAD on Students' Literacy and Science: Year 1 Results From a Cluster-Randomized Trial of Sheltered Instruction
Theresa Deussen, Education Northwest

Presidential Session: Climbing Out of the Ivory Tower: New Forms of Research-Practice Partnerships

Tom Smith & Lora Cohen-Vogel

### **Friday, April 4, 2014**

#### 8:15am-9:45am

Using a Synthetic Peer to Investigate the Effect of Competitive Learning by Teaching in Mathematics

Noboru Matsuda, Carnegie Mellon University; Gabriel J. Stylianides, University of Oxford; William W. Cohen and Kenneth R. Koedinger, Carnegie Mellon University

Using Virtual Worlds and Augmented Reality to Teach Causality Across Time and Distance in Ecosystems

Tina A. Grotzer, Harvard University; Amy M. Kamarainen, New York Hall of Science; Michael Shane Tutwiler, Shari J. Metcalf, and Kasia Derbiszewska, Harvard University; Caroline J Courter, University of North Carolina - Wilmington; Christopher J. Dede, Harvard University

Investigating Criteria Seventh Graders Use to Evaluate the Quality of Online Information Julie Coiro, University of Rhode Island; Donald J. Leu, Elena E. Forzani, and Cheryl Maykel, University of Connecticut; Jonna M. Kulikowich, The Pennsylvania State University; Nell Sedransk, National Institute of Statistical Sciences

The Impact of Immigrants on the Educational Achievement of Natives: Evidence From PISA (Programme for International Student Assessment) Panel Estimates.

Eric A. Hanushek, Stanford University; Susanne Link, Marc Piopiunik, and Ludger Woessmann, Ifo Institute for Economic Research

# **31.013. Teacher Evaluation Systems: Taking Stock of Their Impacts and Challenges** AERA Presidential Session

Chair: Peter A. Youngs, University of Virginia

Participants: Dan Goldhaber, University of Washington; Ellen B. Goldring, Vanderbilt University; Heather C. Hill, Harvard University; Venessa Ann Keesler, Michigan Department of Education; John H. Tyler, Brown University

# 31.024 - How Research With English Learners, Informed by Systemic Functional Linguistics Theory, Can Support the Call for "Close Reading" of "Complex Texts Chair: Annemarie Palincsar

- Demystifying text complexity: supporting the linguistic work of teaching Mary J. Schleppegrell
- Working at the intersection of literacy, linguistics, and scientific reasoning to support the close reading of scientific text
   Annemarie Palincsar, Carrie Symons, Jason Patrick Moore, and Catherine O'Hallaron, University of Michigan
- How Fourth-grade English Learners use Functional Grammar Analysis to Talk about Text. Carrie Symons and Annemarie Palincsar, University of Michigan

#### 10:35am-12:05pm

The Online Research and Comprehension Assessment Project: Designing Technology-Based Assessments for Online Research, Comprehension, and Communication

Donald J. Leu, University of Connecticut; Jonna M. Kulikowich, The Pennsylvania State University; Nell Sedransk, National Institute of Statistical Sciences; Julie Coiro, University of Rhode Island; Elena E. Forzani, Clint Kennedy, and Cheryl Maykel, University of Connecticut

Control of Morphological Forms During Writing Predicts Essay Quality
Mary Northey; Deborah E. McCutchen, and Elizabeth A. Sanders, University of Washington

Bayesian Model Averaging for Propensity Score Analysis
Jianshen Chen and David Kaplan, University of Wisconsin – Madison

# 34.044. Facets of Large-Scale Evaluation Illustrated With ST Math: Examining Outcomes, Mediators, and Moderators.

Chairs: George Farkas and Elizabeth A. van Es, University of California - Irvine

- Evaluation of ST Math Treatment Effects for Special Populations and by Length of Implementation
  - Teomara Rutherford and George Farkas, University of California Irvine
- Linking Educational Technology to Standardized Assessments: Game Content and Features
  - Katerina Schenke, Teomara Rutherford, and George Farkas, University of California Irvine
- I Can Do It! Expectancy as a Mediator of the ST Math Effect on Math Achievement Arena Chang and Teomara, University of California Irvine
- Impact of ST Math on Cognitive Abilities
  David S. Lee, University of California Irvine
- Understanding the Relationship Between ST Math Professional Development and Its Impact on Students
  - Jennifer Joan Long, and Elizabeth A. van Es, University of California Irvine

Individual differences in eye gazes: Coordination of equations, graphs, and tables Theodore W. Wills and Briana L. Chang, Temple University; Waldemar Stepnowski, School District of Philadelphia; Jennifer G. Cromley, Thomas Shipley, and Julie L. Booth, Temple University

Adolescent Learners' Use of Latin Roots as Clues to Infer Meanings of Unfamiliar Words - Amy C. Crosson and Margaret G. McKeown, University of Pittsburgh

Developing Theory-Based Literacy Assessments for Pre-K-12 Students: Challenges and Opportunities

John P. Sabatini, Tenaha P. O'Reilly, Laura Halderman, and Kelly M. Bruce, Educational Testing Service

Pre-Kindergarten Teachers' School Readiness Beliefs, Classroom Practices, and Moderating Contextual Considerations

Cathy Yun, California State University - Fresno; Dale C. Farran, Mark W. Lipsey, Kerry Guess Hofer, and Carol Bilbrey, Vanderbilt University

English Language Learners' Academic Vocabulary Knowledge Melissa Gallagher, Ana M. Taboada Barber, Jori S. Beck, and Michelle M. Buehl, George Mason University

Contributions of Student and Teacher Factors to Students' Ability to Critically Evaluate Online Information

Elena E. Forzani and Donald J. Leu, University of Connecticut; Jonna M. Kulikowich, The Pennsylvania State University; Nell Sedransk, National Institute of Statistical Sciences; Julie Coiro, University of Rhode Island

Designing Scenario-Based Technology-Enhanced Assessments
Mary E. Fowles, John P. Sabatini, and Paul Deane, Educational Testing Service

Using Process Data (Eye Tracking and Keystrokes) to Validate Scenario-Based Summative Assessments

Anita M. Sands, Gary Feng, and Paul Deane, Educational Testing Service

### 12:25 pm-1:55 pm

Can Online Coursework for Early Childhood Teachers Change Their Teaching Practice? Bridget Kathleen Hamre, Jennifer LoCasale-Crouch, and Kathy Neesen, University of Virginia

A Comparison of Coach Feedback in On-Site Versus Technologically Mediated Delivery Methods

Douglas R. Powell, Purdue University

Student Views of Formative Assessment: Toward the Creation of a Fixed-Response Survey Instrument

Ashley M. Chrzanowski, Chao Wang, Heidi Kroog, and Maria Araceli Ruiz-Primo, University of Colorado - Denver

#### 2:15pm -3:45pm

38.050. Educational Policy Makers and Researchers Schooling Each Other: Building Research Partnerships Between Researchers and School Districts

Division L - Educational Policy and Politics; Invited Session

Participants: Scott Thompson, District of Columbia Public Schools; Thomas

Dee, Stanford University; James H. Wyckoff, University of Virginia

# 38.046. Teacher Quality, Teaching Quality, and Student Outcomes in Mathematics: Putting the Puzzle Together.

Chair: Heather C. Hill, Harvard University

- Teacher Knowledge and Student Learning: Bringing Together Two Different Conceptualizations of Teacher Knowledge
   Charalambos Y. Charalambous, University of Cyprus; Heather C. Hill and Daniel McGinn, Harvard University
- Explaining Teacher Effects: Results From the National Center on Teacher Effectiveness
   Main Study
   Heather C. Hill, Harvard University; Douglas Staiger, Dartmouth College; Mark Chin and
   Andrew Bacher-Hicks, Harvard University
- Predictors of Teachers' Instructional Practices
  David Blazar, Claire Gogolen, and Heather C. Hill, Harvard University; Andrea Humez,
  Boston College; Kathleen Lynch, Harvard University
- The Meaning of "High" and "Low" Value-Added Teaching: Observing Differences in Instructional Quality Across Districts

  David Blazar, Erica Litke, and Johanna Barmore, Harvard University

Strategies for Coordinating Multiple Mathematical Representations: Integration of Eye-Tracking and Think-Aloud Data

Briana L. Chang, Theodore W. Wills, Jennifer G. Cromley, Thomas Shipley, and Julie L. Booth, Temple University; Waldemar Stepnowski, School District of Philadelphia; Nhi Tran and Michael Madeja, Temple University

An Exploration of Novice Teachers' Core Competencies: Impacts on Student Achievement and Effectiveness of Preparation

Kent Seidel, University of Denver; Jennie A. Whitcomb, University of Colorado - Boulder

The Futility of Propensity Score Methods in a Statewide Study of the International Baccalaureate

Henry May, University of Delaware; Awilda Rodriguez, Philip M. Sirinides, Laura W. Perna, April Yee, and Tafaya Ransom, University of Pennsylvania

Promoting Teachers' Social and Emotional Competence: The Cultivating Awareness and Resilience in Education Program

Patricia A. Jennings, University of Virginia; Joshua L. Brown, Fordham University; Jennifer L Frank, and Sebrina Doyle, The Pennsylvania State University; Regin Tanler and Damira S Rasheed, Fordham University; Anna DeWeese, Garrison Institute; Mark T. Greenberg, The Pennsylvania State University

The Impact of a Preinstructional Digital Game on Middle-Grade Students' Scientific Misconceptions

Katherine E. Culp, Wendy B. Martin, Peggy Clements, and Ashley E. Lewis Presser, Education Development Center, Inc.

The Impact of Discourse Features of Science Test Items on English Language Learner Performance

Tracy Noble, TERC

Exploring bilingual students' performance overall and on cognate words in a large-scale multidimensional vocabulary test

Judith Scott and Susan Flinspach, University of California-Santa Cruz; Jack Vevea, University of California-Merced

Developing Effective Genre-Based Literacy Practices With English Language Learner Teachers Through Sustained Professional Development Eric Haas, WestEd

From Professional Development to Responsive Teaching for English Language Learners Pedro Portes, University of Georgia

Measuring Principal Performance Through the Relationship Between Principal Practice and Student Growth

Andrew C. Porter, University of Pennsylvania

## 38.024 - Expanding Pedagogical Understandings of Literary Reasoning and Argumentation in Middle and High Schools: Project READI

Chair: Susan Goldman, University of Illinois at Chicago

- Literary Reasoning and Argumentation: Reconceptualizing Pedagogical Implications of the Domain
  - Carol D. Lee, Northwestern University; Susan R. Goldman, University of Illinois at Chicago; Sarah Levine, Northwestern University; Teresa Sosa, University of Illinois at Chicago; MariAnne George, University of Illinois at Chicago; Joe Magliano, Northern Illinois University; Stephen W Briner, Rick Coppola, Kathryn S. McCarthy, and Candice Burkett, University of Illinois at Chicago
- Making Interpretation Visible With an Affect-Based Strategy Sarah Levine, Northwestern University
- Classroom Discussions and Influence on Student Literary Reasoning Teresa Sosa and Susan Goldman, University of Illinois at Chicago
- A Rubric-Based Approach for Analyzing Dimensions of Literary Reasoning Stephen W Briner, Kathryn S. McCarthy, and Candice Burkett, University of Illinois at Chicago; Sarah Levine and Carol D. Lee, Northwestern University; Susan R. Goldman, University of Illinois at Chicago; Joe Magliano, Northern Illinois University
- Development of the READI Literature Epistemology Scale
  Mariya Yukhymenko Stephen W Briner, Candice Burkett, and Kathryn S. McCarthy,
  University of Illinois at Chicago; Sarah Levine, Northwestern University; Joe Magliano,

Northern Illinois University; Carol D. Lee, Northwestern University; Susan R. Goldman, University of Illinois at Chicago

#### 4:05pm-5:35pm

Multiple Source Comprehension: Sources of Complexity and What Students Need to Know and Be Able to Do

Susan R. Goldman, University of Illinois at Chicago

Investigating the Acquisition of Differential Difficulty in a Fourth-Grade Vocabulary Intervention with English Learners (ELs) and their Non-EL Peers
Lauren Artzi, Brie Doyle, Anna Meyer, Rebecca Silverman, and Maria Crassas, University of Maryland

SimScientists: Use of Learning Progressions Within Curriculum-Embedded Simulations for Formative Assessment
Edys S. Quellmalz, WestEd

Cultivating College Knowledge Through Play: The Facebook Game Mission: Admission

Zoe Corwin, University of Southern California; Kevin Eagan, University of California - Los Angeles

### Saturday, April 5, 2014

#### 8:15am-9:45am

Impact of North Carolina's Early Childhood Initiatives on Special Education Placements in Third Grade

Clara Muschkin, Helen Ladd, and Kenneth Dodge, Duke University

### 46.021. Leveraging Simulation-Based Learning Environments to Support Science Practices.

- Exploring the Assistance Dilemma in a Simulated Inquiry Learning Environment for Evolution Theory
  - Daniel Brenner, WestEd; Michael Timms, Australian Council for Educational Research; Bruce McLaren, Carnegie Mellon University; Andrew Grillo-Hill and Kim Luttgen, WestEd
- SimScientists: Interactive Simulation-Based Science Learning Environments
  - Matt Silberglitt, Mark Loveland, and Edys S. Quellmalz, WestEd
- Using Simulations to Foster Integrated Understanding of Complex, Dynamic, Interactive Human Body Systems
  - Barbara C. Buckley, WestEd; Michelle LaMar, University of California Berkeley; George E. DeBoer, American Association for the Advancement of Science
- ChemVLab+: Simulation-Based Lab Activities to Support Chemistry Learning

Jodi Davenport, WestEd; Anna Rafferty, University of California - Berkeley; David Yaron, and Michael Karabinos, Carnegie Mellon University; Michael Timms, Australian Council for Educational Research

### 10:35am-12:05pm

An Examination of the Efficacy of INSIGHTS in Enhancing the Academic and Behavioral Development of Children in Early Grades

Meghan P. McCormick, Sandee G. McClowry, Erin E. O'Connor, and Elise Cappella, New York University

Teaching Mathematical Word Problem Solving: The Quality of Evidence for Strategy Instruction Priming the Problem Structure

Asha K. Jitendra, Shawna Petersen-Brown, Amy Lein, Anne F. Zaslofsky, Amy K Kunkel, Pyung-Gang Jung, and Andrea M Egan, University of Minnesota - Twin Cities

The Impact of Schema-Based Instruction on Proportional Problem Solving for Students With Mathematics Problem-Solving Difficulties

Michael R. Harwell, Danielle Nicole Dupuis, Asha K. Jitendra, Stacy R. Karl, Amy Lein, And Susan Slater, University of Minnesota-Twin Cities

Uniting Science Knowledge and Literacy Development: A Theoretical Rationale for Reading to Learn in the Early Grades

Alison K. Billman and P. David Pearson, University of California-Berkeley

Looking at Feedback Practices in Science and Mathematics Classrooms: Lesson Learned Maria Araceli Ruiz-Primo, University of Colorado- Denver; Heidi Kroog, University of Colorado - Denver; Deanna J.Sands, Seattle University

Students' Use of Written Feedback in Science Notebooks

Min Li, University of Washington; Maria Araceli Ruiz-Primo, University of Colorado - Denver; Phonraphee Thummaphan, University of Washington, Seattle

English Word-Acquisition Patterns for Spanish-Speaking Dual Language Learners During Content-Rich Shared Book Reading Instruction
Sharolyn Pollard-Durodola, University of Denver

Improving Low-Income Preschoolers' Word and World Knowledge in Science: The Effects of Content-Rich Instruction

Susan B. Neuman, New York University; Tanya Kaefer, Lakehead University; Ashley Pinkham, University of Michigan

Sorting and Supporting: Why Double-Dose Algebra Led to Better Test Scores but More Course Failures. Elaine M. Allensworth, University of Chicago; Takako Nomi, The Pennsylvania State University

#### 2:15pm-3:45 pm

Do Interim Assessments Influence Teachers' Grouping Methods? Evidence From a Randomized Controlled Trial

Feng Liu, Jared Eno, Gregory Chojnacki, Arie J. van der Ploeg, Coby Meyers, and Shazia R. Miller, American Institutes for Research; Spyros Konstantopoulos, Michigan State University

### 2:45pm-4:15 pm

Educational Goods and Accountability Helen Ladd, Duke University

Educational Goods and Charter Schools Susanna Loeb, Stanford University

Simulating the Negotiations of International Science Advisers: The GlobalEd 2 Project.

Scott W. Brown, University of Connecticut; Kimberly A. Lawless, University of Illinois at Chicago

Supporting Inquiry Learning From Multiple Documents in History and Science
Jennifer Wiley, University of Illinois at Chicago; Thomas D. Griffin, University of Illinois at Chicago; Andrew Taylor, University of Illinois at Chicago; Allison J. Jaeger, University of Illinois at Chicago; Anne Britt, Northern Illinois University

Reading Skill Versus Dispositional Strategy Influences on Learning From Multiple Documents Inquiry

Thomas D. Griffin, University of Illinois at Chicago; Carlos R. Salas, University of Illinois at Chicago; Jennifer Wiley, University of Illinois at Chicago; Anne Britt, Northern Illinois University

Selecting and Using Information for Argumentation in Science: Investigating a Web-Based Multiple Document Task

Kristopher Jon Kopp, University of Notre Dame; Anne Britt, Northern Illinois University; Keith Millis, Northern Illinois University; Jean-Francois Rouet, CNRS and University of Poitiers

# 49.092-3. Share the Wealth: Learning From Good Social and Emotional Learning Program Implementation

Improving Awareness and Well-Being Through Cultivating Awareness and Resilience in Education (CARE): How Teachers Perceive a Socioemotional Learning Professional Development Intervention

Deborah L. Schussler, The Pennsylvania State University – University Park; Patricia A. Jennings, University of Virginia; Jennifer Sharp, Northern Kentucky University

# 49.092-10. Implications of Assessment Systems and Tools for Formative Classroom Practice and Improved Learning.

- Learning to Use Formative Assessment in Mathematics With the Assessment Work Sample Method: Results From the Initial Pilot
  Andrea D. Beesley, IMPAQ International; Tedra Fazendeiro Clark, McREL
- SimScientists Assessment Systems
   Matt Silberglitt, Barbara C. Buckley, Mark Loveland, and Daniel Brenner, WestEd; Michelle LaMar, University of California Berkeley; Edys S. Quellmalz, WestEd
- Do Interim Assessment Results Influence Teachers' Use of Remedial and Enriched Instruction?

Gregory Chojnacki, Jared Eno, Shazia R. Miller, and Arie J. van der Ploeg, American Institutes for Research; Spyros Konstantopoulos, Michigan State University; Coby Meyers, American Institutes for Research

#### 49.092-15. Evaluating High School Support Structures and Instruction

- Online and Face-to-Face Credit Recovery in Algebra I for At-Risk Ninth Graders: Third-Year Results

  Jessica Heppen, Nicholas Andrew Sorensen, and Kirk Walters, American Institutes for Research: Flaine M. Allensworth, University of Chicago: Suzanne Stachel, American
  - Research; Elaine M. Allensworth, University of Chicago; Suzanne Stachel, American Institutes for Research; Valerie Michelman, University of Chicago; Andrea Coombes, American Institutes for Research
- Implementation of the Florida College and Career Readiness Initiative Christine Mokher, Louis Jacobson, and Jane Alexander, Center for Naval Analysis;
- Efficacy of the Check & Connect Dropout Prevention Program: Early Implementation and Impacts
  - Laura Hawkinson, University of Pennsylvania; Mindee M. Ocummings and Jessica Heppen, American Institutes for Research

#### 49.093-2. Games, the World Wide Web, and Robots

The Benefits and Pitfalls of Learning With Classroom Clickers: A Large-Scale, Multidisciplinary, Empirical Study

Amy M. Shapiro, Judith Eileen Sims-Knight, Paul Capaldo, Grant O'Rielly, and Teal Pedlow, University of Massachusetts - Dartmouth; Leamarie Gordon, Tufts University; Kristina Monteiro, University of Massachusetts – Dartmouth

#### 49.093-3. Posters in Mathematics Teaching and Learning

A Randomized Experiment of a Schema-Based Instructional Approach to Proportional Problem Solving for Seventh-Grade

*Students*. Asha K. Jitendra, Michael R. Harwell, Danielle Nicole Dupuis, Stacy R. Karl, Amy Lein, Susan Slater, Gregory Simonson, and Michael Herriges, University of Minnesota

Improving Long-Term Retention of Mathematical Knowledge Through Automatic Reassessment and Relearning

Deena Soffer Goldstein, Vinoadharen Nair Das; James W. Pellegrino, and Susan R. Goldman, University of Illinois at Chicago; Neil T. Heffernan, and Christina Heffernan, Worcester Polytechnic Institute; Kevin Dietz, University of Illinois at Chicago

Worked Out Examples to Improve Student Understanding of Area and Perimeter Wendy Bradley and Julie Booth, Temple University

### **Sunday, April 6, 2014**

8:15am-9:45am

55.034. Teacher-Student Interaction Patterns: Integrating Models of Instructional and Social Dynamics in the Classroom

Chair: Scott D Gest, The Pennsylvania State University

- Observing Teacher-Student Interactions in Upper Elementary School With the Classroom Assessment Scoring System (CLASS)
   Jason Downer, Erik Ruzek, Megan Stuhlman, and Bridget Kathleen Hamre, University of Virginia
- The Role of Teacher-Child Interaction Patterns in Social Relationships: Drawing Causal Inferences Using Propensity Scores
   Rebecca Madill and Scott D Gest, The Pennsylvania State University; Philip C. Rodkin, University of Illinois
- Teacher Perspectives on Managing Social Relationships in the Elementary Classroom. Kathleen Zadzora, Scott D Gest, Aaron M Miller, and Rebecca Madill, Pennsylvania State University; Philip C. Rodkin, University of Illinois

"Let's Check the Glossary": How English Learners Coconstruct Vocabulary Knowledge in Peer-Tutoring Reading Discussions

Melinda Martin-Beltran, Johanna Tiggert, Megan Peercy, Rebecca Silverman, Stephanie Guthrie, and Anna Meyer, University of Maryland-College Park

Impacts on Mathematics of an Intervention Synthesizing Early Mathematics and Make-Believe Play

Julie Sarama, University of Denver; Fatih Unlu, Abt Associates Inc.; Douglas H. Clements, University of Denver; Carolyn J. Layzer, Abt Associates Inc

Assessing Skills Used in Social Interaction Clark McKown, Rush NeuroBehavioral Center

Supporting Evidence-Based Practices in Schools: Results From an Efficacy Trial of the Incredible Years Teacher Classroom Management Program
Melissa Stormont, Wendy Reinke, Keith Herman, and Lori Newcomer, University of Missouri

#### 10:35am-12:05pm

My End of the Bargain: Exploring the Influence of Spatial Relationships and Institutional Bargaining Structures on the Provisions in Collective Bargaining Agreements
Lesley Lavery, Macalester College; Dan Goldhaber and Roddy Theobald, University of Washington

Examining the Effect of Self-Explanation and Explanatory Feedback on a Cognitively Demanding Educational Physics Game

Deanne Marie Adams and Douglas Clark, Vanderbilt University

The Impact of Collaborative Play and Achievement Motivation on Learning From a Physics Game

Stephen Killingsworth, Douglas Clark, and Pratim Sengupta, Vanderbilt University

What could go wrong? Error anticipation relates to conceptual and procedural knowledge in algebra students.

Nicolas McCann and Julie Booth, Temple University

The Nature and Variability of First-Grade Writing Instruction
Elizabeth N. Farley-Ripple, Charles A. Macarthur, David Coker, Allison F Jackson, and
Huijing Wen, University of Delaware

Small Steps to Big Gains in Reading Comprehension With Fourth- to Sixth-Grade Spanish-Speaking English Language Learners

Kausalai Wijekumar, Penn State University

Shunning the Evidence: Why Do Some Students Bypass Reasoning About Controversial Claims in Science?

Carlos R. Salas, University of Illinois at Chicago; Thomas D. Griffin, University of Illinois at Chicago

### 12:25pm-1:55pm

Multidisciplinary Collaborative Design for Evidence-Based Argument in History, Literature, and Science: Project READI

Susan R. Goldman, University of Illinois at Chicago

Teachers' Instructional Collaborations Across an Urban District Matthey Ronfeldt and Susanna Farmer, University of Michigan; Susanna Loeb, Stanford University

# 59.019. The Elusive Quest for Civil Rights in Education: Perspectives From AERA Past Presidents.

Chair: Shaun R. Harper, University of Pennsylvania

• *Trends in Reading*Carol D. Lee, Northwestern University

# 59.011 - Changing the Game: Research Innovations and the Interdisciplinary Development of Technologies for Learning

Chair: Susan Goldman, University of Illinois at Chicago

- Multidisciplinary Collaborative Design for Evidence-Based Argument in History, Literature, and Science: Project READI
  - Susan R. Goldman, University of Illinois at Chicago
- GlobalEd 2: Developing a Scientifically Literate Citizenry Kimberly A. Lawless, University of Illinois at Chicago
- Technology-Enabled Assessment: Adapting to the Needs of Students and Teachers James W. Pellegrino, University of Illinois at Chicago
- The Connected Chemistry Curriculum Mike Stieff, University of Illinois at Chicago

# 59.013 - Universal Preschool: What Have We Learned, and What Does It Mean for Practice and Policy?

Chair: Rachel A. Gordon, University of Illinois at Chicago

- Going to Scale: Immediate and Long-Term Effects of a Randomized Control Trial of a State Pre-K
  - Dale C. Farran, Vanderbilt University
- Assuring Quality Preschool: Where Are We, and Where Do We Need to Go?
  Rachel A. Gordon, University of Illinois at Chicago; Kerry Guess Hofer, Vanderbilt
  University

The Effect of Feature Complexity in Spanish Spelling in Grades 1-3
Karen Ford, University of Virginia, Francis Huang, University of Missouri, and Marcia Invernizzi, University of Virginia

Mitigating Factors of Student Learning Using Online Virtual Chemistry Lab Activities
Jodi Davenport and Jacklyn Powers, WestEd; Anna Rafferty, University of California Berkeley;
Michael Timms, Australian Council for Educational Research; Michael Karabinos, Carnegie
Mellon University; David Yaron, Carnegie Mellon University

#### 2:15pm-3:45pm

SimScientists Assessments

Edys S. Quellmalz, Barbara C. Buckley, and Mark Loveland, WestEd

### 61.026 - Sylvia Scribner Award Address: Michelene Chi

Chairs: Patricia A. Alexander, University of Maryland - College Park , Richard E. Mayer, University of California - Santa Barbara

• Differentiating Four Levels of Cognitive Engagement for Learning: The ICAP Hypothesis Michelene T.H. Chi, Arizona State University

"We Just Rock and Roll": English-for-Speakers-of-Other-Languages and Mainstream Teachers Building Shared Understanding About How to Teach Challenging Texts to English Learners Rebecca Silverman, Megan Peercy, Melinda Martin-Beltran, and Stephanie Guthrie, University of Maryland-College Park

Policies Supporting Scale-Up of Interventions for Children at Risk in Early Mathematics Douglas H. Clements, University of Denver; Julie Sarama, University of Denver; Christopher B. Wolfe, University at Buffalo - SUNY; Mary Elaine Spitler, State University of New York

Advantages of Touch Screen Computer Adaptive Technology for Assessing Science for Low-Income Preschool Populations

Daryl B. Greenfield, University of Miami

Mixed-Methods Approach to Developing the Spanish Form of the Adjustment Scales for Preschool Intervention

Rebecca Jane Shearer, University of Miami; Mileidis Gort, The Ohio State University; Paul A. McDermott, University of Pennsylvania; Michael L. Lopez, Nat. Center for Latino Child & Family Research

### 4:05pm-5:35pm

Opportunity to Learn Argumentation in English Language Arts, History, and Science Classrooms

Cindy Litman, WestEd; Stacy A. Marple, WestEd; Cynthia L. Greenleaf, WestEd; Irisa Charney-Sirott, WestEd; Lisa Richardson, WestEd - K-12 Alliance; Michael J Bolz, University of Illinois at Chicago; Allison H. Hall, University of Illinois at Chicago

Designing for Argumentation: Learning Outcomes From Teacher-Research Collaborations in Science, History, and Literature

Stacy A. Marple, WestEd; Cindy Litman, WestEd; Cynthia L. Greenleaf, WestEd; Willard R. Brown, WestEd; Gayle Cribb, WestEd

#### 62.083-5. Poster Fair B: Data Use and Research in the Schools

Building Capacity for Improvement Through Collaboration: Findings From the National Center on Scaling Up Effective Schools

Christopher Harrison, University of North Carolina - Chapel Hill; Christopher Hyde Redding, Vanderbilt University - Peabody College; Stephanie Brown, Florida State University; John Wachen, University of North Carolina - Chapel Hill; Jason Miller, Vanderbilt University - Peabody College; Allison Rose Socol, University of North Carolina - Chapel Hill

### **Monday, April 7, 2014**

8:15am-9:45am

Culture, Identity, Resilience Through Literacy, and Wraparound Identity-Focused Supports in an Urban High School

Carol D. Lee, Northwestern University

Algebra for Eighth Graders: Evidence on Its Effects From 10 North Carolina Districts Helen Ladd, Charles Clotfelter, and Jacob Vigdor, Duke University

Roundtable Presentation: Reaching for Rigor by Increasing Student Ownership and Responsibility

Marisa Cannata, Katherine Taylor Haynes, & Tom Smith

# **68.024.** Diagnostic Assessment: Recent Advances From Psychometric Modeling to Classroom Applications.

• The Diagnostic Geometry Assessment System: Results From a Randomized Controlled Trial. *Jessica Masters, Measured Progress* 

# **68.038.** Optimizing Algebra Policies: Evidence on the Impact of Acceleration, Early Exposure, and Credit Recovery

- Algebra for Eighth Graders: Evidence on Its Effects From 10 North Carolina Districts. *Helen F. Ladd, Duke University*; *Charles T. Clotfelter, Duke University*; *Jacob Vigdor, Duke University*
- Getting Back on Track: Payoffs to Expanding Summer Credit Recovery in Ninth-Grade Algebra. *Elaine M. Allensworth, University of Chicago*; *Takako Nomi, St. Louis University*

# 68.039. Scaling Up a Social-Psychological Intervention to Combat Stereotype Threat and Narrow Achievement Gaps.

- Scaling Up Self-Affirmation: The Theory and the Method. *Geoffrey D. Borman, University of Wisconsin Madison*
- Closing Achievement Gaps at Scale Through Self-Affirmation: First-Year Findings From Two Cohorts. *Jeffrey A. Grigg, University of Wisconsin Madison; Paul Hanselman, University of Wisconsin Madison; Geoffrey D. Borman, University of Wisconsin Madison*
- Psychological Moderators and Mediators of Stereotype Threat: Implications for Self-Affirmation Interventions. *Chris Rozek, University of Wisconsin Madison; Jaymes Ray Pyne, University of Wisconsin; Geoffrey D. Borman, University of Wisconsin Madison; Sarah Bruch, University of Iowa; Paul Hanselman, University of Wisconsin Madison*
- School Composition and Self-Affirmation Treatment Effect Heterogeneity. *Paul Hanselman, University of Wisconsin Madison*; *Sarah Bruch, University of Iowa*; *Adam Gamoran, William T. Grant Foundation*
- Identifying the Critical Components of Values Affirmation: Fidelity of Implementation in a Large-Scale Randomized Controlled Trial. *Dominique Bradley, University of Wisconsin Madison; Evan Crawford, University of Wisconsin; Sara Elizabeth Dahill-Brown, Wake Forest University*

#### 8:15am-10:15am

"Yes or No?" Exploring Over-Scaffolding in Peer-Led Literacy Activities for English Learners Daniel, Melinda Martin-Beltran, Rebecca Silverman, and Maria Crassas, University of Maryland-College Park

#### 10:35am-12:05pm

Exploring the Potential of Value Added to Affect the Quality of the Teacher Workforce Dan Goldhaber, University of Washington

The Roles of Teaching Assistants in Pre-Kindergarten Classrooms: Consequences of a Demanding Curriculum

Sascha C. Mowrey, Vanderbilt Peabody College; Dale C. Farran, Vanderbilt University

Understanding the Interplay Between the Cultural Context of Classrooms and Formative Assessment

Heidi Kroog and Maria Araceli Ruiz-Primo, University of Colorado - Denver; Deanna J. Sands, Seattle University

Gathering Information About Teachers' Formative Assessment Practices: On Sampling Strategies and the Accuracy of Inferences

Maria Araceli Ruiz-Primo, Heidi Kroog, and Jennifer A. Silverstein, University of Colorado - Boulder; Deanna J. Sands, Seattle University

Predictors of Reading Comprehension in Middle School: Cognitive and Motivational Factors Ana M. Taboada Barber, Michelle M. Buehl, Melissa Gallagher, Leila N Richie, and Swati Mehta, George Mason University

Word Knowledge and Comprehension Outcomes for the Second Year of Implementation of an Academic Word Vocabulary Intervention

Margaret G. McKeown, Amy C. Crosson, Isabel L. Beck, University of Pittsburgh, Nancy Artz, Cheryl Sandora, and Debra W. Moore, University of Pittsburgh

#### 12:25pm-1:55pm

Teacher Performance Trajectories in High- and Lower-Poverty Schools Zeyu Xu, Umet Ozek, and Michael Hansen, American Institutes for Research

#### 2:15pm-3:45pm

Development of Science Conceptual Knowledge in an Online Learning Simulation

Lisa J. Lynn and Kamila Brodowinska, University of Illinois at Chicago; Scott W. Brown, University of Connecticut; Gregory P Mullin, Bunker Hill Community College; Mariya Yukhymenko, University of Illinois at Chicago; Mark A. Boyer, University of Connecticut

Teachers' Perceptions of Professional Development Designed to Foster Math-Academic Language and Literacy for English Learners
Mary A. Avalos, Jennifer Marie Langer-Osuna, and Walter G. Secada, University of Miami;

Margarita Zisselsberger, Loyola University Maryland

Do Students' College Majors Respond to Changes in Wages?

Mark C. Long, Dan Goldhaber, and Nicholas Chandler-Klein, University of Washington

### 73.028 - Tracking the Development of Classroom Discussion: What Can a Low-Inference Measure Tell Us?

Chair: Catherine Snow, Harvard University

- Theoretical Underpinnings of a Low-Inference Discourse Observation Tool: Looking at Indicators of Productive Classroom Talk
  Tracy Elizabeth, Harvard University and Catherine O'Connor, Boston University
- Working With a Low-Inference Discourse Observation Tool: What Can We See? Catherine O'Connor, Boston University and Maria LaRusso, Harvard University
- The Coach's View of Discourse: What Does the Low-Inference Discourse Observation Show Us and Not Show Us?
  Halley Wheeless, SERP Institute, Cara Cassell, SERP Institute