Division L Invited Session: Reconceptualizing How We Study and Support Research Use
Fri, April 8, 2:15 to 3:45pm, Convention Center, Level One, Room 143 C
Session Type: Invited Speaker Session

Abstract
Panelists in this session are involved in multiple efforts that aim to re-conceptualize research use. Two sets of panelists are engaged in the empirical study of research use, as part of two recently-awarded IES-funded centers of knowledge utilization. These groups are tasked with measuring and studying research use among school and district leaders. A third set of panelists is part of an NSF-funded effort that is developing and testing new models for relating research and practice. They are engaged in rethinking dissemination and are exploring how collaborative design efforts that engage both researchers and practitioners together can promote equity in STEM education.

Sub Unit: Division L - Educational Policies and Politics

Chair
William R. Penuel, University of Colorado - Boulder

Participants
Philip L. Bell, University of Washington
Derek C. Briggs, University of Colorado, Boulder
Pamela J. Buffington, Education Development Center, Inc.
Cynthia E. Coburn, Northwestern University
Elizabeth N. Farley-Ripple, University of Delaware
Heather C. Hill, Harvard Graduate School of Education
Henry May, University of Delaware
James P. Spillane, Northwestern University
SATURDAY, APRIL 9

Public Scholarship ED-Talks: Relationships and Research Use in Policymaking
In Event: Public Scholarship ED-Talks: Making Research Matter in Policy and Practice
Sat, April 9, 2:15 to 3:45pm, Convention Center, Level Two, Room 207 B
Session Type: Invited Speaker Session

Abstract
Public Scholarship ED Talks: Relationships and Research Use in Policymaking

Sub Unit: AERA Presidential Session

Chairs
Steven Barnett, Rutgers University
Dorothy L. Espelage, University of Illinois at Urbana-Champaign
Kevin G. Welner, University of Colorado Boulder

Papers
Kara Finnigan ED-Talk - Kara S. Finnigan, University of Rochester
Jeff Henig ED-Talk - Jeffrey R. Henig, Teachers College, Columbia University
Ruth Lopez-Turley ED-Talk - Ruth Lopez Turley, Rice University
Bill Penuel ED-Talk - William R. Penuel, University of Colorado - Boulder

Strategies for Promoting and Studying Equity in Design-Oriented Research-Practice Partnerships
Sat, April 9, 4:05 to 5:35pm, Convention Center, Level One, Room 102 B
Session Type: Structured Poster Session

Abstract
In the learning sciences, scholars have formed research-practice partnerships (RPPs) organized around the collaborative design and investigation of strategies for supporting and linking learning (Coburn, Penuel, & Geil, 2013). A defining characteristic of these partnerships is mutualism, and many focused on re-organizing learning in and across settings to promote equity of access to valued learning opportunities. Accomplishing both aims presents challenges to partnerships, however. In this structured poster session, researchers, educators, and youth from a range of partnerships will present their strategies for promoting and studying equity in RPPs. Emphasis is on the specific processes, tools, routines, and governance structures for organizing partnerships and on research methodologies for identifying relevant historical inequities, monitoring equity in design, and documenting equity in learning.

Sub Unit: SIG-Learning Sciences
Papers

Value Mapping: Unmasking Assumptions in Co-Design Research - Jean J. Ryoo, Exploratorium; Molly Victoria Shea, University of Colorado - Boulder; Nicole Bulalacao; Emilyn Green; José Sandoval, Environmental Science Workshop; Emily McLeod, TechBridge

Research With a (Public) Purpose: Benefits and Challenges of Conducting Inquiry for Equity Through Youth Participatory Action Research - Nicole Mirra, The University of Texas - El Paso; John S. Rogers, University of California - Los Angeles

Collaborative Knowledge Production as Ends and Means of Promoting Equity in a Network-Based Research-Practice Partnership - Rafi Santo, Indiana University - Bloomington; Dixie Ching, New York University; Kylie A. Peppler, Indiana University - Bloomington; Christopher Hoadley, New York University

Design-Revise-Repeat: The Continuing Development of a University-Community Partnership - A. Susan Jurow, University of Colorado - Boulder; Daniela Krue DiGiacomo, University of Colorado - Boulder; Jacqueline S. Hotchkiss, University of Colorado - Boulder; Jovita Schiffer, Sanchez International Elementary School

Creating Spaces to Combat Racial Harm: Lessons From a Research-Community Partnership - Sepehr Vakil, University of California - Berkeley; kihana miraya ross, University of California - Berkeley; David Philoxene, University of California - Berkeley; Nailah Suad Nasir, University of California - Berkeley

Specifying How to Work Toward Equity in Middle-Grades Mathematics Instructional Improvement Efforts - Kara J. Jackson, University of Washington - Seattle; Paul A. Cobb, Vanderbilt University; Jonee Wilson, Vanderbilt University; Mahtab Nazemi, University of Washington - Seattle

A Long-Term Research-Practice Partnership for Equitable, Sustainable STEM Design - Angela Calabrese Barton, Michigan State University; Carmen Turner, Boys & Girls Club of Lansing

Lines of Partnering in Design-Focused Research-Practice Partnerships: Using Collaborative Reflection for Cultural Exchange and Problem Solving - Kerri Wingert, University of Washington - Seattle; Veronica Cassone McGowan, University of Washington - Seattle; Philip L. Bell, University of Washington

Promoting Early Elementary Mathematical Thinking With Interactive Technology: A Collaborative Investigation - Pamela J. Buffington, Education Development Center, Inc.; Josephine K. Louie, Education Development Center, Inc.; Catherine McCulloch, Education Development Center, Inc.; Laura Shaw, Washburn Elementary School, Auburn School Department

Citizen Science and Curriculum: An Inclusive Instructional Strategy - Tamara Sumner, University of Colorado; Samuel Severance, University of Colorado - Boulder
A Participatory Approach to Research-Practice Partnerships: Equity in Youth-Researcher Collaborations - Josie Chang-Order, University of Colorado - Boulder; Michael D. Harris, Colorado University - Boulder; Katie Van Horne, University of Colorado - Boulder

Learning How to Enact Equitable Relationships: Lessons From a Community-Based Research Training Program for Students - Ben R. Kirshner, University of Colorado - Boulder; Leticia Sanchez, University of Colorado, Boulder; CU Engage; Roudy Hildreth, University of Colorado Boulder

Discussants
John Q. Easton, Spencer Foundation
Pat O'Connell Johnson, U.S. Department of Education

Bridging the Research-to-Practice Gap: Evaluation and Problem Solving Within Research-Practice Partnerships
Sat, April 9, 4:05 to 6:05pm, Convention Center, Level One, Room 158 B
Session Type: Symposium

Abstract
Research-practice partnerships are long-term commitments dedicated to addressing priorities of the practice through research. With a mission of bridging the research-to-practice gap and increasing the relevancy of education research, the Institute for Education Science has funded establishment of Researcher-Practitioner Partnerships. Four of these funded Partnerships, all at different stages in their development, will discuss the organization and mission of their partnerships. Presenters will describe how the organization of the partnership has increased the relevancy and meaningfulness of their research. The benefits and challenges of the Partnerships will be discussed. A panel discussion will follow the individual presentations in which presenters will field questions from the discussant and audience regarding the nature of Partnerships.

Sub Unit: SIG-School/University Collaborative Research

Chair
Rose A Mason, University of Kansas

Papers

Implementing Comprehensive, Integrated, Three-Tiered (Ci3T) Models to Meet Students' Academic, Behavior, and Social Needs - Kathleen Lane, University of Kansas
Fostering Research-Practice Partnerships at the State Level: The Mathematics Instructional Coaching Project - Jennifer L. Russell, University of Pittsburgh; Mary Kay Stein, University of Pittsburgh; Richard James Correnti, University of Pittsburgh; Laura Booker, Tennessee Department of Education; Nate Schwartz, Tennessee Department of Education; Nicole Roberts, Tennessee Department of Education; Laura Stelitano, University of Pittsburgh; Bethany J Pullen, University of Pittsburgh

Increasing the Capacity of Instructional Personnel: Collaborative Exploration and Idea Generation Through the Framework of a Research-Practice Partnership - Rose A Mason, University of Kansas; Howard Wills; Darcey Bast, Kansas City Kansas Public School; Michelle Colvin, Kansas City Kansas Public School; Dwight Irvin, University of Kentucky; Debra Kamps, University of Kansas; Melissa Veatch, Kansas City Public Schools

Discussants
Jacquelyn Anastasia Buckley, U.S. Department of Education
Rob Ochsendorf, The National Science Foundation
**SUNDAY, APRIL 10**

**Power and Privilege in the Learning Sciences: Critical and Sociocultural Theories**  
Sun, April 10, 10:35am to 12:05pm, Marriott Marquis, Level Four, Independence Salon C  
Session Type: Symposium

Abstract  
This structured poster symposium brings together authors of an upcoming book, entitled Power and Privilege in the Learning Sciences: Critical and Sociocultural Theories, to be published by Routledge in Summer 2016. The poster symposium brings together chapter authors from the book to discuss various branches of critical theory, and how they might be synthesized with sociocultural and cultural-historical theories of learning. Specifically, the three papers will address poststructural theories of race, queer theory, and critical pedagogy. The discussant will comment on some commonalities and differences across the presentations, and propose a set of discussion questions for the audience and presenters to collaboratively develop new insights into critical theories of learning.

Sub Unit: SIG-Cultural-Historical Research

Chair  
Indigo Esmonde, University of Toronto - OISE

Papers  
Poststructuralism, the Learner, and the Learning Process - Niral Shah, Michigan State University; Zeus Leonardo, University of California - Berkeley  
Queering Safe Spaces by Design - Jacob McWilliams, University of Colorado - Boulder; William R. Penuel, University of Colorado - Boulder  
Learning and Transformative Social Change: A Dialogue Across Freirean and Vygotskian Traditions - Shirin Vossoughi, Northwestern University; Kris D. Gutiérrez, University of California - Berkeley

Discussant  
Paula K. Hooper, Exploratorium

**Can University-District Partnerships Promote Educational Equity?**  
Sun, April 10, 10:35am to 12:05pm, Marriott Marquis, Level Three, LeDroit Park  
Session Type: Symposium

Abstract  
University-school district partnerships emerged within the last few years with varying success. What are the qualities of effective partnerships? Which partnership practices promote meaningful improvements in district policies and practices, help build district research capacity,
and build a culture of using data and research in decision making? At the same time, which partnership practices yield research findings that have broad relevance for school improvement? Researchers and district leaders from two established partnerships will discuss what they have learned about the qualities of productive partnerships.

Sub Unit: Division L - Educational Policies and Politics / Division L - Section 9: Policy Implementation and Going to Scale

Chair
Laura P. Wentworth, California Education Partners

Papers
The Causal Effects of Cultural Relevance: Evidence From an Ethnic Studies Curriculum Situated in a University-District Partnership - Thomas Dee, Stanford University; Emily K. Penner, Stanford University; Bill W. Sanderson, San Francisco Unified School District
The Study of a Large Urban District’s Secondary Reading Initiative Targeted at Struggling Readers - Ruth Lopez Turley, Rice University; Carla J. Stevens, Houston Independent School District
Negotiating Research-Practice Partnerships - Laura P. Wentworth, California Education Partners

Designing for Teacher Learning and Enduring Reform Within Science Education
Sun, April 10, 2:45 to 4:15pm, Convention Center, Level One, Room 101
Session Type: Structured Poster Session

Abstract
The purpose of this structured poster session is to discuss various approaches to and perspectives of designing for teacher learning in the context of science education reform, namely The Framework for K-12 Science Education (NRC, 2012) and the Next Generation Science Standards (NGSS Lead States, 2013). In particular, the papers in this session address efforts to support and facilitate teacher learning of reform and productively build partnerships with educators in their work toward enacting enduring and effective change that will broaden participation of a more diverse student body within science education. In line with the AERA call, the work of this session aims “to contribute to social progress...through a process of sustained public inquiry, rather than by being asserted...from...sanctioned institutions.”

Sub Unit: Division C - Learning and Instruction / Division C - Section 1d: Science

Chairs
Carrie D. Allen, University of Colorado - Boulder
Sara C. Heredia, Exploratorium Teacher Institute

Papers
Examining the Relationship Between Teachers' Organizational Sense-Making and Their Implementation of Next Generation Science Standards–Aligned Instruction - Carrie D. Allen, University of Colorado - Boulder

An Assets-Based Professional Development Approach to Support Middle School Teachers' Implementation of Next Generation Science Standards - Sara C. Heredia, Exploratorium Teacher Institute

Co-Designing Supports for Science Instruction: Lessons From a Research-Practice Partnership - Eileen Gilligan, Clark County School District; Nonye Alozie, SRI International; Savitha Moorthy, SRI International; Andrew E. Krumm, SRI International; David Miller, Clark County School District; Kevin David Biesinger, Clark County School District

Designing a New Next Generation Science Standards–Aligned High School Biology Curriculum Unit and Associated Teacher Professional Development - Louisa A. Stark, University of Utah; Nicola Barber, University of Utah; Kristin M. Bass, Rockman et al; Molly Malone; Jo Ellen Roseman, American Association for the Advancement of Science

Designing Scaffolds to Support Teacher Use of a Learning Progression for Formative Assessment Tools and Practice - Erin Marie Furtak, University of Colorado - Boulder

Teacher Learning in Practice-Focused Reform Through Co-Design Collaboration - Katie Van Horne, University of Colorado - Boulder

Supporting Elementary Teachers to Adapt Curriculum Materials for Increased Uncertainty - Eve Manz, Boston University

Science Teacher Learning Practices in a Curriculum Adaptation Professional Development Model - Tana J Peterman, University of Washington - Seattle; Heena Lakhani, University of Washington - Seattle; Philip L. Bell, University of Washington

Developing Teacher Expertise in the Next Generation Science Standards Through Curricular Co-Design - Samuel Severance, University of Colorado - Boulder; Heather Leary, Brigham Young University - Idaho; Raymond Johnson, University of Colorado - Boulder; David Quigley, University of Colorado - Boulder

Integrating Next Generation Science Standards Core Ideas and Practices: Supporting and Studying Teachers' Implementation - Jo Ellen Roseman, American Association for the Advancement of Science; Rebecca A. Kruse, National Science Foundation

Discussant
William R. Penuel, University of Colorado - Boulder
MONDAY, APRIL 11

The Use of Maker Spaces and Computer Simulations to Enhance Student Engagement and Assessment
Mon, April 11, 7:45 to 9:15am, Marriott Marquis, Level Two, Marquis Salon 13
Session Type: Paper Session

Abstract
These five papers explore the use of computer technology and Makers Spaces in creating innovative and engaging science learning environments. Included in this session will be demonstrations of the impact of computer simulations, computer modeling and the growing national trend of engaging students in Makers Spaces.

Sub Unit: SIG-Science Teaching and Learning

Chair
Maria K. DiBenedetto, Bishop McGuinness Catholic High School

Papers
Sewing Electronics in Class: Improving Middle School Students' Science Learning - Jiangyue Gu, Utah State University; Colby Tofel-Grehl, Utah State University; Deborah A. Fields, Utah State University; Chongning Sun, Utah State University; Cathy Ann Maahs-Fladung, East Carolina University

A Blended Assessment Strategy for EcoXPT: An Experimentation-Driven Ecosystems Science-Based Multiuser Virtual Environment - Meredith M Thompson, Harvard University; Michael Shane Tutwiler, Harvard University; Shari J. Metcalf, Harvard University; Amy M. Kamarainen, Harvard Graduate School of Education; Tina A. Grotzer, Harvard University; Christopher J. Dede, Harvard University

Enhancing High School Students' Information Literacy Through Computer-Based Scaffolding in Problem-Based Learning for Science Learning - Nam Ju Kim, Utah State University; Brian R. Belland, Utah State University

Exploring Student Understanding of Force and Motion Using a Simulation-Based Performance Assessment - Jessica Gale, Georgia Institute of Technology; Jayma Koval, Georgia Institute of Technology; Stefanie Anne Wind, The University of Alabama - Tuscaloosa; Joseph W Dagosta, Georgia Institute of Technology; Mike Ryan, Georgia Institute of Technology; Marion Usselman, Georgia Insitute of Technology

International Sustainable World Energy, Engineering, and Environment Project (ISWEEEEP) Participants Versus Non-ISWEEEEP Participants: Comparisons of High School Students' Understandings of the Scientific Method - Alpaslan Sahin, Harmony Public Schools; Ozcan Gulacar, Texas State University; Adem Ekmekci, Rice University; Kadir Almus, North American University

Discussant
Abstract
Many educational interventions that show promise during a “pilot” phase demonstrate limited efficacy at scale (Elmore, 1996). Interventions designed, tested, and implemented in the pilot context often do not align with a new and different system. Consequently, mechanisms are needed for managing the micro-implementation of interventions aimed at macro-impact (Milbrey Wallin McLaughlin, 1987; Milbrey W. McLaughlin & Mitra, 2001). The papers in this symposium develop the concept of adaptive integration as a social process for learning how to maintain the integrity of an intervention across diverse contexts (Bryk, Gomez, Grunow, & LeMahieu, 2015). Two well-established networked improvement communities launched by the Carnegie Foundation serve as case studies: the Community College Pathways (CCP) and the Building Teaching Effectiveness Network (BTEN).

Sub Unit: Division L - Educational Policies and Politics / Division L - Section 9: Policy Implementation and Going to Scale

Chair
Jonathan R. Dolle, WestEd

Papers
A Framework for Managing Adaptive Integration in Networked Improvement Communities - Jonathan R. Dolle, WestEd; Jennifer L. Russell, University of Pittsburgh
Adaptive Integration in the Building a Teaching Effectiveness Network - Jennifer L. Russell, University of Pittsburgh; Margaret Quinn Hannan, University of Pittsburgh
The Role of System Analysis in Adaptive Integration: Scaling Enrollment in the Community College Pathways - Christopher A. Thorn, Carnegie Foundation for the Advancement of Teaching; Angel Bohannon, Carnegie Foundation for the Advancement of Teaching
Processes of Adaptive Integration in Scaling Professional Development for Community College Developmental Mathematics Faculty - Ann R. Edwards, Carnegie Foundation; Carlos Sandoval, The Carnegie Foundation for the Advancement of Teaching; Haley McNamara, Carnegie Foundation for the Advancement of Teaching
Curriculum Enactment as a Case of Adaptive Integration: Implementing Statway at Scale - Ann R. Edwards, Carnegie Foundation

Discussant
William R. Penuel, University of Colorado – Boulder
Learning Sciences SIG Poster Session
In Event: Poster Session 10
Mon, April 11, 10:00 to 11:30am, Convention Center, Level Two, Exhibit Hall D
Session Type: Poster Session

Sub Unit: SIG-Learning Sciences

Papers

A Comparison of How Students Learn When Building or Exploring Computational Agent-Based Models - Aditi Wagh, Tufts University; Uri J. Wilensky, Northwestern University

Agent-Based Models Versus Video-Based Visualizations to Learn Nanoscience Concepts: An Embodied Cognition Perspective - Polly K. Lai, The University of Sydney; Michael J. Jacobson, The University of Sydney; Lina Markauskaite, The University of Sydney

Co-Constructing Students’ Learning Practices: Redefining Engagement and Participation - Simona Goldin, University of Michigan; Michaela Krug O'Neil, University of Michigan - Ann Arbor; Shweta Shripad Naik, University of Michigan; Florencia Gomez Zaccarelli, Stanford University


Examining Expansive Framing in a Design Research Study to Promote Interdisciplinary Reasoning - Julia Svoboda Gouvea, Tufts University; Abhilash Nair, Michigan State University; Vashti Sawtelle, Michigan State University; Chandra Anne Turpen, University of Maryland - College Park

Exposing Piaget's Scheme: Empirical Evidence for the Microgenesis of Coordination - Dor Abrahamson, University of California - Berkeley; Shakila Shayan, Utrecht University; Arthur Bakker, Utrecht University; Marieke van der Schaaf, Utrecht University

From Using Wearable Technology to Improving With Statistical Reasoning - Victor R. Lee, Utah State University; Joel Drake, Utah State University; Jeffrey Thayne, Utah State University; Ryan Cain, Utah State University

Guiding Student Capacity Development Toward Effective Designs: Student Learning and Agency in Youth-Researcher Collaborative Inquiry - Ung-Sang Lee, University of California - Los Angeles; Kimberley Gomez, University of California - Los Angeles

Looking Beyond Cues in Understanding the Co-Construction of Epistemological Framing During Interviews: A Case Study - Yara Shaban, Tufts University; Michelle Hoda Wilkerson, University of California - Berkeley

Metaphors Are Projected Constraints on Action: An Ecological Dynamics View on Learning Across the Disciplines - Dor Abrahamson, University of California - Berkeley; Raúl Sánchez-García, European University, Madrid; Cliff Smyth, Saybrook University

Negotiating Problems of Practice in Researcher-Practitioner Collaborations: Implications From Two Contrasting Cases - Florencia Gomez Zaccarelli, Stanford University; Barry J. Fishman, University of Michigan - Ann Arbor
Seeing the Science in Young Children's Activity Through an Interactionally Grounded Account of Inquiry - Danielle Keifert, Exploratorium

Student Engagement in Scientific Argumentation in a Sheltered English Instruction Classroom Community - Maria Gonzalez-Howard, Boston College; Katherine L. McNeill, Boston College

Students' Difficulties With Randomness in Complex Systems: A Design-Based Research Study - Yu Guo, Northwestern University; Uri J. Wilensky, Northwestern University

Technology-Mediated Teacher Noticing: A Goal for Classroom Practice, Tool Design, and Professional Development - Janet Dawn Kim Walkoe, University of Maryland; Michelle Hoda Wilkerson, University of California - Berkeley; Andrew R. Elby, University of Maryland - College Park

Who Scaffolds the Scaffolders? Parent Mediation of Facilitator-Child Scaffolding Interactions in Museum Exhibits - Catherine Louise Dornfeld, University of Wisconsin - Madison; Matthew W. Berland, University of Wisconsin - Madison; Sadhana Puntambekar, University of Wisconsin

**Scaling up Digital Media Innovations**

**Mon, April 11, 11:45am to 1:15pm, Marriott Marquis, Level Four, Capitol**

**Session Type: Symposium**

**Abstract**

Funders, policymakers, and designers are increasingly interested in spreading new instructional approaches to larger numbers of youth and adults in in-school and out-of-school settings. Most existing scholarship on scale-up comes from the pre-digital age. Contemporary digital technologies, particularly those powered by the Internet, have changed the equation substantially. Digital innovations often reimagine how learning occurs, requiring new capacities for adults who use them with children. Technological advances have created alternative pathways for scale-up. This session gathers scholars of learning sciences, digital media, policy, and organizational theory to share new theoretical and methodological approaches to investigate scale-up of digital learning technologies. Taken together, the papers capture the state of the field and create an agenda for future research.

**Sub Unit: SIG-Advanced Technologies for Learning**

**Chair**

Cynthia E. Coburn, Northwestern University

**Papers**

Spread and Scale in the Digital Age: A Conceptual Framework - Richard Morel; Cynthia E. Coburn, Northwestern University; Amy Catterson, University of California - Berkeley; Jennifer Higgs, University of California - Berkeley
"A Citywide Laboratory": Scaling Digital Learning Through Interorganizational Collaboration in the Hive NYC Learning Network - Rafi Santo, Indiana University - Bloomington; Kylie A. Peppler, Indiana University - Bloomington; Dixie Ching, New York University; Christopher Hoadley, New York University

Studying Scale in the Chicago Cities of Learning - Nichole D. Pinkard, DePaul University; William R. Penuel, University of Colorado - Boulder; Ugochi Cynthia Acholonu, DePaul University; Katie Van Horne, University of Colorado - Boulder; Ogheneovo Dibie, University of Colorado - Boulder; Arafat Sultan, University of Colorado - Boulder; David Quigley, University of Colorado - Boulder; Tamara Sumner, University of Colorado

Influences on the Scaling of Digital Learning Resources - Barbara M. Means, SRI Education; Vanessa Peters

Discussants
Jabari Mahiri, University of California - Berkeley
Donald J. Peurach, University of Michigan

Examining Student Opportunity to Learn to New Literacy Standards and Assessments in Diverse Settings
Mon, April 11, 11:45am to 1:15pm, Convention Center, Level Two, Room 207 A
Session Type: Symposium

Abstract
The complex literacy instruction envisioned by the CCSS-ELA remains rare in our secondary schools. Teachers use lectures as an efficient alternative to engaging students in making sense of academic texts. Even when texts are used, students rarely engage in extended reading or understanding beyond the literal level. Thus, students’ opportunities to learn (OTL) advanced literacy skills may be severely limited. This session will problematize the mismatch between students’ OTL and new standards and assessments. Drawing from studies in diverse urban schools, three papers will explore diverse students’ literacy OTL from various vantage points. Papers will also analyze assessments linked to the new standards, as these constrain students’ ability to develop and demonstrate the capacity to learn from complex text.

Sub Unit: Division C - Learning and Instruction / Division C - Section 1a: Literacy

Chair
Sheila Valencia, University of Washington

Papers
Argumentation in the Presence and Absence of Text - Cindy Litman, WestEd; Stacy A. Marple, WestEd; Cynthia L. Greenleaf, WestEd
A Behind-the-Scenes Look at Effective Video-Based Professional Development
Mon, April 11, 4:30 to 6:00pm, Marriott Marquis, Level Two, Marquis Salon 17
Session Type: Symposium

Abstract
With the increase in professional development (PD) programs that use video as a means for supporting teachers’ learning and instructional improvement, there is now interest in understanding the thinking and decision making that occur behind the scenes in facilitators’/designers’ minds as they plan and lead PD that capitalizes on the power of video. This symposium brings together four effective video-based PD programs, two in mathematics and two in science. Each paper presents a study of one of these four programs, representing one of Borko’s (2004) 3-phases of research on PD. The papers include analysis and discussion of facilitator’s moves, tools and frameworks for designing and orchestrating video-based PD programs, and strategies and resources used for effective facilitator preparation.

Sub Unit: SIG-Research in Mathematics Education

Chairs
Mary Kay Stein, University of Pittsburgh
Miray Tekkumru-Kisa, Florida State University

Papers
Designing and Studying Video-Based Professional Development Within a Teacher Learning Progression Framework - Miray Tekkumru-Kisa, Florida State University; Mary Kay Stein, University of Pittsburgh
Design-Based Implementation Research: Adapting a Professional Development Leadership Model With a School District - Hilda Borko, Stanford University; Janet Carlson, Stanford University; Charmaine Mangram, Stanford University; Susan Louise Million, Stanford University
Preparing Facilitators to Use and Adapt Video-Based Professional Development Materials - Nanette M. Seago, WestEd; Karen A. Koellner, Hunter College - CUNY; Jennifer K. Jacobs, University of Colorado - Boulder
The Power of a Conceptual Framework in Video-Based Professional Development Design - Kathleen J. Roth, Cal Poly Pomona; Paul Beardsley, California State Polytechnic
University - Pomona; Jody Bintz, Biological Sciences Curriculum Study; Arlo Caine, California State Polytechnic University - Pomona; Connie Jean Hvidsten, University of California - Davis; Paul Numedahl, BSCS; Nicole I. Wickler, California State Polytechnic University, Pomona; Christopher D. Wilson, Biological Sciences Curriculum Study

Discussants
Yeping Li, Texas A&M University
William R. Penuel, University of Colorado - Boulder
TUESDAY, APRIL 12

Brokering Future Learning Opportunities: Theoretical and Practical Considerations for Linking Youth to Out-of-School Time Opportunities
Tue, April 12, 8:15 to 9:45am, Convention Center, Level One, Room 103 A
Session Type: Structured Poster Session

Abstract
In this interactive poster session, we examine how adults or more experienced peers facilitate the cross-setting learning of youth through the concept of brokering, a practice of connecting youth to people, spaces, programs, and information sources in order to provide extended learning opportunities. The purpose of this session is to compare and extend different understandings of brokering by highlighting this emerging area of research, design, and implementation. The poster presenters explore: How is brokering learning conceptualized and for what purpose? Who is brokering and what is being brokered? What does brokering learning look like across settings?

Sub Unit: SIG-Out-of-School Time

Chairs
Denise Nacu, DePaul University
Katie Van Horne, University of Colorado - Boulder

Papers
Brokering Learning Opportunities Within an Out-of-School Network: A Conceptual Model for Supporting Youth Interest-Driven Learning - Dixie Ching, New York University; Rafi Santo, Indiana University - Bloomington; Christopher Hoadley, New York University; Kylie A. Peppler, Indiana University - Bloomington
Youth as Knowledge Brokers Across Learning Environments: Social Capital as Catalyst for Cross-Setting Learning - Timothy Podkul, SRI International; Denise Sauerteig, SRI International; Amy Homma, Smithsonian Hirshhorn Museum & Sculpture Gardens
Enabling and Enhancing the Role of Learning Broker in Online Social Learning Networks - Denise Nacu, DePaul University; Michael Schutzenhofer, DePaul University; Caitlin Kennedy Martin, DePaul University - Digital Youth Network; Taha Hamid, DePaul University; Jonathan Gemmell, DePaul University; Daniela Stan Raicu, DePaul University; Nichole D. Pinkard, DePaul University
Examining Brokering for Future Learning Opportunities Over Time - Katie Van Horne, University of Colorado - Boulder; Josie Chang-Order, University of Colorado - Boulder; Daniela Kruel DiGiacomo, University of Colorado - Boulder; Erica Jeanne Van Steenis, University of Colorado - Boulder; Carrie D. Allen, University of Colorado - Boulder
Brokering in Blended Environments: Designing to Support Learning On- and Off-Line - Caitlin Kennedy Martin, DePaul University - Digital Youth Network; James Sandherr, Digital
Youth Network; Elaina Boytor, DePaul University; Denise Nacu, DePaul University; Nichole D. Pinkard, DePaul University; Sheena Erete, DePaul University

Brokering Opportunities in a Learning Ecosystem: A Case Study of a Regional Environmental Education Landscape - Stacy Song Kehoe, University of Pittsburgh; Jennifer L. Russell, University of Pittsburgh; Kevin Crowley, University of Pittsburgh

Supporting Young People's Access to Sustainable Livelihoods in New Media Arts - Ben R. Kirshner, University of Colorado - Boulder; Josie Chang-Order, University of Colorado - Boulder; Michael D. Harris, Colorado University - Boulder; Katie Van Horne, University of Colorado - Boulder

Brokering Learning Opportunities in and out of the Classroom: A Cross-Setting Intervention - Shelley Stromholt, University of Washington

Navigating Interest-Driven Learning Pathways: How Parents Broker Out-of-School Time Opportunities for Their Children - Marti Louw, Carnegie Mellon University; Kevin Crowley, University of Pittsburgh

Learning Brokers as Sociocultural and Sociohistorical Mediators - Lisa Hope Schwartz, University of Colorado, Boulder

Discussant
Brigid J.S. Barron, Stanford University

**Collaboration to Improve Educational Opportunities for English Learners in the United States**

**Tue, April 12, 10:35am to 12:05pm, Convention Center, Level One, Room 101**

**Session Type: Structured Poster Session**

**Abstract**
Better serving English Learners is an urgent and important challenge for many U.S. schools. In this structured poster session, eight grantees funded by the National Center for Education Research (IES) will share findings obtained through working in close partnership between researchers and practitioners to improve instruction and assessment for ELs in contexts across the U.S. These projects increase the utility and relevance of research through close collaboration between school practitioners, decision makers, and researchers in which analyses are designed to answer questions of concern to schools, districts, and states. The projects serve to accelerate efforts to help ELs by using data already collected by states and districts as the foundation for further research.

**Sub Unit:** Division H - Research, Evaluation and Assessment in Schools / Division H - Section 1: Applied Research in Schools

**Chair**
Karen Douglas, U.S. Department of Education
Papers

High-Payoff Opportunities for Reclassifying English Learners: Partnering to Make a Difference - Peggy Estrada, University of California - Santa Cruz; Katherine G. Hayes, Los Angeles Unified School District; Hilda Maldonado, Los Angeles Unified School District

Analysis of English Learners' Science Achievement as a Boundary Practice in a Research-Practice Partnership - Savitha Moorthy, SRI International; Andrew E. Krumm, SRI International; Ying Zheng, SRI International; Kevin David Biesinger, Clark County School District; Eileen Gilligan, Clark County School District; David Miller, Clark County School District; P. Gail Welch, Clark County School District

Addressing the Linguistic Challenges of Assessing English Learners: A State and Research Organization Partnership - Tracy E. Noble, TERC; Catherine Bowler, Massachusetts Department of Education; Rachel R. Kachchaf, Smarter Balanced; Ann Rosebery, TERC

English Learners Who Waive Services in a Northeastern District: Profile and Outcomes - Julie Riordan, Education Development Center, Inc.; Marco S. Andrade, Providence Schools; Katherine Shields, Education Development Center, Inc.; Caroline E. Parker, Education Development Center, Inc.

Toward a Typology of Questions Explored by Researcher-Practitioner Partnerships - Karen D. Thompson, Oregon State University; David Bautista, Oregon Department of Education; Guadalupe Diaz, Oregon State University; Chelsea Clinton, Oregon Department of Education; Martha Irene Martinez, Oregon Department of Education

Working in Partnership to Understand English Learner Classification’s Intended and Unintended Consequences - Ilana Marice Umansky, University of Oregon; Christina Mei-Yue Wong, San Francisco Unified School District

Understanding the Trajectories and Longitudinal Outcomes of Adolescent Newcomer English Language Learners in a Texas District - Aida Walqui, WestEd; Mariagrazia Sheffield, Fort Worth Independent School District; Suann Claunch, Fort Worth Independent School District

Discussant
Sean F. Reardon, Stanford University

Measuring and Supporting the Improvement of Common Core State Standards–Aligned Mathematics Teaching at Scale

Tue, April 12, 10:35am to 12:05pm, Convention Center, Level One, Room 146 A

Session Type: Symposium

Abstract
The objective of this symposium is to advance theories for studying mathematics teaching and the role of teacher networks in instructional improvement, and to provide evidence on a wide range of psychometrics associated with a newly-developed measurement system that can not only monitor but also support large-scale improvements in mathematics instruction. In a state-wide study of natural variation in mathematics instruction and teacher networks across an entire state, we examine the extent to which internal validity evidence collected on our
developed measures allow for valid inferences about teaching and the extent to which these inferences have potential utility for improving mathematics teaching (consequential validity).

Sub Unit: Division L - Educational Policies and Politics / Division L - Section 3: Curriculum and Instruction

Chair
Mary Kay Stein, University of Pittsburgh

Papers
Theorizing and Measuring Mathematics Teaching at Scale - Mary Kay Stein, University of Pittsburgh; Richard James Correnti, University of Pittsburgh; Jennifer L. Russell, University of Pittsburgh; Katelynn Kelly

Theorizing and Measuring Social Supports for Teacher Learning - Jennifer L. Russell, University of Pittsburgh; Mary Kay Stein, University of Pittsburgh; Richard James Correnti, University of Pittsburgh; Stacy Song Kehoe, University of Pittsburgh; Debra W. Moore, University of Pittsburgh

Validity Evidence for Measures: Understanding Both Construct and Consequential Validity - Richard James Correnti, University of Pittsburgh; Mary Kay Stein, University of Pittsburgh; Jennifer L. Russell, University of Pittsburgh; Debra W. Moore, University of Pittsburgh

Discussants
James Hiebert, University of Delaware
Alan J. Daly, University of California - San Diego

Opportunities for Identity Work in the Face of Risk and Resilience Through Literature
Tue, April 12, 2:15 to 3:45pm, Convention Center, Level One, Room 150 A
Session Type: Symposium

Abstract
This symposium offers empirical studies of interventions addressing how recruitment of cultural repertoires and explicit scaffolding to support literary reasoning impact the acquisition of skills in literary argumentation as well as identity development among urban adolescent students. These studies demonstrate how the recruitment of cultural resources, explicit disciplinary scaffolding, and identity wrestling support rigorous skill development and expand opportunities for navigating multiple points of view, all essential in preparing students for strong civic engagement. They also point to the generative possibilities of literature study to address these challenges.
Tuesday, April 12

Sub Unit: Division C - Learning and Instruction / Division C - Section 1b: Humanities, Social Sciences, Fine Arts

Chair
MariAnne George, University of Illinois at Chicago

Papers
Emergent Understandings and Identity Wrestling Through Literature - Carol D. Lee, Northwestern University
Reconceptualizing Teacher Identity and Belief About Students' Agency Through Approaching Literature as Inquiry - Rick Coppola, Chicago Public Schools; MariAnne George, University of Illinois at Chicago; Susan R. Goldman, University of Illinois at Chicago
Building on Students' Experiences and Knowledge of the World to Interpret Literary Texts - Angela Fortune, The University of Illinois at Chicago; Allison H. Hall, University of Illinois at Chicago; Susan R. Goldman, University of Illinois at Chicago
Investigating the Role of Literature in the Academic Socialization of Youth Ex-Offenders - Yolanda J. Majors, The University of Minnesota

Discussant
P. David Pearson, University of California - Berkeley