Journals of Interest - Mathematics and Science Education

June 2017

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Educational Researcher

Volume 46, Issue 4

Teaching Versus Teachers as a Lever for Change: Comparing a Japanese and a U.S. Perspective on Improving Instruction James Hiebert, James W. Stigler.

Quality Assurance in Teacher Education and Outcomes: A Study of 17 Countries

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Teacher Educators' Practice and Vision of Good Teaching in Teacher Education Reform Context in Ghana

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Educational Studies in Mathematics

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Designing opportunities to learn mathematics theory-building practices Pages 229-244 Hyman Bass.

Sense making in the context of algebraic activities

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Teachers' appraisals of adjectives relation to mathematics tasks Pages 283-301 Colin Foster, Matthew Inglis.

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In the workplace mathematics does not announce itself: towards overcoming the hiatus between mathematics education and work Pages 329-349 Gail E. FitzSimons, Lisa Björklund Boistrup.

Erratum to: The secondary-tertiary transition viewed as a change in mathematical cultures: an exploration concerning symbolism and its use Pages 351 Claudia Corriveau, Nadine Bednarz.

Book Review: Leveraging the potential of research on classroom discourse fro enhancing mathematics teaching and learning Jill Adler and Anna Sfard (Eds.) (2017) *Reseach for Educational Change: Transforming Researchers' Insights Into Improvement in Mathematics Teaching and Learning* Pages 353-357 Margaret Walshaw.

Journal of Research in Science Teaching

<u>Volume 54, Issue 5</u> Issue Information I Version of Record online: 7 APR 2017I DOI: 10.1002/tea.21356

Call for papers: *Journal of Research in Science Teaching*- Special Issue: A critical examination of the Next Generation Science Standards Troy D. Sadler, David E. Brown.

Hope and anxiety in physics class: Exploring their motivational antecedents and influence on metacognition and performance Antonio González, María- Victoria Carrera Fernández, Paola -Verónica Paoloni.

The impact of physics teachers' pedagogical content knowledge and motivation on students' achievement and interest Melanie M. Keller, Knut Neumann, Hans E. Fischer.

Bridging inquiry-based science and constructionism: Exploring the alignment between students tinkering with code of computational models and goals of inquiry

Aditi Wagh, Kate Cook-Whitt, Uri Wilensky.

Understanding patterns of evolution acceptance- A new implementation of the Measure of Acceptance of the Theory of Evolution (MATE) with Midwestern university students

William L. Romine, Emily M. Walter, Ephiram Bosse, Amber N. Todd.

What is (or should be) scientific evidence use in k-12 classrooms? Katherine L. McNeill, Leema Berland.

International Journal of Science Education

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The effects of different types of text and individual differences on view complexity about genetically modified organisms

Daniel L. Dinsmore, Brian P. Zoellner, Meghan M. Parkinson, Anthony M. Rossi, Mary J. Monk & Jenelle Vinnachi.

When procedures discourage insight: epistemological consquences of prompting novice physics students to construct force diagrams Eric Kuo, Nicole R. Hallinen & Luke D. Conlin.

Analysing teachers' operations when teaching students: what constitutes scientific theories?

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The role of involvement and emotional well-being for preschool children's scienctific oberservation competency in biology Janina Klemm & Birgit J. Neuhaus.

Scaffolding for argumentation in hypothetical and theoretical biology concepts

Wan-Yun Weng, Yu-Ren Lin & Hsiao-Ching She.

Students' motivational beliefs in science learning, school motivational contexts, and science achievement in Taiwan Cheng-Lung Wang & Pey-Yan Liou.

A review and evaluation of the internal structure and consistency of the Approaches to Teaching Inventory

Jordan Harshman & Marilyne Stains.

What do science teachers think about developing scientific competences through context-based teaching? A case study Teresa Lupión-Cobos, Rafael López-Castilla & Ángel Blanco-López.

Prompting students to make socioscientific decisions: embedding metacognitive guidance in an e-learning environment Ying-Shao Hsu & Shu-Sheng Lin.

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Scale and the evolutionarily based approximate number system: an exploratory study

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Exploring the emotions in Pedagogical Context Knowledge about the electric field

Lina Melo, Florentia Cañada & Vicente Mellado.

Science engagement and science achievement in the context of science instruction: a multilevel analysis of U.S. students and schools Larry J. Grabau & Xin Ma.

What is motivating middle-school science teachers to teach climate change?

Peggy McNeal, Heather Petcovic & Patricia Reeves.

Using psychological constructs from the MUSIC Model of Motivation to predict students' science identification and career golas: results from the U.S. and Iceland

Brett D. Jones, Sumeyra Sahbaz, Asta B. Schram & Jessica R. Chittum.

Science Education

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What science and for whom?: An introduction to our focus on equality and out-of-school learning Leslie Rupert Herrenkohl and Browyn Bevan.

Research-practice partnerships as a strategy for promoting equitable science teaching and learning through leveraging everday science William R Penuel.

Equity and the meaning of science learning: Mapping the contested terrain Noah Weeth Feinstein.

Social justice and out-of-school science learning: Exploring equity in science television, science clubs and maker spaces Emily Dawson.

Analyzing Teachers' Use of Metadiscourse: The Missing Element in Classroom Discourse Analysis Kok-Sing Tang.

Understanding how teachers guide evidence construction conversations Eve Manz and Ian Parker Renga.

"Can There be a Full Moon at Daytime?" Young Students Making Sense of Illustrations of the Lunar Phases Lisbeth Åberg-Bengtsson, Karl Göran Karlsson and Torgny Ottosson.

Temporality of Emotion: Antecedent and Successive Variants of Frustration When Learning Chemistry

Donna King, Stephen M. Ritchie, Maryam Sandhu, Senka Henderson and Ben Boland.

Journal of College Science Teaching

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Adapting a Student-Centered Chemistry Curriculum to a Large-Enrollment Context: Successes and Challenges

Emily J. Borda, Andrew Boudreaux, Ben Fackler-Adams, Paul Frazey, Sara Julin, Gregory Pennington, Jared Ogle.

Student-Designed Experiments: A Pedagogical Design for Introductory Science Labs

Jeffrey Scott Coker.

Group Active Engagement Exercises: Pursuing the Recommendations of Vision and Change in an Introductory Undergraduate Science Course Hannah E. Jardine, Daniel M. Levin, B. Booth Quimby, Todd J. Cooke.

A Crash Course in Undergraduate Research

Meghan E. Marrero, Jessica F. Riccio, Marion Ben-Jacob, Anthony Canger, Charles Maliti.

Increasing Student Interactions With Learning

Emily Kaye Faulconer.

Research and Teaching: Connecting Science Content and Science Methods for Preservice Elementary School Teachers Scott Kirst, Tim Flood.

Research and Teaching: Correcting Missed Exam Questions as a Learning Tool in a Physiology Course

Timothy G. Rozell, Jessica Johnson, Ashley E. Rhodes, Andrea Sexten.

Research and Teaching: The Pairing of a Science Communications and a Language Course to Enrich First-Year English Language Learners' Writing and Argumentation Skills

Ashley J. Welsh, Amber Shaw, Joanne A. Fox.

Research and Teaching: Teaching Assistant and Faculty Perceptions of Ongoing, Personalized TA Professional Development: Initial Lessons and Plans for the Future

Judith S. Ridgway, Isaac Y. Ligocki, Jonathan D. Horn, Erica Szeyller, Caroline A. Breitenberger.

Point of View: Academic Librarians as STEM Retention Partners Erin M. O'Toole. **Case Study: Guidelines for Producing Videos to Accompany Flipped Cases** Annie Prud'homme-Généreux, Nancy A. Schiller, John H. Wild, Clyde Freeman Herreid.

The Journal of Mathematical Behavior

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The basis step in the construction of the principle of mathematical induction based on APOS theory Isabel García-Martínez, Marcela Parraguez.

Students' geometric thinking with cube reprsentations: Assessment framework and empirical evidence Taro Fujita, Yutaka Kondo, Hiroyuki Kumakura, Susumu Kunimune.

The learning and teaching of linear algebra: Observations and generalizations Guershon Harel.

Field-based hypotheses on advancing standards for mathematical practice Guershon Harel.

Stimulating student aesthetic response to mathematical problems by means of manipulating the extent of surprise Boris Koichu, Efim Katz, Avi Berman.

Students' understanding the relation between tangent plane and directional derivative of functions of two variables Rafael Martínez-Planell, María Trigueros Gaismán, Daniel McGee.

The effect of rewording and dyadic interaction on realistic reasoning in solving word problems Maria Mellone, Lieven Verschaffel, Wim Van Dooren.

Principal and coach as partners Lucy West.

Answering the call by developing an online elementary mathematics specialist program Rachel A. Harrington, Laurie Burton, Cheryl Beaver.

The Virginia mathematics specialist initiative: Collaborative effort among all components of the VA mathematics community

William E Haver, Christine P. Trinter, Vickie L. Inge.

The ecology of instructional teacher leadership P. Sean Smith, Meredith L. Hayes, Kiira M. Lyons.

An autoethnography of a (reluctant) teacher leader Melinda C. Knapp.

Developing collective capacity to improve mathematics instruction: Coaching as a leaver for school-wide improvment Lynsey K. Gibbons, Elham Kazemi, Rebecca M. Lewis.

Mathematics coaching and instrucation reform: Individual and collective change Megan Hopkins, Dan Ozimek, Tracy M. Sweet.

Elementary mathematics specialists in departmentalized" teaching assignments: Affordances and constraints Isabel García-Martínez, Marcela Parraguez.

Effectively coaching middle school teachers: A case for teacher and student learning Aimme Ellington, Joy Whitenack, David Edwards.

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Reflections on the promise and complexity of mathematics coaching Patricia F. Campbell and Mathew J. Griffin.

A research journey through mathematics coaching Jennifer Luebeck and Elizabeth Burroughs.

Preparing and implementing successful mathematics coaches and teacher leaders Amiee Ellington, Joy Whitenack, Christine Trinter and Francis (Skip) Fennell.

Editors' Introduction to special issue on mathematics coaches Carolyn A. Maher and Elizabeth B. Uptegrove

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Proof validation and modification in secondary school geometry

Kotaro Komatsu, Keith Jones, Takehiro Ikeda and Akito Narazaki.

Engaging students in roles of proof

Sarah K. Bleiler-Baxter and Jeffrey D. Pair

Journal for Research in Mathematics Education

Volume 48, No. 4

Making Classroom Implementation and Integral Part of Research

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Assessing Journal Quality in Mathematics Eudcation

Ryan Andrew Nivens and Samuel Otten.

Journal Quality in Mathematics Education

Steven R. Williams and Keith R. Leatham.

Unpacking the Male Superiority Myth and Masculinization of Mathematics at the Intersections: A Review of Research on Gender in Mathematics Education

Luis A. Leyva.

Being a Girl Mathematician: Diversity of Positive Mathematical Identities in a Secondary Classroom

Darinka Radovic, Laura Black, Christian E. Salas, and Julian Williams.

Educational Psychology Review

<u>Volume 29, Issue 2</u> Student Learning in Higher Education: Where We Are and Paths Forward Luke Fryer, David Gijbels.

Do Students Develop Towards More Deep Approaches to Learning During Studies? A Systematic Review on the Development of Students' Deep and Surface Approaches to Learning in Higher Education Henna Asikainen, David Gijbels.

Toward a Dynamic, Multidimensional Research Framework for Strategic Processing Daniel L. Dinsmore

A Learning Patterns Perspective on Student Learning in Higher Education: State of the Art and Moving Forward

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Toward an Integrated Model of Student Learning in the College Classroom Akane Zusho.

Building Bridges: Seeking Structure and Direction for Higher Education Motivated Learning Strategy Models Luke K. Fryer.

Issues of Constructs, Contexts, and Continuity: Commentary on Learning in Higher Education Patricia A. Alexander.

Student Learning in Higher Education: a Commentary John T.E. Richardson.

Review of Brief School-Based Positive Psychological Interventions: a Taster for Teachers and Educators Rébecca Shankland, Evelyn Rosset.

The Expertise Reversal Effect is a Variant of the More General Element Interactivity Effect

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