

Creating Inclusive PreK–12 STEM Learning Environments AUTHORS AND CONTRIBUTORS

STEERING COMMITTEE

Arthur Powell, Rutgers University (Chair)
Project: Collaborative Research: ComputerSupported Math Discourse Among Teachers and
Students (NSF# 1118888)

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Project: Collaborative Research: School Structure
and Science Success: Organization and
Leadership Influences On Student Achievement
(NSF# 1338512)

Cory Buxton, University of Georgia Project: Language-Rich Inquiry Science with English Language Learners through Biotechnology (LISELL-B) (NSF# 1316398)

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Project: Race-Gender Trajectories in Engineering:
The Role of Social Control Across Neighborhood
and School Contexts (NSF# 1619843)

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Project: Measuring Early Mathematical Reasoning Skills: Developing Tests of Numeric Relational Reasoning and Spatial Reasoning (NSF# 1721100)

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Project: Integrating Chemistry and Earth Science (NSF# 1721163)

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Project: Strengthening Mathematics Intervention Classes: Identifying and Addressing Challenges to Improve Instruction for Struggling Learners (NSF# 1621294)

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Project: Engaging Students in Scientific Practices: Evaluating Evidence and Explanation in Secondary Earth and Space Science (NSF# 1721041)

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Project: Design Technology and Engineering Education for English Learner Students: Project DTEEL (NSF# 1503428)

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Project: PBS NewsHour STEM Student
Reporting Labs: Broad Expansion of Youth
Journalism to Support Increased STEM Literacy
Among Underserved Student Populations and
their Communities (NSF# 1503315)

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Project: Exploring the Efficacy of Engineering is Elementary (E4) (NSF# 1220305)

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Project: EarSketch: An Authentic, Studio-Based STEAM Approach to High School Computing Education (NSF# 1417835)

Santiago Gasca, TERC

Projects: Doing the Math with Paraeducators: A Research and Development Project (NSF# 1621151)

Zoombinis: The Full Development
Implementation Research Study of a
Computational Thinking Game for Upper
Elementary and Middle School Learners (NSF#
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Project: CAREER: Noticing and Using Students' Prior Knowledge in Problem-Based Instruction (NSF# 1253081)

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Project: Supporting Instructional Growth in Mathematics: Enhancing Urban Secondary Teachers' Professional Learning through Formative Feedback (NSF# 1620920)

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Project: Developing a Model of STEM-Focused Elementary Schools (eSTEM) (NSF# 1621005)

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Assessments for Conceptual Teaching (FAACT)
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Project: Promoting Students' Spatial Thinking
in Upper Elementary Grades using Geographic
Information Systems (GIS) (NSF# 1316660)

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Architectural Design and Modeling Using E-Rebuild (NSF# 1720533)

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Schools and Programs (NSF# 1445592)

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Project: Designing a Middle Grades Spatial
Skills Curriculum (NSF# 1720801)

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Project: Multiple Instrumental Case Studies of
Inclusive STEM-focused High Schools:
Opportunity Structures for Preparation and
Inspiration (OSPrI) (NSF# 1118851)

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Project: EAGER Proposal for a Teacher's Guide to the Mathematics and Science Resources of the ELPD Framework (NSF# 1346491)

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Project: CAREER: L-MAP: Pre-service Middle
School Teachers' Knowledge of Mathematical
Argumentation and Proving (NSF# 1350802)

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Project: Model of Research-Based Education for Teachers (NSF# 1119678)

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Project: Integrating Quality Talk Professional Development to Enhance Professional Vision and Leadership for STEM Teachers in High-Need Schools (NSF# 1316347)

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Project: Collaborative Research: Mobilizing Teachers to Increase Capacity and Broaden Women's Participation in Physics (NSF# 1720869)

Project: Science in the Learning Gardens: Factors that Support Racial and Ethnic Minority Students' Success in Low-Income Middle Schools (NSF# 1418270)

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Project: CAREER: Designing Learning
Environments to Foster Productive and
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Diverse Students in Secondary Mathematics
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