



<b>Table #</b>	<b>Project Name</b>	<b>PI</b>	<b>Co-PI(s)</b>	<b>Content Area</b>	<b>Grade Band</b>
1	Cluster Randomized Trial of the Efficacy of Early Childhood Science Education for Low-Income Children	Laurie Van Egeren, Michigan State University	Holly Brophy-Herb, Steven Pierce, Hope Gerde, Norm Lownds, and Christina Schwarz, Michigan State University; Bradley Morris, Kent State University	S	Pre-K
2	An Integrated Instructional Model for Accelerating Student Achievement in Science and Literacy in Grades 1-2	Nancy Romance, Florida Atlantic University	Michael Vitale, East Carolina University; Annemarie Palincsar, University of Michigan; Jerome Haky, Florida Atlantic University	S	E
3	School Organization and Science Achievement: Organization and Leadership Influences on Equitable Student Performance (Collaborative Research: Settlege and Butler)	John Settlege, University of Connecticut; Malcolm Butler, University of Central Florida	Julianne Wenner, University of Connecticut	S	E
4	The Leonardo Project: An Intelligent Cyberlearning System for Interactive Scientific Modeling in Elementary Science Education	James Lester, North Carolina State University	Michael Carter, Bradford Mott, and Eric Wiebe, North Carolina State University	S	E
5	Quality Elementary Science Teaching (QuEST)	Deborah Hanuscin, University of Missouri	Delinda van Garderen, Zandra de Aurajo, Mark Ehlert, and Cathy Thomas, University of Missouri	S	E
6	Model of Research-Based Education for Teachers	Dan Hanley, Western Washington University	Matthew Miller, Western Washington University	S	E
7	Modeling Hydrologic Systems in Elementary Science (MoHSES)	Cory Forbes, University of Nebraska-Lincoln	Christina Schwarz, Michigan State University	S	E
8	Integrating Computing Across the Curriculum (ICAC): Incorporating Technology into STEM Education Using XO Laptops	Shelia Cotten, Michigan State University	Mike Wyss, University of Alabama, Birmingham	S T	E

9	Promoting Students' Spatial Thinking in Upper Elementary Grades Using Geographic Information Systems (GIS)	May Jadallah, Illinois State University	Malcolm Butler, University of Central Florida	S T	E
10	Designing an Integrated Framework for Genetics Education to Develop Innovative Curricula and Assessments	Michelle Williams, Michigan State University	Angela DeBarger, SRI International	S T	E M
11	CAREER: Learning About Complex Causality in the Classroom	Tina Grotzer, Harvard University		S	E M
12	Supporting Scientific Practices in Elementary and Middle School Classrooms	Brian Reiser, Northwestern University	Leema Berland, University of Wisconsin-Madison; Lisa Kenyon, Wright State University; Christina Schwarz, Michigan State University	S	E M
13	Fossil Finders: Using Fossils to Teach About Evolution, Inquiry and Nature of Science	Barbara Crawford, The University of Georgia	Robert Ross and Warren Allmon, The Paleontological Research Institution	S	E M
14	SimScientists Assessments: Physical Science Links	Edys Quellmalz, WestEd	Matt Silberglitt, Barbara Buckley, Mark Loveland, and Daniel Brenner, WestEd	S T	M
15	CAREER: Supporting Computational Algorithmic Thinking (SCAT)—Exploring the Development of Computational Algorithmic Thinking Capabilities in African-American Middle School Girls	Jakita Thomas, Spelman College		S T	M
16	EcoMobile: Blended Real and Virtual Immersive Experiences for Learning Complex Causality and Ecosystems Science	Chris Dede, Harvard University	Tina Grotzer, Harvard University	S T	M
17	Activate Computational Thinking (ACT)	Katherine Hayden, California State University, San Marcos	Youwen Ouyang, California State University, San Marcos	S T	M
18	Cyber-Enabled Learning: Digital Natives in Integrated Scientific Inquiry Classrooms (Collaborative Research: Campbell)	Todd Campbell, University of Connecticut	Dan Coster, Paul Wolf, and Max Longhurst, Utah State University; Shiang-Kwei Wang and Hui-Yin Hsu, New York Institute of Technology	S T	M
19	Studying Topography, Orographic Rainfall, and Ecosystems (STORE) with Geospatial Information Technology	Daniel Zalles, SRI International	James Manidakos, SRI International	S T	M H Post-Sec

20	Inquiry Primed: An Intervention to Mitigate the Effects of Stereotype Threat in Science	Samantha Daley, CAST	Sam Catherine Johnston, CAST	S	M
21	Efficacy Study of Metropolitan Denver's Urban Advantage Program: A Project to Improve Scientific Literacy Among Urban Middle School Students	Nancy Walsh, Denver Museum of Nature & Science	Lynn Dierking, Oregon State University; Meg John and Ka Chun Yu, Denver Museum of Nature & Science	S	M
22	Learning Science as Inquiry with the Urban Advantage: Formal-Informal Collaborations to Increase Science Literacy and Student Learning	James Short, American Museum of Natural History	Suzanne Wilson, University of Connecticut	S	M
23	Designing Assessments in Physical Science Across Three Dimensions (Collaborative Research: DeBarger)	Angela DeBarger, SRI International	Christopher Harris, SRI International; Joseph Krajcik, Michigan State University; James Pellegrino and Louis DiBello, University of Illinois at Chicago	S	M
24	Language-Rich Inquiry Science with English Language Learners Through Biotechnology (LISELL-B)	Cory Buxton, University of Georgia	Martha Alleksaht-Snider, Allan Cohen and Laura Lu, University of Georgia	S	M
25	Efficacy Study of Project-Based Inquiry Science	Christopher Harris, SRI International	William Penuel, University of Colorado, Boulder; Joseph Krajcik, Michigan State University	S	M
26	CAREER: Supporting Middle School Students' Construction of Evidence-Based Arguments	Brian Belland, Utah State University		S	M
27	Reasoning Tools for Understanding Water Systems	Beth Covitt, University of Montana	Kristin Gunckel, University of Arizona; Charles (Andy) Anderson, Michigan State University	S	M
28	A Learning Progression-Based System for Promoting Understanding of Carbon-Transforming Processes	Charles (Andy) Anderson, Michigan State University	Daniel Gallagher, Seattle Public Schools; Kathleen Schwille, National Geographic Society; Mark Wilson, University of California, Berkeley	S	M H
29	An Innovative Approach to Earth Science Teacher Preparation: Uniting Science, Informal Science Education, and Schools to Raise Student Achievement	Maritza Macdonald, American Museum of Natural History	Rosamond Kinzler, Mordecai-Mark Mac Low, Edmond Mathez, American Museum of Natural History; Meryle Weinstein, New York University's Institute for Education and Social Policy	S	M H

30	Secondary Science Teaching with English Language and Literacy Acquisition (SSTELLA)	Patricia Stoddart, University of California, Santa Cruz	Doris Ash, University of California, Santa Cruz; Edward Geaney Lyon, Arizona State University; Jorge Solis, The University of Texas at San Antonio; Sara Tolbert, University of Arizona	S	M H
31	Unifying Life: Placing Urban Tree Diversity in an Evolutionary Context	Yael Wyner, City College of New York	Jennifer Doherty, University of Washington; John Kress, Smithsonian Institute; David Jacobs, University of Maryland, College Park; Peter Belhuemer, Columbia University	S	M
32	Ecology Disrupted: Using Real Scientific Data About Daily Life to Link Environmental Issues to Ecological Processes in Secondary School Science Classrooms (Collaborative Research: Wyner)	Yael Wyner, City College of New York	Jonathan Becker, Virginia Commonwealth University; Rosamond Kinsler and Rob DeSalle, American Museum of Natural History	S	H Post-Sec
33	Enhancing Teaching and Learning with Social Media: Supporting Teacher Professional Learning and Student Scientific Argumentation	James Ellis, The University of Kansas	Amber Rowland, Janis Bulgren, Marilyn Ault, The University of Kansas	S T	M H
34	Climate Change Narrative Game Education (CHANGE)	Glenn Gordon Smith, University of South Florida	Allan Feldman, Yiping Lou, and Ping Wang, University of South Florida	S T	H
35	High Adventure Science: Earths Systems and Sustainability	Amy Pallant, The Concord Consortium	Hee-Sun Lee, University California, Santa Cruz; Elaine Johnson, National Geographic Society	S	H
36	Leveling Up: Supporting and Measuring High School STEM Knowledge Building in Social Digital Games	Jodi Asbell-Clarke, TERC, Inc.	Teon Edwards and Jamie Larsen, TERC, Inc.	S	H Other
37	FUN: A Finland US Network for Engagement and STEM Learning in Games	Jodi Asbell-Clarke, TERC, Inc.		S	E M H Post-Sec Other
38	Educating the Imagination: A Studio Design for Transformative Science Learning	Beth Warren, TERC, Inc.	Ann Rosebery and Eli Tucker-Raymond, TERC, Inc.; Linda Nathan, Boston Arts Academy	S	H
39	Developing Critical Evaluation as a Scientific Habit of Mind: Instructional Scaffolds for Secondary Earth and Space Sciences	Doug Lombardi, Temple University	Janelle Bailey, Temple University	S	H

40	Interactive Learning and Collaboration Environment (InterLACE)	Ethan Danahy, Tufts University	Daniel Hannon, Tufts University	S	H
41	Developing and Testing a Model to Support Student Understanding of the Sub-microscopic Interactions That Govern Biological and Chemical Processes	Joseph Krajcik, Michigan State University	Dan Damelin, The Concord Consortium; Shawn Stevens, University of Michigan	S	H
42	Misconceptions Oriented Standards-Based Assessment Resource for Teachers of High School Life Science (MOSART HSLS)	Philip Sadler, Harvard University		S	H
43	Laboratory for the Study of Extra Solar Planets: Fostering Data Literacy	Roy Gould, Smithsonian Astrophysical Observatory	Mary Dussault and Susan Sunbury, Smithsonian Astrophysical Observatory	S	H
44	CAREER: Changing the Landscape: Towards the Development of a Physics Identity in High School	Zahra Hazari, Florida International University		S	H
45					
46	Fostering Pedagogical Argumentation: Pedagogical Reasoning with and About Student Science Ideas	Leema Berland, University of Wisconsin-Madison	Rosemary Russ and Melissa Braaten, University of Wisconsin-Madison	S	Post-Sec
47	An Examination of Science and Technology Teachers' Conceptual Learning Through Concept-Based Engineering Professional Development	Rodney Custer, Black Hills State University	Jenny Daugherty, Purdue University; Julia Ross, University of Maryland, Baltimore County	S T E	H
48	Identifying and Measuring the Implementation and Impact of STEM School Models	Melanie LaForce, The University of Chicago	Jeanne Century, The University of Chicago	S T E M	H
49	Multiple Instrumental Case Studies of Inclusive STEM-Focused High Schools: Opportunity Structures for Preparation and Inspiration (OSPrI)	Sharon Lynch, The George Washington University	Erin Peters-Burton and Tara Behrend, The George Washington University; Barbara Means, SRI International	S T E M	H
50	iSTEM: A Multi-State Longitudinal Study of the Effectiveness of Inclusive STEM High Schools	Barbara Means, SRI International	Viki Young, Ann House, and Haiwen Wang, SRI International; Sharon Lynch, The George Washington University	S T E M	H Post-Sec

51	Engaging Youth in Engineering Module Study	Melissa Dean, Mobile Area Education Foundation	James Van Haneghan and James Laier, University of South Alabama; Martha Peek, Mobile County Public School System	STEM	M
52	Morehouse College DR K-12 Pre-service STEM Teacher Initiative	Cynthia Trawick, Morehouse College	Abdelkrim Brania and Charles Meadows, Morehouse College	STEM	MH
53	Modeling Engineered Levers for the 21st Century Teaching of STEM (Collaborative Research: Schunn)	Christian Schunn, University of Pittsburgh	Mary Kay Stein, University of Pittsburgh	SEM	H
54	An Investigation of the Impact of Strengthening the "T" and "E" Components of STEM in High School Biology and Chemistry Courses	Debra Brockway, Stevens Institute of Technology	Cary Sneider, Portland State University	SE	H
55	Science Learning: Integrating Design, Engineering and Robotics (SLIDER)	Marion Usselman, Georgia Institute of Technology	Mike Ryan and Donna Llewellyn, Georgia Institute of Technology; Juan-Carlos Aguilar, Georgia Department of Education	SE	M
56	Exploring the Efficacy of Engineering is Elementary (E4)	Christine Cunningham, Museum of Science, Boston	William Carlsen, Pennsylvania State University; Pamela Lottero-Perdue, Towson University; Elizabeth Parry, North Carolina State University	E	E
57	Multimedia Engineering Notebook Tools to Support Engineering Discourse in Urban Elementary School Classrooms (Collaborative Research: Wright)	Christopher Wright, University of Tennessee	Kristen Wendell and Patricia Paugh, University of Massachusetts, Boston	E	E
58	Community-Based Engineering Design Challenges for Adolescent English Learners	Amy Alexandra Wilson, Utah State University	Christine Hailey and Daniel Householder, Utah State University	E	H
59	Developing, Researching, and Scaling Up SmartGraphs	Carolyn Staudt, The Concord Consortium	Andrew Zucker, The Concord Consortium	SM	MH
60	Levels of Conceptual Understanding in Statistics (LOCUS)	Tim Jacobbe, University of Florida	Bob delMas, University of Minnesota; Jeff Haberstroh, Educational Testing Service; Brad Hartlaub, Kenyon College	SM	MH Post-Sec
61	Beyond Bridging: Co-education of Pre-service and In-service Elementary Teachers in Science and Mathematics	Bruce Johnson, University of Arizona		SM	E

62	Project ATOMS: Accomplished Elementary Teachers of Mathematics and Science	Temple Walkowiak, North Carolina State University	Ellen McIntyre, University of North Carolina at Charlotte; Sarah Carrier, Margareta Pop Thomson, Steve Porter, and Jayne Fleener, North Carolina State University	S M	E
63	Mathematics and Culture in Micronesia: Integrating Societal Experiences (Macimise)	A. J. (Sandy) Dawson, Pacific Resources for Education and Learning	Tom Craven, University of Hawaii; Donald Rubinstein, University of Guam	M	Pre-K E M Post-Sec
64	Professional Development for Culturally Relevant Teaching and Learning in Pre-K Mathematics	Anita Wager, University of Wisconsin-Madison	M. Elizabeth Graue and Thomas Carpenter, University of Wisconsin-Madison	M	Pre-K
65	Teachers Empowered to Advance Change in Mathematics (TEACH MATH): Preparing PreK-8 Teachers to Connect Children's Mathematical Thinking and Community-Based Funds of Knowledge	Corey Drake, Michigan State University	Erin Turner, University of Arizona; Julia Aguirre, University of Washington, Tacoma; Tonya Bartell, Michigan State University; Mary Foote, Queens College, City University of New York; Amy Roth McDuffie, Washington State University, Tri-Cities	M	E
66	Evaluating the Developing Mathematical Ideas Professional Development Program: Researching Its Impact on Teaching and Student Learning	James Hammerman, TERC, Inc.		M	E
67	The Impact of Early Algebra on Students' Algebra-Readiness (Collaborative Research: Knuth)	Eric Knuth, University of Wisconsin-Madison	Ana Stephens, University of Wisconsin-Madison	M	E
68	The Role and Use of Examples in Learning to Prove	Eric Knuth, University of Wisconsin-Madison	Amy Ellis, University of Wisconsin-Madison; Orit Zaslavsky, New York University	M	M H Post-Sec Other
69	CAREER: Fraction Activities and Assessments for Conceptual Teaching (FAACT) for Students with Learning Disabilities	Jessica Hunt, The University of Texas at Austin		M	E
70	Mathematics Discourse in Secondary Classrooms (M-DISC): A Case-Based Professional Development Curriculum	Beth Herbel-Eisenmann, Michigan State University	Michael Steele, University of Wisconsin-Milwaukee; Michelle Cirillo, University of Delaware	M	MH

71	Coherent Implementation of Mathematics Instructional Materials: A Study of the Variations and Effects of District Supports for Implementation	June Mark, Education Development Center, Inc.	Deborah Spencer, Education Development Center, Inc.	M	E
72	Children's Understanding of Functions in Grades K-2	Maria Blanton, TERC, Inc.	Barbara Brizuela, Tufts University	M	E
73	Theorizing and Advancing Teachers' Responsive Decision Making in the Domain of Rational Numbers	Susan Empson, The University of Texas at Austin	Victoria Jacobs, University of North Carolina at Greensboro	M	E
74	Learning Mathematics of the City in the City	Laurie Rubel, City University of New York	Vivian Lim, University of Pennsylvania; Erica Deahl and Sarah Williams, Massachusetts Institute of Technology	T M	H
75	Learning Trajectories to Support the Growth of Measurement Knowledge: Pre-K Through Middle School	Jeffrey Barrett, Illinois State University	Craig Cullen, Illinois State University; Doug Clements and Julie Sarama, University of Denver	M	E M
76	Development of a Cognition-Guided, Formative Assessment-Intensive, Individualized Computer-Based Dynamic Geometry Learning System for Grades 3-8	Michael Battista, Ohio State University		M	E M
77	Investigating the Relationship Between Teacher-Level and Student-Level Factors and NAEP Mathematics Test Performance by American Indian and Alaska Native Students	Sharon Nelson-Barber, WestEd		M	E M
78	Illuminating Learning by Splitting: A Learning Analytics Approach to Fraction Game Data Analysis	Taylor Martin, Utah State University	Nicole Velasquez, Utah State University	T M	E M
79	Formative Assessment in the Mathematics' Classroom: Engaging Teachers and Students	Cheryl Tobey, Education Development Center, Inc.		M	M
80	CAREER: Teaching Practices That Support Fraction-Based Algorithmic Thinking	Debra Johanning, University of Toledo		M	M
81	Developing Principles for Mathematics Curriculum Design and Use in the Common Core Era	Jeffrey Choppin, University of Rochester	Jon Davis and Corey Drake, Michigan State University; Amy Roth McDuffie, Washington State University, Tri-Cities	M	M



82	Using Math Pathways and Pitfalls to Promote Algebra Readiness	Jodi Davenport, WestEd	Yvonne Kao and Alma Ramirez, WestEd	M	M
83	Cross-National Comparison of School and District Supports for High-Quality Mathematics Instruction in the US and China	Tom Smith, Vanderbilt University	Min Sun, Virginia Polytechnic Institute and State University; Paul Cobb, Vanderbilt University	M	M
84	Implementing the Mathematical Practice Standards: Enhancing Teachers' Ability to Support the Common Core State Standards	E. Paul Goldenberg, Education Development Center, Inc.	Deborah Spencer, June Mark, Al Cuoco, and Mark Driscoll, Education Development Center, Inc.	M	M H
85	Transition to Algebra: A Habits of Mind Approach	E. Paul Goldenberg, Education Development Center, Inc.	June Mark, Education Development Center, Inc.	M	M H
86	Changing Curriculum, Changing Practice	Al Cuoco, Education Development Center, Inc.	Mary Beth Piecham, Education Development Center, Inc.	M	H
87	Supports for Learning to Manage Classroom Discussions: Exploring the Role of Practical Rationality and Mathematical Knowledge for Teaching	Patricio Herbst, University of Michigan	Dan Chazen, University of Maryland, College Park	M	H Post-Sec
88	Assessing Secondary Teachers' Algebraic Habits of Mind (Collaborative Research: Sword, Stevens, and Matsuura)	Sarah Sword, Education Development Center, Inc.; Glenn Stevens, Boston University; Ryota Matsuura, St. Olaf College	Al Cuoco, Education Development Center, Inc.	M	H Post-Sec
89	CAREER: Investigating Middle and Secondary Mathematics Teachers' Transformative Learning of Statistics Within Professional Development	Susan Peters, University of Louisville		M	Post-Sec
90	Every Day, Every Child: A Partnership for Research with Elementary Math and Science Instructional Specialists	Kimberly Markworth, Western Washington University	Chris Ohana, Western Washington University; Ruth Parker, Mathematics Education Collaborative	S M	E
91	CAREER: Noticing and Using Students' Prior Knowledge in Problem-Based Instruction	Gloriana Gonzalez, University of Illinois at Urbana-Champaign		M	H

92	Developing Rich Media-Based Materials for Practice-Based Teacher Education	Daniel Chazan, University of Maryland, College Park	Patricio Herbst, University of Michigan	M	Post-Sec
93	INK-12: Teaching and Learning Using Interactive Ink Inscriptions in K-12 (Collaborative Research: Koile)	Kimberle Koile, Massachusetts Institute of Technology (MIT)	Andee Rubin, TERC, Inc.	T M	E
94	Ready for Robotics: The Missing T and E of STEM in Early Childhood Education	Marina Bers, Tufts University		T E	Pre-K E
95	ScratchJr: Computer Programming in Early Childhood Education as a Pathway to Academic Readiness and Success (Collaborative Research: Bers)	Marina Bers, Tufts University	Mitchel Resnick, Massachusetts Institute of Technology (MIT)	T E	Pre-K E
96	Visualizing to Integrate Science Understanding for All Learners (VISUAL)	Marcia Linn, University of California, Berkeley	Bob Tinker, The Concord Consortium ( <i>Emeritus</i> )	S T	M H
97	Continuous Learning and Automated Scoring in Science (CLASS)	Marcia Linn, University of California, Berkeley	Lydia Liu, Educational Testing Service (ETS)	S T	M
98	Electronic Teacher Guide: Its Development and Use in Supporting Educative Curricula	Jacqueline Miller, Education Development Center, Inc.	William Tally, Education Development Center, Inc.	S T	H
98	Taking Foundation Science to Scale—Digitally: Transforming a Print Curriculum into an Innovative Learning Tool for Commercial Distribution	Jacqueline Miller, Education Development Center, Inc.		S	H
99	Confronting the Challenges of Climate Literacy (Collaborative Research: Ledley)	Tamara Shapiro Ledley, TERC, Inc.	Karen McNeal, North Carolina State University; Kathy Ellins, The University of Texas at Austin; Julie Libarkin, Michigan State University	S	H Post-Sec
100	Expanding PhET Interactive Science Simulations to Grades 4-8: A Research-Based Approach	Katherine Perkins, University of Colorado, Boulder	Dan Schwartz, Stanford University; Noah Podolefsky and Michael Dubson, University of Colorado, Boulder	S T	M H
101	Common Online Data Analysis Platform (CODAP)	William Finzer, The Concord Consortium	Dan Damelin, The Concord Consortium; Joan Heller, Heller Research Associates; Cliff Konold, University of Massachusetts, Amherst	S T	M H Post-Sec
102	Promoting Spatial Thinking with Web-Based Geospatial Technologies	Alec Bodzin, Lehigh University	David Anastasio and Dork Sahagian, Lehigh University	S	M

103	Constructing and Critiquing Arguments in Middle School Science Classrooms: Supporting Teachers with Multimedia Educative Curriculum Materials	Suzanna Loper, University of California, Berkeley	Katherine McNeill, Boston College; Jacqueline Barber, University of California, Berkeley	S	M
104	Overcoming Obstacles to Scaling-Up with a Cyberlearning Professional Development Model (Collaborative Research: Zahm)	Barbara Zahm, It's About Time	Ruta Demery, It's About Time; Tamara Sumner and Heather Leary, University of Colorado, Boulder; Cathy Ringstaff, WestEd	S	M
105	Geniverse: A Student Collaboratory for Biology Cyberlearning	Frieda Reichsman, The Concord Consortium	Chad Dorsey, The Concord Consortium; Chris Wilson, Biological Sciences Curriculum Study (BSCS); Jan Mokros, Maine Mathematics and Science Alliance	S	M H
106	Signing High School Science	Judy Vesel, TERC, Inc.	Harry Lang, NTID/RIT ( <i>retired</i> ); Jason Hurdich, Vcom3D; Lisa Elliot, NTID/RIT	S	H
107	Building High School Students' Understanding of Evolution	Louisa Stark, University of Utah	Jo Ellen Roseman, AAAS Project 2061; Kevin Pompei and Dina Drits-Esser, University of Utah	S	H
108	Ocean Tracks: Investigating Marine Migrations in a Changing Ocean (Collaborative Research: Krumhansl)	Ruth Krumhansl, Education Development Center, Inc.	Josephine Louie, Education Development Center, Inc.	S	H
109	Energy: A Multidisciplinary Approach for Teachers (EMAT) Designing and Studying a Multidisciplinary, Online Course for High School Teachers	Susan Kowalski, Biological Sciences Curriculum Study (BSCS)	Pamela Van Scotter, Biological Sciences Curriculum Study (BSCS); David Davis, Oregon Public Broadcasting; Kimberly Obbink, National Teachers Enhancement Network	S	H
110	SimScientists Human Body Systems: Using Simulations to Foster Integrated Understanding of Complex, Dynamic, Interactive Systems	Barbara Buckley, WestEd	George Deboer, American Association for the Advancement of Science (AAAS); Daniel Brenner and Andrew Grillo-Hill, WestEd	S	H
111	Integrating Engineering and Literacy	Chris Rogers, Tufts University	Merredith Portsmore and David Hammer, Tufts University	E	E M
112	Electronic Communities for Mathematics Instruction (e-CMI)	Al Cuoco, Education Development Center, Inc.	Eden Badertscher and Bowen Kerins, Education Development Center, Inc.	M	MH
113	Mapping Developmental Trajectories of Students' Conceptions of Integers	Lisa Lamb, San Diego State University	Jessica Pierson Bishop, University of Georgia; Randolph Philipp, San Diego State University	M	E M H



**POSTER HALL ADDENDUM**

**Additions:**

<b>Table #</b>	<b>Project Name</b>	<b>PI</b>	<b>Co-PI(s)</b>	<b>Content Area</b>	<b>Grade Band</b>
70	Mathematics Discourse in Secondary Classrooms (M-DISC): A Case-Based Professional Development Curriculum	Beth Herbel-Eisenmann, Michigan State University	Michael Steele, University of Wisconsin-Milwaukee; Michelle Cirillo, University of Delaware	M	MH
74	Learning Mathematics of the City in the City	Laurie Rubel, City University of New York	Vivian Lim, University of Pennsylvania; Erica Deahl and Sarah Williams, Massachusetts Institute of Technology	T M	H
111	Integrating Engineering and Literacy	Chris Rogers, Tufts University	Merredith Portsmore and David Hammer, Tufts University	E	E M
112	Electronic Communities for Mathematics Instruction (e-CMI)	Al Cuoco, Education Development Center, Inc.	Eden Badertscher and Bowen Kerins, Education Development Center, Inc.	M	MH
113	Mapping Developmental Trajectories of Students' Conceptions of Integers	Lisa Lamb, San Diego State University	Jessica Pierson Bishop, University of Georgia; Randolph Philipp, San Diego State University	M	E M H

**Cancellations:**

<b>Table #</b>	<b>Project Name</b>	<b>PI</b>	<b>Co-PI(s)</b>	<b>Content Area</b>	<b>Grade Band</b>
45	Mini-symposia: The Results of the African Diaspora: Developing Black Scholars in Science Education for the 21st Century in the United States, Part II	Mary Atwater, University of Georgia	Malcolm Butler, University of Central Florida	S	Other
70	Evaluating the Cognitive, Psychometric, and Instructional Affordances of Curriculum-Embedded Assessments: A Comprehensive Validity-Based Approach	Jim Pellegrino, University of Illinois at Chicago	Louis DiBello and Susan Goldman, University of Illinois at Chicago; James Minstrell, FACET Innovations, LLC	M	E
74	Differentiated Professional Development: Building Mathematics Knowledge for Teaching Struggling Learners	Amy Brodesky, Education Development Center, Inc.		M	E M