

2014 DR K-12 Awards

**This list contains newly awarded grants as well as grants continuing under a new award number.*

Award Number	Project	PI	Institution
1406282	A Conference on Progress and Factors that Contribute to Closing the STEM Achievement Gap	Sharon Robinson	American Association of Colleges for Teacher Education
1433181	A Study Group on Diversity, Equity and Excellence in Achievement and Assessment in Science, Technology, Engineering and Mathematics Education	Edmund Gordon	Teachers College, Columbia University
1417672	Access, Agency, and Allies in Mathematical Systems (A3IMS)	Beth Herbel-Eisenmann	Michigan State University
1418044	Bio-Sphere: Fostering Deep Learning of Complex Biology for Building our Next Generation's Scientists	Sadhana Puntambekar	University of Wisconsin-Madison
1418136	Building High School Students' Understanding of Evolution	Louisa Stark	University of Utah
1446250	CAREER: Fraction Activities and Assessments for Conceptual Teaching (FAACT) for Students with Learning Disabilities	Jessica Hunt	University of Texas at Austin
1431846	CAREER: Changing the Landscape: Towards the Development of a Physics Identity in High School	Zahra Hazari	Florida International University
1434442	Centers for Learning and Teaching: Research to Identify Changes in Mathematics Education Doctoral Preparation and the Production of New Doctorates	Robert Reys	University of Missouri-Columbia
1416984	Changing Culture in Robotics Classroom (Collaborative Research: Schunn)	Christian Schunn	University of Pittsburgh
1418163	CodeR4STATS - Code R for AP Statistics	Michelle Wilkerson-Jerde	Tufts University
1435470	Common Online Data Analysis Platform (CODAP)	William Finzer	Concord Consortium
1449550	Community for Advancing Discovery Research in Education 2 (CADRE 2)	Barbara Berns	Education Development Center
1418149	Computer Science in Secondary Schools (CS3): Studying Context, Enactment, and Impact	Eric Snow	SRI International

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1443024	Confronting the Challenges of Climate Literacy (Collaborative Research: McNeal)	Karen McNeal	North Carolina State University
1401350	Cyber-enabled Learning: Digital Natives in Integrated Scientific Inquiry Classrooms (Collaborative Research: Campbell)	David Campbell	University of Connecticut
1417939	DIMes: Immersing Teachers and Students in Virtual Engineering Internships	Jacqueline Barber	University of California-Berkeley
1417769	DR K-12: Teaching STEM with Robotics: Design, Development, and Testing of a Research-based Professional Development Program for Teachers	Vikram Kapila	Polytechnic University of New York
1417777	Driven to Discover: Citizen Science Inspires Classroom Investigation	Karen Oberhauser	University of Minnesota-Twin Cities
1418199	DRK-12: Changing Culture in Robotics Classroom (Collaborative Research: Shoop)	Robin Shoop	Carnegie-Mellon University
1418288	DRK-12: Developing and Testing the Internship-inator, a Virtual Internship in STEM Authorware System	David Shaffer	University of Wisconsin-Madison
1417835	EarSketch: An Authentic, Studio-based STEAM Approach to High School Computing Education	Jason Freeman	Georgia Tech Research Corporation
1415898	Empowering Teachers through VideoReview	Susan Doubler	TERC Inc.
1418183	Engineering Teacher Pedagogy: Using INSPIRES to Support Integration of Engineering Design in Science and Technology Classrooms	Julia Ross	University of Maryland Baltimore County
1418052	Focus on Energy: Preparing Elementary Teachers to Meet the NGSS Challenge (Collaborative Research: Lacy)	Sara Lacy	TERC Inc.
1418211	Focus on Energy: Preparing Elementary Teachers to Meet the NGSS Challenge (Collaborative Research: Vokos)	Stamatis Vokos	Seattle Pacific University
1414438	From Elementary Generalist to Mathematics Specialist: Examining Teacher Practice and Student Outcomes in Departmental and Self-Contained Models	Barbara Reys	University of Missouri-Columbia

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1418423	GRIDS: Graphing Research on Inquiry with Data in Science	Marcia Linn	University of California-Berkeley
1419055	Human Subjects Protection in the Digital Age	Penelope Earley	George Mason University
1417585	Identifying an Effective and Scalable Model of Lesson Study	Motoko Akiba	Florida State University
1440579	Implementation of the Next Generation Science Standards at the State Level: A Conference to Determine the Role of the Earth and Space Sciences Community	Edward Robeck	American Geological Institute
1439366	Improving Students' Mathematical Proficiency through Formative Assessment: Responding to an Urgent Need in the Common Core Era	Edward Silver	University of Michigan, Ann Arbor
1415541	Instructional Leadership for Scientific Practices: Resources for Principals in Evaluating and Supporting Teachers' Science Instruction	Katherine McNeill	Boston College
1404467	Integrating Computing Across the Curriculum (ICAC): Incorporating Technology into STEM Education Using XO Laptops	Shelia Cotten	Michigan State University
1418267	Intensified Algebra Efficacy Study	Kirk Walters	American Institutes for Research in the Behavioral Sciences
1418019	Investigating How to Enhance Scientific Argumentation through Automated Feedback in the Context of Two High School Earth Science Curriculum Units	Ou Liu	Educational Testing Service
1417838	Knowledge Assets to Support the Science Instruction of Elementary Teachers (ASSET)	Patrick Smith	Horizon Research Inc.
1416781	Learning about Ecosystems Science and Complex Causality through Experimentation in a Virtual World	Tina Grotzer	Harvard University
1445104	Learning and Sharing the World Best Practices in Math Education: The U.S. National Commission on Mathematics Instruction	Ana Ferreras	National Academy of Sciences

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1418020	Learning Linkages: Integrating Data Streams of Multiple Modalities and Timescales (Collaborative Research: Sherin)	Bruce Sherin	Northwestern University
1415509	Learning Trajectories in Grades K-2 Children's Understanding of Algebraic Relationships	Maria Blanton	TERC Inc.
1450532	Massachusetts Engineering Innovation and Dissemination Community (MEIDC)	Darryl Williams	Tufts University
1417722	Model My Watershed - Teaching Environmental Sustainability (Collaborative Research: Staudt)	Carolyn Staudt	Concord Consortium
1443223	Modeling Hydrologic Systems in Elementary Science (MoHSES)	Cory Forbes	University of Nebraska-Lincoln
1418235	Moving Next Generation Science Standards into Practice: A Middle School Ecology Unit and Teacher Professional Development Model	James Short	American Museum Natural History
1411660	Multimedia Engineering Notebook Tools to Support Engineering Discourse in Urban Elementary School Classrooms (Collaborative Research: Wright)	Christopher Wright	University of Tennessee Knoxville
1406780	One Year After Science's Grand Challenges in Education: Professional Empowerment of STEM Teachers' through Education Policy and Decision Making	Jay Labov	National Academy of Sciences
1417895	Preparing Urban Middle Grades Mathematics Teachers to Teach Argumentation Throughout the School Year	Jennifer Knudsen	SRI International
1417438	Professional Development Models and Outcomes for Science Teachers (PDMOST)	Philip Sadler	Harvard University
1418440	Project Next Generation Tools to Analyze and Revise Science Curriculum (Project Next Gen TARSC)	Rachelle DiStefano	California State University, East Bay Foundation, Inc.
1417735	Promoting Active Learning Strategies in Biology (PALS)	Thomas Cheatham	Middle Tennessee State University

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1418152	Reclaiming Access to Inquiry-based Science Education (RAISE) for Incarcerated Students	Michael Krezmien	University of Massachusetts Amherst
1416789	Re-Imagining Video-based Online Learning	Joanne Lobato	San Diego State University Foundation
1443790	Researching the Impact of an Online MOOC Designed to Transform Student Engagement and Achievement in Mathematics	Jo Boaler	Stanford University
1415585	School and District Utilization of Mathematics Specialists Who Have Returned to the Classroom	Patrick Smith	Horizon Research Inc
1418270	Science in the Learning Gardens: Factors that Support Racial and Ethnic Minority Students' Success in Low-Income Middle Schools	Dilafuz Williams	Portland State University
1417809	Supporting Secondary Students in Building External Models (Collaborative Research: Damelin)	Daniel Damelin	Concord Consortium
1417900	Supporting Secondary Students in Building External Models (Collaborative Research: Krajcik)	Joseph Krajcik	Michigan State University
1417040	Supports for Science and Mathematics Learning in Pre-Kindergarten Dual Language Learners: Designing and Expanding a Professional Development System	Kimberly Breneman	Rutgers University New Brunswick
1417731	Survey of U.S. Middle School Mathematics Teachers and Teaching	Heather Hill	Harvard University
1415284	Taking Games to School: Exploratory Study to Support Game-based Teaching and Learning In High-School Science Classes	Jodi Asbell-Clarke	TERC Inc.
1417983	Teacher Professional Development for Technology-enhanced Inquiry to Foster Students' 21st Century Learning	Kathleen Koenig	University of Cincinnati Main Campus
1418133	Teaching Environmental Sustainability - Model My Watershed (Collaborative Research: Gill)	Susan Gill	Stroud Water Research Center
1417527	Teaching Environmental Sustainability - Model My Watershed (Collaborative Research: Marcum-Dietrich)	Nanette Marcum-Dietrich	Millersville University

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1417202	The Climate Lab: An Innovative Partnership between Climate Research and Middle-School Practice Collaborative Research: Drayton)	Brian Drayton	TERC Inc.
1417332	The Climate Lab: An Innovative Partnership between Climate Research and Middle-School Practice Collaborative Research: Lloyd-Evans)	Trevor Lloyd-Evans	Manomet Inc.
1417601	Understanding the Role of Contextual Effects in STEM Pursuit and Persistence: A Synthesis Approach	Michael Gottfried	University of California-Santa Barbara
1417705	Working with Middle School Science Teachers to Design and Implement an Interactive Data Dashboard	Virginia Snodgrass Rangel	William Marsh Rice University