Browse by TERC Authors

**Jodi Asbell-Clarke**

*Building Bridges: Teachers Leveraging Game-Based Implicit Science Learning in Physics Classrooms*
*Challenging Games Help Students Learn: An Empirical Study on Engagement, Flow and Immersion in Game-based Learning*
*Focus on Education: Visiting the Radio Universe*
*Learning Science Online: A Descriptive Study of Online Science Courses for Teachers*
*Learning Science Online: What Matters for Science Teachers?*
*Measuring Implicit Science Learning Using Networks of Player-Game Interactions*
*Playing with Science: Using Electronic Games to Foster Inquiry*
*Scaffolding Inquiry for At-Risk Science Learners*
*Serious Games Analytics to Measure Implicit Science Learning*
*Teaching Strategies Affecting the Implementation of an Inquiry-Based Science Curriculum with ELLs*
*The Blue Mars Science Center*
*Using Students’ Representations and Explanations for Assessment within a Learning Progression*

**Erin Bardar**

*Building Bridges: Teachers Leveraging Game-Based Implicit Science Learning in Physics Classrooms*
*Project LITE Educational Materials and Their Effectiveness*
*The Need for a Light and Spectroscopy Inventory for Assessing Innovations*

**Maria Blanton**

*Algebra and the Elementary Classroom: Transforming Thinking, Transforming Practice*
*Algebra in the Early Grades*
*Algebraic Reasoning in Kindergarten – Grade 2*
*Algebraic Reasoning in Prekindergarten–Grade 2*
*Developing Essential Understanding of Algebraic Thinking for Teaching Mathematics in Grades 3-5 Essential Understanding Series*
*Just Say Yes to Early Algebra!*
*Teaching and Learning Proof Across the Grades: A K-16 Perspective*

**Sally Crissman**

*Looking Through the Energy Lens*
*Measure Lines*
*Using Students’ Representations and Explanations for Assessment within a Learning Progression*

**Donna Curry**

*A Framework for Adult Numeracy Standards*
*Integrating Arithmetic and Algebra*
*Revisiting Subtraction*
*Two Ways of Thinking about Division*

**Sue Doubler**

*Can Teachers Learn Through Inquiry Online*
*Learning Progressions as Tool for Curriculum Development: Lessons from the Inquiry Project*
*Online Professional Development: Science Inquiry in the Online Environment*
Professional Learning with Web-Based Videos: The Talk Science Experience

Researching the Impact of Online Professional Development for Teachers

Science Learning and Teaching: A Case of Online Professional Learning

The Role of Representations in Shaping a Community of Scientific Inquiry Online

Using Students' Representations and Explanations for Assessment within a Learning Progression

Brian Drayton

A Study of the Literature of Lab-Based Instruction in Biology

After Installation: Ubiquitous Computing and High School Science in Three Experienced

Book Review: Green Equilibrium

Creating and Sustaining Online Professional Learning Communities

Digital Curriculum in the Classroom: Authority, Control, and Teacher Role

Digital Design of Smart Images: A Design Story

Dimensions That Shape Teacher-Scientist Collaborations for Teacher Enhancement

Discourse Analysis of Comments on a Climate Change Op-Ed, Part 1

Discourse Analysis of Comments on a Climate Change Op-Ed, Part 2

Discourse Analysis of Web Texts: Initial Results from a Telementoring Project for Middle School Girl

Experimental Extinctions of Garlic Mustard (Alliaria petiolata) Populations: Implications for Weed Science and Conservation Biology

Innovate to Mitigate: Science Learning in an Open-innovation Challenge for High School Students

Interactive Whiteboard Use in High-Tech Science Classrooms: Patterns of Integration

Learning in a Team of High School Students Addressing a Climate Mitigation Challenge

Many Futures: Mentoring Middle School Girls

MSPnet: Design Dimensions for Nested Learning Communities

Plant Species Lost in an Isolated Conservation Area in Metropolitan Boston from 1894 to 1993

Reply to Angelo: Declines in species in Thoreau’s Concord and the Middlesex Fells, Massachusetts, USA

State Testing and Inquiry-Based Science: Are They Complementary or Competing Reforms

Structuring a Virtual Conference to Facilitate Collaboration and Reflective Dialogue

Success Rates for Reintroductions of Eight Perennial Species after Fifteen Years

Teacher knowing: Reflections on a student-teacher dialogue and implications for professional development

TEEECH Lessons Learned: Strategies for Facilitating Communication in Teacher Enhancement

Tell-tale Signs of the Inquiry-Oriented Classroom

The Test of Time: Ubiquitous Computing Visions and Realities in 7 Pioneering Schools


What Do The Ecologists Get From An Innovative Mentoring Program With High School Teachers?

What, where, who? Learning in an Innovate to Mitigate pilot team

What’s the Problem? One Key to More Productive Classroom Inquiry

Work-Based Curriculum to Broaden Learners' Participation in Science: Insights for Designers

Teon Edwards

Challenging Games Help Students Learn: An Empirical Study on Engagement, Flow and Immersion in Game-based Learning

Measuring Implicit Science Learning Using Networks of Player-Game Interactions

Playing with Science: Using Electronic Games to Foster Inquiry

Joni Falk

After Installation: Ubiquitous Computing and High School Science in Three Experienced

Creating and Sustaining Online Professional Learning Communities
• Enhancing Use of Learning Sciences Research in Planning for and Supporting Educational Change: Leveraging and Building Social Networks

- Interactive Whiteboard Use in High-Tech Science Classrooms: Patterns of Integration
- Many Futures: Mentoring Middle School Girls
- MSPnet: Design Dimensions for Nested Learning Communities
- State Testing and Inquiry-Based Science: Are They Complementary or Competing Reforms
- Structuring a Virtual Conference to Facilitate Collaboration and Reflective Dialogue
- TEECH Lessons Learned: Strategies for Facilitating Communication in Teacher Enhancement
- Tell-tale Signs of the Inquiry-Oriented Classroom

**Marian Grogan**

- Aligning Classroom-Based Assessment With High Stakes Tests
- Supporting Students with Learning Disabilities in High School Science

**Nick Haddad**

- Using Students' Representations and Explanations for Assessment within a Learning Progression

**Jim Hammerman**

- BioTeach—A Program of The Massachusetts Biotechnology Education Foundation: Evaluation Report, Year Three
- Fluid Grouping: Quantifying Group Engagement around Interactive Tabletop Exhibits in the Wild
- Measuring Adult Developmental Differences Using a Survey Instrument
- New Ways to Measure Adult Developmental Differences Among Teachers
- Statistics Education on the Sly
- Strategies for Managing Statistical Complexity with New Software Tools
- The Test of Time: Ubiquitous Computing Visions and Realities in 7 Pioneering Schools
- Understanding Data Through New Software Representations

**Kathryn Hobbs**

- Interactive Whiteboard Use in High-Tech Science Classrooms: Patterns of Integration
- The Test of Time: Ubiquitous Computing Visions and Realities in 7 Pioneering Schools

**Lily Ko**

- Agency of Women of Color in STEM: Individual and Institutional Strategies for Persistence and Success
- Career-Life Balance for Women of Color: Experiences in Science and Engineering Academia
- Counterspaces for Women of Color in STEM Higher Education: Marginal and Central Spaces for Persistence and Success
- Enabling Courage: Agentic Strategies of Women of Color in Computing
- Enacting Agency: The Strategies of Women of Color in Computing
- Narratives of the Double Bind: Intersectionality in Life Stories of Women of Color in Physics, Astrophysics and Astronomy

**Martha Merson**

- Breast Cancer and the Environment
- EMPower Mathematics
- Math is Healthy
- Measurement in Adult Education: Starting with Students' Understandings
- Smart Moves: Making Sense of the Math in Environmental Data
The EMPower Project: Connecting Curriculum Development and Research

Transparency of Water: A workshop on math, water, and justice

What Don't We Know? Message about Science

Megan Murray

Relearning to Teach Arithmetic (Teacher's Study Guide/Videotapes)

Karen Mutch-Jones


BioTeach—A Program of The Massachusetts Biotechnology Education Foundation: Evaluation Report, Year Three

Lesson Study for Accessible Science: Building Expertise to Improve Practice in Inclusive Science Classrooms

Supporting Science Access for All Students: Using Content Enhancements to Create Pathways to the Big Ideas

Mia Ong

Agency of Women of Color in STEM: Individual and Institutional Strategies for Persistence and Success

Body Projects of Young Women of Color in Physics: Intersections of Gender, Race, and Science

Broadening Participation in America's STEM Workforce, CEOSE 2007-2008 Biennial Report to Congress

Career-Life Balance for Women of Color: Experiences in Science and Engineering Academia

Challenging Cultural Stereotypes of Scientific Ability

Counterspaces for Women of Color in STEM Higher Education: Marginal and Central Spaces for Persistence and Success

Enabling Courage: Agentic Strategies of Women of Color in Computing

Enacting Agency: The Strategies of Women of Color in Computing

Inside The Double Bind: A Synthesis of Empirical Research on Undergraduate and Graduate Women of Color in Science, Technology, Engineering and Mathematics

Narratives of the Double Bind: Intersectionality in Life Stories of Women of Color in Physics, Astrophysics and Astronomy

Sowing the Seed of Diversity

The Mini-Symposium on Women of Color in Science, Technology, Engineering, and Mathematics (STEM)

The Status of Women of Color in Computer Science

Understanding the Dearth of Women in Science

Women of Color in Computer Science: A Summary of Empirical Literature Findings from Inside the Double Bind

Gilly Puttick

A Study of the Literature of Lab-Based Instruction in Biology

Achieving Energy and Ecological Literacies for All: Linking Ecology and Energy Education. Perspectives from Sessions at Ecological Society of America (ESA) 2014 Annual Meeting

Building Systems from Scratch: an Exploratory Study of Students Learning About Climate Change

Digital Curriculum in the Classroom: Authority, Control, and Teacher Role

Digital Design of Smart Images: A Design Story

Environmental Attitudes in Youth-created Computer Games about Climate Change

Game Design to Learn about Climate Change: Middle School Girls’ Experiences with Systems Thinking


Innovate to Mitigate: Science Learning in an Open-innovation Challenge for High School Students

It's Not as Bad as Using the Toaster All the Time—Trade Offs in a Scratch Game About Energy Use

Learning and Behavior Change in a Girl Scout Program Focused on Energy Conservation: Saving Energy to ‘Save The Planet’

Learning in a Team of High School Students Addressing a Climate Mitigation Challenge

Lesson Study for Accessible Science: Building Expertise to Improve Practice in Inclusive Science Classrooms

Page:

Subject:

Page:

Page:

Page:

Page:

Page:

Page:

Page:

Page:

Page:
Tara Robillard

Increasing Access to Technical Science Vocabulary Through Use of Universally Designed Signing Dictionaries.

Teaching Mathematics Vocabulary with an Interactive Signing Math Dictionary

Ann Rosebery

“The Coat Traps All Your Body Heat”: Heterogeneity as Fundamental to Learning

“This Question Is Just Too, Too Easy!” Perspectives from the Classroom on Accountability in Science

Appropriating Scientific Discourse: Findings from Language Minority Classrooms

Boats, Balloons and Classroom video: Science Teaching as Inquiry

Classroom Diversity: Connecting Curriculum to Students’ Lives

Developing Interpretive Power in Science Teaching

Discourse and Social Practice: Learning Science in Language Minority Classrooms

Equity in the Future Tense: Redefining Relationships among Teachers, Students, and Science in Linguistic Minority Classrooms

Rethinking Diversity in Learning Science: The Logic of Everyday Sense-Making

Teacher Professional Development as Situated Sense-Making: A Case Study in Science Education

Teaching Science to English Language Learners: Building on Students’ Strengths

The Generative Potential of Students’ Everyday Knowledge in Learning Science

Using Diversity as a Strength in the Science Classroom: The Benefits of Science Talk

What Counts as Teacher Research? Continuing the Conversation

Elizabeth Rowe

Building Bridges: Teachers Leveraging Game-Based Implicit Science Learning in Physics Classrooms

Challenging Games Help Students Learn: An Empirical Study on Engagement, Flow and Immersion in Game-based Learning

Learning Science Online: A Descriptive Study of Online Science Courses for Teachers

Learning Science Online: What Matters for Science Teachers?

Measuring Implicit Science Learning Using Networks of Player-Game Interactions

Playing with Science: Using Electronic Games to Foster Inquiry

Serious Games Analytics to Measure Implicit Science Learning

Andee Rubin

Learning About Statistical Inference

Math Momentum in Science Centers

Math that Matters

REVEALing Findings from the Field: Experiences Developing and Implementing a Staff Facilitation Model at Two Science Centers
Seeking out Math in Making Experiences
Strategies for Managing Statistical Complexity with New Software Tools
Tablet-Based Technology to Support Students’ Understanding of Division
The Role of Representations in Shaping a Community of Scientific Inquiry Online
Understanding Data Through New Software Representations

Susan Jo Russell
Algebraic Reasoning in the Elementary Classroom: Results of a Professional Development Program for Teachers
But Why Does It Work?
Relearning to Teach Arithmetic (Teacher’s Study Guide/Videotapes)

Myriam Steinback
Measurement in Adult Education: Starting with Students’ Understandings

Judy Storeygard
Adam: My Mouth Is Full of Words
Ask an Author: How Can I Help Special Needs Students Feel Included in Class Discussions
Ask an Author: Inclusive Math Communities
Ask an Author: Students with Special Needs
Bridges to Classroom Mathematics: Videotape Package
Count Me In! K-5: Including Learners With Special Needs in Mathematics Classrooms
Literacy In a Science Context
Making Computers Work for Students with Special Needs
Models of Intervention: Reweaving the Tapestry
Muscles, Lungs, Blood and Guts
My Kids Can: Making Math Accessible to All Learners, K-5
Reflections on Video: One Teacher’s Story
Relearning to Teach Arithmetic (Teacher’s Study Guide/Videotapes)
Talking Mathematics: Supporting Children’s Voices

Rena Stroud
Interactive Whiteboard Use in High-Tech Science Classrooms: Patterns of Integration
The Test of Time: Ubiquitous Computing Visions and Realities in 7 Pioneering Schools

Eli Tucker-Raymond
Building Systems from Scratch: an Exploratory Study of Students Learning About Climate Change
Developing Interpretive Power in Science Teaching
Environmental Attitudes in Youth-created Computer Games about Climate Change
Game Design to Learn about Climate Change: Middle School Girls’ Experiences with Systems Thinking
Literacy Practices of Experienced Makers: Tools for Understanding Landscapes of Possibilities
Making It Social: Considering the Purpose of Literacies to Support Participation in Making and Engineering
Opting in and Creating Demand: Why Young People Choose to Teach Mathematics to Each Other
Practice-Based Inquiry in Science: A Professional Development Course in Science for K-5 Teachers in Urban Districts

Beth Warren
“The Coat Traps All Your Body Heat”: Heterogeneity as Fundamental to Learning
Tracey Wright

Karen in Motion: The Role of Physical Enactment in Developing an Understanding of Distance, Time and Speed.

Math Momentum in Science Centers

Judy Vesel

Breaking Barriers

Inclusive Museums

Increasing Access to Technical Science Vocabulary Through Use of Universally Designed Signing Dictionaries.

It’s Elementary: What’s the Weather?

Research Basis and Validation: EnViSci Network, Technology-Enhanced

Signing High School Science

Signing Math & Science Dictionary Apps for Inclusion of Deaf and Hard of Hearing Visitors in Science Museum Exhibit Activities

Signing Math and Science

Signing Science! Andy And Tonya Are Just Like Me! They Wear Hearing Aids And Know My Language!?

Teaching Mathematics Vocabulary with an Interactive Signing Math Dictionary

The Universal eBook: Assistive Technology Meets 21st Century Book Publishing