

2018-19 DRK-12 New Awards

This list contains grants awarded fall 2018 – summer 2019.

**Denotes CADRE Fellows alumnus*

Award Number	Project Title	PI	Institution
1920249	Advancing Coherent and Equitable Systems of Science Education	Philip Bell	University of Washington
1908900	Aligning the Science Teacher Education Pathway: A Networked Improvement Community	Michele Korb	California State University, East Bay
1853951	Articulating a Transformative Approach for Designing Tasks that Measure Young Learners' Developing Proficiencies in Integrated Science and Literacy (Collaborative Research: Billman)	Alison K. Billman	University of California, Berkeley
1903103	Articulating a Transformative Approach for Designing Tasks that Measure Young Learners' Developing Proficiencies in Integrated Science and Literacy (Collaborative Research: Harris)	Christopher Harris	WestEd
1853923	Articulating a Transformative Approach for Designing Tasks that Measure Young Learners' Developing Proficiencies in Integrated Science and Literacy (Collaborative Research: Rutstein)	Daisy Rutstein	SRI International
1908311	Building a Teacher Knowledge Base for the Implementation of High-Quality Instructional Resources through the Collaborative Investigation of Video Cases (Collaborative Research: Jabon)	David Jabon	DePaul University
1908319	Building a Teacher Knowledge Base for the Implementation of High-Quality Instructional Resources through the Collaborative Investigation of Video Cases (Collaborative Research: Murray)	Eileen Murray	Montclair State University
1908185	Building a Teacher Knowledge Base for the Implementation of High-Quality Instructional Resources through the Collaborative Investigation of Video Cases (Collaborative Research: Wilson)	David Wilson	Buffalo State College, SUNY
1907471	Building Professional Capital in Elementary Science Teaching through a District-wide Networked Improvement Community Model	Jessica Thompson	University of Washington

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1908557	Building Students' Data Literacy through the Co-design of Curriculum by Mathematics and Art Teachers (Collaborative Research: Matuk)	Camillia Matuk*	New York University
1908030	Building Students' Data Literacy through the Co-design of Curriculum by Mathematics and Art Teachers (Collaborative Research: Silander)	Megan Silander	Education Development Center
1908142	Building Students' Data Literacy through the Co-design of Curriculum by Mathematics and Art Teachers (Collaborative Research: Vacca)	Ralph Vacca	Fordham University
1845841	CAREER: Black Youth Development and Curricular Supports for Robust Identities in Mathematics	Maisie Gholson	University of Michigan
1845490	CAREER: Bridging the Digital Accessibility Gap in STEM Using Multisensory Haptic Platforms	Jenna Gorlewicz	Saint Louis University
1845048	CAREER: Building on Diverse Students' Funds of Knowledge to Promote Scientific Discourse and Strengthen Connections to Science Learning in Urban Classrooms	Christine Bae	Virginia Commonwealth University
1844453	CAREER: Cultivating Teachers' Epistemic Empathy to Promote Responsive Teaching	Lama Jaber	Florida State University
1846227	CAREER: Expanding Latinxs' Opportunities to Develop Complex Thinking in Secondary Science Classrooms through a Research-Practice Partnership	Hosun Kang	University of California, Irvine
1907944	Case Studies of a Suite of Next Generation Science Instructional, Assessment, and Professional Development Materials in Diverse Middle School Settings	Nancy Songer	Drexel University
1908165	Co-developing a Curriculum Coherence Toolkit with Teachers (Collaborative Research: Drake)	Corey Drake	Michigan State University
1907808	Co-developing a Curriculum Coherence Toolkit with Teachers (Collaborative Research: Newton)	Jill Newton	Purdue University
1907650	Co-developing a Curriculum Coherence Toolkit with Teachers (Collaborative Research: Olson)	Amy Olson	Duquesne University

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1907831	Co-developing a Curriculum Coherence Toolkit with Teachers (Collaborative Research: Wood)	Marcy Wood	University of Arizona
1908482	Crowdsourcing Neuroscience: An Interactive Cloud-based Citizen Science Platform for High School Students, Teachers, and Researchers	Camillia Matuk*	New York University
1908159	Design and Implementation of Immersive Representations of Practice	Karl Kosko	Kent State University
1908121	Design Research on the Teaching and Learning of Conceptual Understanding in High School Chemistry Through the Use of Dynamic Visualizations of Physical and Chemical Changes	Ellen Yeziarski	Miami University
1908351	Designing and Researching a Program for Preparing Teachers as Facilitators of Computational Making Activities in Classroom and Informal Learning Environments	Ricarose Roque	University of Colorado Boulder
1908915	Designing for Science Learning in Schools by Leveraging Participation and the Power of Place through Community and Citizen Science (Collaborative Research: Ballard)	Heidi Ballard	University of California, Davis
1908670	Designing for Science Learning in Schools by Leveraging Participation and the Power of Place through Community and Citizen Science (Collaborative Research: Henson)	Sol Henson	Sierra Streams Institute
1907437	Developing an Online Game to Teach Middle School Students Science Research Practices in the Life Sciences (Collaborative Research: Baker)	Ryan Baker	University of Pennsylvania
1907384	Developing an Online Game to Teach Middle School Students Science Research Practices in the Life Sciences (Collaborative Research: Gagnon)	David Gagnon	University of Wisconsin-Madison
1907398	Developing an Online Game to Teach Middle School Students Science Research Practices in the Life Sciences Collaborative Research: Metcalf)	Shari Metcalf	Harvard University
1907782	Developing and Investigating Unscripted Mathematics Videos	Joanne Lobato	San Diego State University

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1908630	Developing and Validating Early Assessments of College Readiness: Differential Effects for Underrepresented Groups, Optimal Timing of Assessments, and STEM-Specific Indicators	Gregory Palardy	University of California, Riverside
1906588	Developing Leaders, Transforming Practice in K-5 Mathematics: An Examination of Models for Elementary Mathematics Specialists (Collaborative Research: Lewis)	Chandra Lewis	RMC Research Corporation
1906565	Developing Leaders, Transforming Practice in K-5 Mathematics: An Examination of Models for Elementary Mathematics Specialists Collaborative Research: Davis)	Sarah Davis	Portland Public Schools
1906682	Developing Leaders, Transforming Practice in K-5 Mathematics: An Examination of Models for Elementary Mathematics Specialists Collaborative Research: Rigelman)	Nicole Rigelman	Portland State University
1906293	Developing Learning Environments that Support Molecular-Level Sensemaking	Melanie Cooper	Michigan State University
1907681	Developing Organizational Capacity to Improve K-8 Mathematics Teaching and Learning	Alison Castro Superfine	University of Illinois at Chicago
1908937	Developing the Science Comprehensive Online Learning Platform for Rural School Science Teacher Development	Brooke Moore	Fort Hays State University
1920545	Early Emergence of Socioeconomic Disparities in Mathematical Understanding	Elizabeth Votruba-Drzal	University of Pittsburgh
1908743	Ed+gineering: An Interdisciplinary Partnership Integrating Engineering into Elementary Teacher Preparation Programs	Jennifer Kidd	Old Dominion University
1908117	Environmental Innovation Challenges: Teaching and Learning Science Practices in the Context of Complex Earth Systems	Gillian Puttick	TERC
1908084	Fourteenth International Congress on Mathematical Education (ICME14) Travel Grant	Gail Burrill Burrill	Michigan State University
1907751	Fusing Equity and Whole-School STEM Models: A Conference Proposal	Gauri Vaishampayan	Museum of Science and Industry

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1908632	Generalized Embodied Modeling to Support Science through Technology Enhanced Play (Collaborative Research: Danish)	Joshua Danish	Indiana University
1908791	Generalized Embodied Modeling to Support Science through Technology Enhanced Play (Collaborative Research: Enyedy)	Noel Enyedy	Vanderbilt University
1908110	Getting Unstuck: Designing and Evaluating Teacher Resources to Support Conceptual and Creative Fluency with Programming	Karen Brennan	Harvard University
1939192	Human Variance and Assessment for Learning Implications for Diverse Learners of STEM: A National Conference	Edmund Gordon	Columbia University
1937719	Improving Evaluations of R&D in STEM Education	Larry Hedges	Northwestern University
1907840	Improving Grades 6-8 Students' Mathematics Achievement in Modeling and Problem Solving through Effective Sequencing of Instructional Practices	Joe Champion	Boise State University
1904156	Investigating School District Resilience and the Impact of Hurricane Exposure on Student Outcomes	Cassandra Davis	University of North Carolina at Chapel Hill
1908760	Invigorating Statistics Teacher Education Through Professional Online Learning (InSTEP)	Hollylynne Lee	North Carolina State University
1908889	Learning Trajectories as a Complete Early Mathematics Intervention: Achieving Efficacies of Economies at Scale	Douglas Clements	University of Denver
1941494	Looking Back and Looking Forward: Increasing the Impact of Educational Research on Practice	Jinfa Cai	University of Delaware
1908515	PBS NewsHour Student Reporting Labs StoryMaker: STEM-Integrated Student Journalism	Leah Clapman	Greater Washington Educational Telecommunications Association
1907950	Professional Development for Teaching and Learning about Energy and Equity in High School Physics (Collaborative Research: Mason)	Bruce Mason	American Association of Physics Teachers
1936601	Professional Development for Teaching and Learning about Energy and Equity in High School Physics (Collaborative Research: Scherr)	Rachel Scherr	Seattle Pacific University

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1908825	Reasoning Language for Teaching Secondary Algebra	Cody Patterson	University of Texas at San Antonio
1908431	Science Coordinators Advancing a Framework for Outstanding Leadership Development	Julie Luft	University of Georgia
1908272	Science Learning through Embodied Performances in Elementary and Middle School	Maria Varelas	University of Illinois at Chicago
1907460	Spanning Boundaries: A Statewide Network to Support Science Teacher Leaders to Implement Science Standards	Julie Yu	Exploratorium
1922641	STEM for All Collaboratory: Accelerating Dissemination and Fostering Collaborations for STEM Educational Research and Development	Joni Falk	TERC
1812913	STEM Sea, Air, and Land Remotely Operated Vehicle Design Challenges for Rural, Middle School Youth	Guenter Maresch	North Florida Community College
1906264	Streams of Data: Nurturing Data Literacy in Young Science Learners (Collaborative Research: Kochevar)	Randall Kochevar	Education Development Center
1906286	Streams of Data: Nurturing Data Literacy in Young Science Learners (Collaborative Research: Robeck)	Edward Robeck	American Geological Institute
1907561	Strengthening Middle School Mathematical Argumentation through Teacher Coaching: Bridging from Professional Development to Classroom Practice	Teresa Lara-Meloy	TERC
1908464	Strengthening STEM Teaching in Native American Serving Schools through Long-Term, Culturally Responsive Professional Development	Angelina Castagno	Northern Arizona University
1907906	Students and Teachers Learning from Nature: Studying Biologically Inspired Design in High School Engineering Education	Marc Weissburg	Georgia Institute of Technology
1907895	Supporting Students' Science Content Knowledge through Project-based Inquiry	Hiller Spires	North Carolina State University
1907506	Teaching Science Outdoors: A Next Generation Approach for Advancing Elementary Science Teaching in Urban Communities	Gail Richmond	Michigan State University

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1920119	Teaching Students to Reason about Variation and Covariation in Data: What Do We Know and What Do We Need to Find Out?	Susan Kowalski	BSCS
1920732	The Developmental Emergence and Consequences of Spatial and Math Gender Stereotypes	Sara Cordes	Boston College
1908886	The School Gardeners' Southwest Desert Almanac: A Conference for Supporting, Sustaining, and Spreading Garden-Based Science Teaching	Steven Zuiker	Arizona State University
1932697	Third National Conference on Doctoral Programs in Mathematics Education	Jeffrey Shih	University of Nevada, Las Vegas
1907745	Using Animated Contrasting Cases to Improve Procedural and Conceptual Knowledge in Geometry	Erin Krupa	North Carolina State University
1908481	Validation of the Equity and Access Rubrics for Mathematics Instruction (VEAR-MI)	Jonee Wilson*	North Carolina State University
1920621	Validity Evidence for Measurement in Mathematics Education (V-M2ED) (Collaborative Research: Bostic)	Jonathan Bostic	Bowling Green State University
1920619	Validity Evidence for Measurement in Mathematics Education (V-M2ED) (Collaborative Research: Krupa)	Erin Krupa	North Carolina State University
1907904	Young Mathematicians: Expanding an Innovative and Promising Model Across Learning Environments to Promote Preschoolers' Mathematics Knowledge	Jessica Young	Education Development Center