2022-23 DRK–12 New Awards

This list contains grants awarded winter 2022 – fall 2023.
NEW! *Denotes awards made since CADRE's September 2023 newsletter.*

Award #	Project Title	PI	Institution
2300743	A Professional Development Model for High School Teachers to Adapt Curricula Toward Students' Knowledges and Resources	Christina Krist	University of Illinois at Urbana-Champaign
2247435	A Team-based Model for Co-adapting Existing Middle School Science Curricula for Culturally and Linguistically Diverse Learners	Jie Zhang	University of Houston
2300665	Advancing Mentor Teachers' Practices Through Collaborative Pedagogical Reasoning (Collaborative Research: Ghousseini)	Hala Ghousseini	University of Wisconsin-Madison
2300667	Advancing Mentor Teachers' Practices Through Collaborative Pedagogical Reasoning (Collaborative Research: Remillard)	Janine Remillard	University of Pennsylvania
2300666	Advancing Mentor Teachers' Practices Through Collaborative Pedagogical Reasoning (Collaborative Research: Shaughnessy)	Meghan Shaughnessy	Boston University
2246607	**NEW!** Advancing, Supporting, and Sustaining Equity Among Elementary Teachers of Science	Elizabeth Davis	University of Michigan
2300444	Assessing the Efficacy and Implementation of a Technology-based Mathematics Intervention for Middle School Students	Jessica Mislevy	SRI International
2300433	Biomimicry as an Authentic Anchor: Giving Teachers the Tools to Adapt an Interdisciplinary Middle School Curriculum	Debra Bernstein	TERC
2237986	CAREER: Affirming Bilingual Children's Participation in Mathematics	José Martínez Hinestroza	Texas State University
2239152	CAREER: Creatively Reimagining Engagements with Data in Biology Learning Environments	Joshua Rosenberg	University of Tennessee, Knoxville
2237739	CAREER: Developing a Participatory Model for Elementary Science for Community Change	Terrance Burgess	Michigan State University

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2333959	CAREER: Equity Focused Elementary Mathematics: Creating Virtual Mathematics Communities in Rural Georgia	Susan Cannon	University of Georgia
2237035	**NEW!** CAREER: Examining the Supply, Qualifications, and Career Paths of STEM Teachers	Tuan Nguyen	Kansas State University
2237902	CAREER: Investigating Young Children's Opportunities to Learn Mathematics in Early Childhood Classrooms	Nicholas Johnson	San Diego State University
2237053	CAREER: Knowledge Exchange for Supporting Youth With or At Risk for Mathematics Difficulty	Jessica Rodrigues	University of Missouri
2237151	CAREER: Preparing Middle and High School Pre-service Teachers for Critical Mathematics Education	Zareen Aga	James Madison University
2239316	CAREER: Reframing Students' Graph Literacy with a Focus on Students' Thinking	Hwa Young Lee	Texas State University
2237703	**NEW!** CAREER: Second Chance STEM: Uncovering School Policies Structuring Access to and Engagement in High School STEM Credit Recovery	Samantha Viano	George Mason University
2326811	Co-developing a Community-based Science Education Curriculum Framework for Disaster Justice and Resilience: A Response to the 2022 Buffalo Blizzard	Noemi Waight	University at Buffalo
2247546	Conversations Across Boundaries: Bringing PreK-2 Mathematics Experts Together	Paola Sztajn	North Carolina State University
2300558	Culturally Responsive Elementary Science Teaching	Deborah Hanuscin	Western Washington University
2300118	Developing a Multi-disciplinary STEM Education Model for Multilingual Learners that Meets Societal Challenges	Okhee Lee	New York University
2300233	Developing an Early Mathematics Intervention for Children with Disabilities in the Home Learning Environment	Gena Nelson	University of Oregon
2300404	Developing Concept of Variable Among Students with Mathematics Difficulties in Preparation for Algebra 1	Sarah Krowka	RG Research Group

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2247128	Developing Mathematics Teachers Responsive Pedagogies for Linguistically Marginalized Students	Samantha Marshall Pham	North Carolina State University
2300766	Elementary Teacher Professional Learning of Equitable Engineering Pedagogies for Multilingual Students	Mary McVee	University at Buffalo
2300832	Engaging Students in Discourse About Criteria for Judging Scientific Models (Collaborative Research: Danish)	Joshua Danish	Indiana University
2300831	Engaging Students in Discourse About Criteria for Judging Scientific Models (Collaborative Research: Duncan)	Ravit Golan Duncan	Rutgers University–New Brunswick
2300689	Engaging Teachers in Integrating Human-Centered Design for Geometry Problem-based Instruction	Gloriana Gonzalez Rivera	University of Illinois at Urbana-Champaign
2300676	Enhancing Early Childhood Educators' Reflective Practice and Content Knowledge to Increase Children's Capacity for Science Talk	Soo-Young Hong	University of Nebraska-Lincoln
2300785	Enhancing STEM Success: A Multi-modal Investigating of Spatial Reasoning and Training in Undergraduate Education	Melissa Beck	Louisiana State University
2301273	Examining Elementary Mathematics Teachers' Behaviors and Learning with an Online Professional Development Platform (Collaborative Research: Cimpian)	Joseph Cimpian	New York University
2301274	Examining Elementary Mathematics Teachers' Behaviors and Learning with an Online Professional Development Platform (Collaborative Research: Moran)	Cheryl Moran	University of Chicago
2301272	Examining Elementary Mathematics Teachers' Behaviors and Learning with an Online Professional Development Platform (Collaborative Research: Perry)	Michelle Perry	University of Illinois at Urbana-Champaign
2309657	Examining Potential Causal Connections and Mechanisms Between Children's Block Play and Mathematics Learning	Sara Schmitt	University of Oregon

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2300544	Examining Relationships Among Teacher Professional Learning and Associated Teacher and Student Outcomes in Math and Science: A Meta-analytic Approach to Mediation and Moderation	Ryan Williams	American Institutes for Research
2301116	Examining the Longitudinal Development of Pre-service Elementary Teachers' Equitable Noticing of Children's Mathematical Thinking (Collaborative Research: Jessup)	Naomi Jessup	Georgia State University
2301115	Examining the Longitudinal Development of Pre-service Elementary Teachers' Equitable Noticing of Children's Mathematical Thinking (Collaborative Research: Kalinec-Craig)	Crystal Kalinec-Craig	University of Texas at San Antonio
2301114	Examining the Longitudinal Development of Pre-service Elementary Teachers' Equitable Noticing of Children's Mathematical Thinking (Collaborative Research: Thomas)	Jonathan Thomas	University of Kentucky
2300726	Expanding Sixth-Grade Youth's Understanding of Engineering Through Critical Multilingual Journalism	Chelsea Andrews	Tufts University
2247675	**NEW!** Exploring Data Science Through the Lens of Civics Education	Traci Higgins	TERC
2246989	Exploring the Landscape of Rural Mathematics Education (Collaborative Research: Amador)	Julie Amador	University of Idaho
2246988	Exploring the Landscape of Rural Mathematics Education (Collaborative Research: Choppin)	Jeffrey Choppin	University of Rochester
2246990	Exploring the Landscape of Rural Mathematics Education (Collaborative Research: Heck)	Daniel Heck	Horizon Research, Inc.
2319933	Facilitating Teacher Learning with Video Clips of Instruction in Science	Miray Tekkumru Kisa	Rand Corporation
2300556	Fostering Systems Thinking in High School Environmental Engineering Through Engagement of Coastal Communities	Rossella Santagata	University of California, Irvine

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2300619	Hearing Each Other's Voices: Community Models for Professional Learning for Teachers, STEM Coaches, and Researchers (Collaborative Research: Fusco)	Judith Fusco	Digital Promise Global
2300618	Hearing Each Other's Voices: Community Models for Professional Learning for Teachers, STEM Coaches, and Researchers (Collaborative Research: Hmelo-Silver)	Cindy Hmelo-Silver	Indiana University
2300555	High School Climate Education for a Resilient Future	Jessica Bean	University of California, Berkeley
2300532	Improving Rural Middle Grades Mathematics Instruction Through a Statewide Teacher-Researcher Alliance	Joe Champion	Boise State University
2300734	Intelligent Science Stations: Developing Adaptive Mixed-Reality Technology to Enhance Inquiry-based STEM Learning in Schools	Nesra Yannier	Carnegie Mellon University
2300357	Investigating Early Elementary Students' Computational Thinking Development in Integrated Mathematics-Coding Instruction	Jessica Shumway	Utah State University
2300606	Making the Building Blocks of Early Math Scalable, Accessible, and Viable for All Young Children and Their Teachers	Douglas Clements	University of Denver
2300738	Meta-Analysis of the Instructional-Relational Model of Student Engagement and Math Achievement: A Moderation and Mediation Approach	Yibing Li	American Institutes for Research
2300609	Mobilizing Physics Teachers to Promote Inclusive and Communal Classroom Cultures through Everyday Actions (Collaborative Research: Cunningham)	Beth Cunningham	American Association of Physics Teachers
2300608	Mobilizing Physics Teachers to Promote Inclusive and Communal Classroom Cultures Through Everyday Actions (Collaborative Research: Fracchiolla)	Claudia Fracchiolla	American Physical Society
2300607	Mobilizing Physics Teachers to Promote Inclusive and Communal Classroom Cultures Through Everyday Actions (Collaborative Research: Hazari)	Zahra Hazari	Florida International University

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2247807	Over-Engaged Parenting and Science Achievement in Early Childhood	Julia Leonard	Yale University
2300927	Support Partnership for New Bilingual Science and Engineering Teachers	Alberto Esquinca	San Diego State University
2300747	Supporting Rural STEM Middle School Teachers and Career Counselors in the Development of Effective STEM Content and Career Development Experiences	Dodie Limberg	University of South Carolina
2300490	The Effects of Family Engagement on STEM Learning and Motivation: A Systematic Review and Meta-Analysis	Tyler Smith	University of Missouri
2301248	The Smart Playground: Computational Thinking Through Robotics in Early Childhood (Collaborative Research: Bers)	Marina Bers	Boston College
2301247	The Smart Playground: Computational Thinking Through Robotics in Early Childhood (Collaborative Research: Bustamante)	Andres Bustamante	University of California, Irvine
2301249	The Smart Playground: Computational Thinking Through Robotics in Early Childhood (Collaborative Research: Rogers)	Chris Rogers	Tufts University
2300322	Unpacking Computational Thinking for Elementary Teachers and Learners (Collaborative Research: Albert)	Jennifer Albert	Citadel Military College of South Carolina
2300323	Unpacking Computational Thinking for Elementary Teachers and Learners (Collaborative Research: Jocius)	Robin Jocius	University of Texas at Arlington