2019-20 DRK–12 New Awards

This list contains grants awarded fall 2019 – summer 2020.
NEW! *Denotes awards made since CADRE's June 2020 newsletter*
*****Denotes CADRE Fellows alumnus*

Award Number	Project Title	PI	Institution
2008997	Advancing Equity and Strengthening Teaching with Elementary Mathematical Modeling (Collaborative Research: Aguirre)	Julia Aguirre	University of Washington
2010202	Advancing Equity and Strengthening Teaching with Elementary Mathematical Modeling (Collaborative Research: Carlson)	Mary Carlson	Montana State University
2010269	Advancing Equity and Strengthening Teaching with Elementary Mathematical Modeling (Collaborative Research: Suh)	Jennifer Suh	George Mason University
2010178	Advancing Equity and Strengthening Teaching with Elementary Mathematical Modeling (Collaborative Research: Turner)	Erin Turner	University of Arizona
2010265	**NEW!** Assessing College-Ready Computational Thinking (Collaborative Research: Brown)	Richard Brown	National Math and Science Initiative
2010314	**NEW!** Assessing College-Ready Computational Thinking (Collaborative Research: Wilson)	Mark Wilson	University of California, Berkeley
2010361	Bridging Science Teaching and Learning in Title 1 Schools	Brian Williams	Georgia State University
2010563	Building Environmental and Educational Technology Competence and Leadership Among Educators: An Exploration in Virtual Reality Professional Development	Nastassia Jones	Southern University
1942912	CAREER: Developing Elementary Preservice Teachers' Understandings and Abilities to Support Emerging Bilingual Students Scientific Sensemaking	María González-Howard*	University of Texas at Austin
1942580	CAREER: Exploring Teacher Noticing of Students' Multimodal Algebraic Thinking	Janet Walkoe	University of Maryland, College Park
1941668	CAREER: Implementing Mathematical Modeling for Emergent Bilinguals	Ji Yeong I	Iowa State University

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1941720	CAREER: Investigation of Beginning Teachers' Expertise to Teach Mathematics via Reasoning and Proof	Orly Buchbinder	University of New Hampshire
1942500	CAREER: Job Embedded Education on Computational Thinking for Rural STEM Discipline Teachers	Colby Tofel-Grehl	Utah State University
1941992	CAREER: Promoting Equitable and Inclusive STEM Contexts in High School	Kelly Lynn Mulvey	North Carolina State University
1941642	CAREER: Spreading Computational Literacy Equitably via Integration of Computing in Preservice Teacher Preparation	Lauren Margulieux	Georgia State University
1942770	CAREER: Supporting Model Based Inference as an Integrated Effort Between Mathematics and Science	Ryan (Seth) Jones	Middle Tennessee State University
1941952	CAREER: Understanding Latinx Students' Stories of Doing and Learning Mathematics	Carlos Gomez*	Clemson University
2010556	Comparing the Efficacy of Collaborative Professional Development Formats for Improving Student Outcomes of a Student-Teacher-Scientist Partnership Program	Catrina Adams	Botanical Society of America
2010111	**NEW!** Creating a Model for Sustainable Ambitious Mathematics Programs in High-Need Settings: A Researcher-Practitioner Collaboration	Jeffrey Choppin	University of Rochester
2010591	Developing a Suite of Standards-based Instructionally Supportive Tools for Middle School Computer Science	Satabdi Basu	SRI International
2009803	**NEW!** Developing Teachers' Epistemic Cognition and Teaching Practices for Supporting Students' Epistemic Practices with Scientific Systems	Susan Yoon	University of Pennsylvania
2009127	Enhancing Energy Literacy through Place-based Learning: Using the School Building to Link Energy Use with Earth Systems	Laura Zangori	University of Missouri-Columbia
2010038	**NEW!** Enhancing Rational Number Instruction for Students with Math Disabilities and Difficulties: Designing Professional Development for Teachers Who Provide Math Intervention	Russell Gersten	RG Research Group

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2009176	Evolving Minds: Promoting Causal-Explanatory Teaching and Learning of Biological Evolution in Elementary School	Deborah Kelemen	Boston University
2037179	**NEW!** Exploring COVID and the Effects on U.S. Education: Evidence from a National Survey of American Households	Anna Saavedra	University of Southern California
2006595	Exploring Early Childhood Teachers' Abilities to Identify Computational Thinking Precursors to Strengthen Computer Science in Classrooms	Sean Justice	Texas State University
2000833	Facilitating Teacher Learning with Video Clips of Instruction in Science	Miray Tekkumru Kisa	Florida State University
2010172	Fostering Equitable Groupwork to Promote Conceptual Mathematics Learning	Anna DeJarnette	University of Cincinnati Main Campus
2010413	**NEW!** From Access to Sustainability: Investigating Ways to Foster Sustainable Use of Computational Modeling in K-12 Science Classrooms	Paulo Blikstein	Teachers College, Columbia University
2006144	**NEW!** Geological Construction of Rock Arrangements from Tectonics: Systems Modeling Across Scales	Amy Pallant	Concord Consortium
2010223	How Deep Structural Modeling Supports Learning with Big Ideas in Biology (Collaborative Research: Capps)	Daniel Capps	University of Georgia
2010334	How Deep Structural Modeling Supports Learning with Big Ideas in Biology (Collaborative Research: Shemwell)	Jonathan Shemwell	University of Alabama
2010547	**NEW!** Implementation and Efficacy Study of Preschool Math Activities for Numeracy	Anna Shusterman	Wesleyan University
1956152	Improving the Teaching of Genetics in High School to Avoid Instilling Misconceptions about Gender Differences (Collaborative Research: Donovan)	Brian Donovan	BSCS Science Learning
1956119	Improving the Teaching of Genetics in High School to Avoid Instilling Misconceptions about Gender Differences (Collaborative Research: Riegle-Crumb)	Catherine Riegle-Crumb	University of Texas at Austin

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2010333	**NEW!** Incorporating Professional Science Writing into High School STEM Research Projects	Sarah Fankhauser	Emory University
2010256	**NEW!** An Interdisciplinary Approach to Supporting Computer Science in Rural Schools	Bryan Wallace	CodeVA
2016241	International Mind, Brain and Education Society (IMBES): 2020 Biennial Conference	Nora Newcombe	Temple University
2010259	Internet of Things Pedagogical Ecosystem for Integrated Computer Science and Software Engineering Education for Grades 9-12	Pramod Abichandani	New Jersey Institute of Technology
2010322	Learning Progressions in Science: Analyzing and Deconstructing the Multiple Dimensions in Assessment	Mark Wilson	University of California, Berkeley
2032179	Learning to Teach During COVID-19: Leveraging Simulated Classrooms as Practice-based Spaces for Preservice Elementary Teachers within Online Teacher Education Courses	Jamie Mikeska*	Educational Testing Service
2009939	Leveraging Simulations in Preservice Preparation to Improve Mathematics Teaching for Students with Disabilities (Collaborative Research: Cohen)	Julie Cohen	University of Virginia
2010298	Leveraging Simulations in Preservice Preparation to Improve Mathematics Teaching for Students with Disabilities (Collaborative Research: Jones)	Nathan Jones	Boston University
2009613	Locally Adaptable Instructional Materials and Professional Learning Design for Place-based Elementary Science	Katahdin Cook Whitt	Maine Mathematics and Science Alliance
2010188	**NEW!** Opening Pathways into Engineering through an Illinois Physics and Secondary Schools Partnership	Timothy Stelzer	University of Illinois at Urbana-Champaign
2030436	Pandemic Learning Loss in U.S. High Schools: A National Examination of Student Experiences	Jennifer Hamilton	National Opinion Research Center
2010230	Parents, Teachers, and Multilingual Children Collaborating on Mathematics Together (Collaborative Research: Civil)	Marta Civil	University of Arizona

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2010260	Parents, Teachers, and Multilingual Children Collaborating on Mathematics Together (Collaborative Research: Pinnow)	Rachel Pinnow	University of Missouri-Columbia
2010417	Parents, Teachers, and Multilingual Children Collaborating on Mathematics Together (Collaborative Research: Quintos)	Beatriz Quintos Alonso	University of Maryland, College Park
2000495	Paving the Way for Fractions: Identifying Foundational Concepts in First Grade (Collaborative Research: Jordan)	Nancy Jordan	University of Delaware
2000424	Paving the Way for Fractions: Identifying Foundational Concepts in First Grade (Collaborative Research: Newcombe)	Nora Newcombe	Temple University
2010086	Preparing Teachers to Design Tasks to Support, Engage, and Assess Science Learning in Rural Schools	William Penuel	University of Colorado Boulder
2006179	**NEW!** A Quantitative Synthesis of Research on Elementary Science Programs	Robert Slavin	Johns Hopkins University
1923586	A Research-Practice Partnership for Developing Computational Thinking through Linguistically and Culturally Relevant CS Curriculum in Middle School	Scott Gray	El Paso Independent School District
2027397	Responding to a Global Pandemic: The Role of K-12 Science Teachers	Patrick (Sean) Smith	Horizon Research, Inc.
2023088	Responding to an Emerging Epidemic through Science Education	Troy Sadler	University of North Carolina at Chapel Hill
2010153	Responsive Instruction for Emergent Bilingual Learners in Biology Classrooms	Julie Brown	University of Florida
2010505	**NEW!** SPIRAL: Supporting Professional Inquiry and Re-Aligning Learning through a Structured e-Portfolio System	Jose-Felipe Martinez-Fernandez	University of California, Los Angeles
2010276	**NEW!** Storytelling for Mathematics Learning and Engagement	Erica Walker	Teachers College, Columbia University
2009212	Supporting Elementary Teacher Learning for Effective School-Based Citizen Science (TL4CS)	Patrick (Sean) Smith	Horizon Research, Inc.

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2010633	Supporting Students' Language, Knowledge, and Culture through Science	Cory Buxton	Oregon State University
2006263	Synchronous Online Video-Based Development for Rural Mathematics Coaches (Collaborative Research: Choppin)	Jeffrey Choppin	University of Rochester
2006353	Synchronous Online Video-Based Development for Rural Mathematics Coaches (Collaborative Research: Amador)	Julie Amador	University of Idaho
2010530	Systemic Transformation of Inquiry Learning Environments for STEM	Ellen Meier	Teachers College, Columbia University
2010137	Understanding the Role of Lesson Study in K-12 Mathematics and Science Teacher Education	Sharon Dotger	Syracuse University