
 Journals of Interest - Mathematics and Science Education

January 2018

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Educational Researcher

[Volume 46, Issue 9](#)

Editors' Introduction: Introducing a Methodological Research Collection on Pressing Issues for LGBTQ Students

Joseph R. Cimpian, Carolyn D. Herrington.

Coming Out and Leaving Home: A Policy and Research Agenda for LGBT Homeless Students

William G. Tierney, James Dean Ward.

Gay-Straight Alliances as Settings for Youth Inclusion and Development: Future Conceptual and Methodological Directions for Research on These and Other Student Groups in Schools

V. Paul Poteat, Hirokazu Yoshikawa, Jerel P. Calzo, Stephen T. Russell, Stacey Horn.

Classification Errors and Bias Regarding Research on Sexual Minority Youths

Joseph R. Cimpian.

Queer and Trans Youth, Relational Subjectivity, and Uncertain Possibilities: Challenging Research in Complicated Contexts

Cris Mayo.

A Ratchet Lens: Black Queer Youth, Agency, Hip Hop, and the Black Ratchet Imagination

Bettina L. Love.

Outing the Politics of Knowledge Production: A Review of LGBTQ Issues in Education: Advancing a Research Agenda

Ed Brockenbrough.

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Educational Studies in Mathematics

[Volume 97, Issue 1](#)

Editorial

Merrilyn Goos.

Why Johnny struggles when familiar concepts are taken to a new mathematical domain: towards a polysemous approach

Igor' Kontorovich.

Conflicting frames: a case of misalignment between professional development efforts and a teacher's practice in a high school mathematics classroom

Einat Heyd-Metzuyanim, Charles Munter, James Greeno.

Power and identity in immigrant parents' involvement in early years mathematics learning

Miwa Aoki Takeuchi.

Culture and ideology in mathematics teacher noticing

Nicole L. Louie.

Mediating primary mathematics: theory, concepts, and a framework for studying practice

Hamsa Venkat, Mike Askew.

Inverse function: Pre-service teachers' techniques and meanings

Teo Paoletti, Irma E. Stevens, Natalie L. F. Hobson, Kevin C. Moore, Kevin R. LaForest.

Book review: Baruch B. Schwarz and Michael J. Baker (Eds) (Foreword by L.B. Resnick with F. Schantz) (2017) *Dialogue, Argumentation and Education: History, Theory and Practice*

Keith Weber.

Correction to: Book review: Baruch B. Schwarz and Michael J. Baker (Foreword by L.B. Resnick with F. Schantz) (2017) *Dialogue, Argumentation and Education: History, Theory and Practice*

Keith Weber.

Mathematical Thinking and Learning

[Volume 20, Issue 1](#)

On MTL's Second Milestone: Exploring Computational Thinking and Mathematics Learning

Lyn English.

Computational Literacy and "The Big Picture" Concerning Computers in Mathematics Education

Andrea A. diSessa.

Group Theory, Computational Thinking, and Young Mathematicians

George Gadanidis, Erin Clements, Chris Yiu.

The Dynamic Geometrisation of Computer Programming

Nathalie Sinclair, Margaret Patterson.

Cultivating Computational Thinking Practices and Mathematical Habits of Mind in Lattice Land

Christina (Yu) Pei, David Weintrop, Uri Wilensky.

Journal of Research in Science Teaching

[Volume 55, Issue 1](#)

Issue Information (pages 1-2)

A new design for manuscript typesetting in the *Journal of Research in Science Teaching*: Increasing efficiencies and embracing future publication trends

Fouad Abd-El-Khalick, Dana L. Zeidler.

Key challenges and future directions for educational research on scientific argumentation

J. Bryan Henderson, Katherine L. McNeill, Maria González-Howard, Kevin Close, Mat Evans.

A person-in-context approach to student engagement in science: Examining learning activities and choice

Jennifer A. Schmidt, Joshua M. Rosenberg, Patrick N. Beymer.

Pedagogical content knowledge of experts and novices-what knowledge do they activate when analyzing science lessons?

Matthias Krepf, Wilfried Plöger, Daniel Scholl, Andreas Seifert.

Investigating a learning progression for energy ideas from upper elementary through high school

Cari F. Hermann-Abell, George E. DeBoer.

Characterizing teacher attention to student thinking: A role for epistemological messages

Rosemary S. Russ.

Gesticulating science: Emergent bilingual students' use of gestures

Zeynep Unsal, Britt Jakobson, Per-Olof Wickman, Bengt-Olov Molander.

International Journal of Science Education

Volume 40, Issue 1

The key factors affecting students' individual interest in school science lessons

Derek Cheung.

Understanding children's science identity through classroom interactions

Mijung Kim.

Native plant naming by high-school students of different socioeconomic status: implications for botany education

Gonzalo M.A. Bermudez, Sandra Díaz, Ana L. De Longhi.

Professional development design considerations in climate change education: teacher enactment and student learning

Andrea Drewes, Joseph Henderson, Chrystalla Mouza.

Scientific explanations in Greek upper secondary physics textbooks

Athanasios Velentzas, Krystallia Halkia.

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Analysis of a physics teacher pedagogical 'micro-actions' that support 17-year-olds learning of free body diagrams via a modelling approach

Su Lynn Tay, Jennifer Yeo.

Investigating the interrelationships among conceptions of, approaches to, and self-efficacy in learning science

Lanqin Zheng, Yan Dong, Ronguai Huang, Chun-Yen Chang, Kaushal Kumar Bhagat.

Students' reasons for preferring teleological explanations

Friederike Trommier, Hiege Gresch, Marcus Hammann.

Gender and family influences on Spanish students' aspirations and values in stem fields

Milagros Sáinz, Jörg Müller.

Representations as mediation between purposes as junior secondary science students learn about the human body

Clas Olander, Per-Olof Wickman, Russell Tytler, Ake Ingerman.

Memorisation methods in science education: tactics to improve the teaching and learning practice

Frits F. B. Pals, Jos L. J. Tolboom, Cor J. M. Suhre, Paul L.C. van Geert.

Science Education

[Volume 102, Issue 1](#)

Issue Information (Pages 1-4)

What does three-dimensional teaching and learning look like? Examining the potential for crosscutting concepts to support the development of science knowledge

Sarah J. Fick.

Experiences and practices of evolution instructors at Christian universities that can inform culturally competent evolution education

M. Elizabeth Barnes, Sara E. Brownell.

Community organizations' programming and the development of community science teachers

Maria Varelas, Daniel Morales-Doyle, Syeda Raza, David Segura, Karen Canales, Carole Mitchener.

Boosting the numbers of STEM majors? The role of high schools with a STEM program

Martha Cecilia Bottia, Elizabeth Stearns, Roslyn Arlin Mickelson, Stephanie Moller.

An Inquiry into the structure of situational interests

Flávio S. Azevedo.

Framing negotiation: Dynamics of epistemological and positional framing in small groups during scientific modeling

Soo-Yean Shim, Heui-Baik Kim.

High school students' evaluations, plausibility (re) appraisals, and knowledge about topics in Earth science

Doug Lombardi, Elliot S. Bickel, Janelle M. Bailey, Shondricka Burrell.

Metaphors describing energy transfer through ecosystems: Helpful or misleading?

Ulrike Wernecke, Juila Schwanewedel, Ute Harms.

Using Q methodology to investigate undergraduate students' attitudes toward the geosciences

Julia M. Young, Daniel P. Shepardson.

Journal of College Science Teaching

[Volume 47, No. 3](#)

Data Modeling for Preservice Teachers and Everyone Else

Anthony J. Petrosino, Michele J. Mann.

Providing Opportunities for Argumentation in Science Exam Settings

Lauren Swanson, Cinzia Fissore, Ruben Solorza.

Integration, Authenticity, and Relevancy in College Science Through Engineering Design

Ken L. Turner Jr., Adam R. Hoffman.

Physics Meets Art in the General Education Core

Marta L. Dark, Derrick J. Hylton.

Two-Year Community: Tools for Success: A Study of the Resources and Study Habits of General Chemistry 1 Students at Two Community Colleges

Laura B. Bruck, Aaron D. Bruck.

Case Study: Skinny Genes? An Interdisciplinary Look at a Complex Behavioral Disorder

Joan-Beth Gow, Lisa A. Carpino.

Research and Teaching: Assessing the Effectiveness of Sustainability Learning

Jill A. Marshall, Jay L. Banner, Hye Sun You.

Research and Teaching: Structure and Evaluation of a Flipped General Chemistry Course as a Model for Small and Large Gateway Science Courses at an Urban Public Institution

Melissa A. Deri, Pamela Mills, Donna McGregor.

Research and Teaching: Many Paths Toward Discovery: A Module for Teaching How Science Works

Rebecca M. Price, Kathryn E. Perez.

Research and Teaching: SMASH: A Diagnostic Tool to Monitor Student Metacognition, Affect, and Study Habits in an Undergraduate Science Course

Kelsey J. Metzger, Brittany A. Smith, Ethan Brown, Paula A. G. Soneral.

International Journal Of Mathematical Education in Science and Technology

[Volume 49, Issue 1](#)

Precalculus teachers' perspectives on using graphing calculators: an example from one curriculum

Ilyas Karadeniz, Denisse R. Thompson.

The effect of explanations on mathematical reasoning tasks

Mathias Norqvist.

The effectiveness of resources created by students as partners in explaining the relevance of mathematics in engineering education

Michelle Dunn, Birgit Loch, Wendy Scott.

Advanced mathematics communication beyond modality of sight

Mina Sedaghatjou.

ICT integration in mathematics initial teacher training and its impact on visualization: the case of GeoGebra

Monika Dockendorff, Horacio Solar.

Are middle school mathematics teachers able to solve word problems without using variable

Burcin Gökkurt Özdemir, Emrullah Erdem, Tugba Örnek, Yasin Soylu.

The concept of invariance in school mathematics

Shlomo Libeskind, Moshe Stupel, Victor Oxman.

Kurtosis: a forgotten moment

Lynn G. McAlevey, Alan F. Stent.

An elementary algorithm to evaluate trigonometric functions to high precision

B. Tomas Johansson.

Guided discovery of the nine-point circle theorem and its proof

Orly Buchbinder.

Dynamic geometry as a context for exploring conjectures

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[Volume 49, Issue 2](#)

On problematic aspects in learning trigonometry

Dina Kamber, Djurdjica Takaci.

Prospective mathematics teachers' understanding of the base concept

Tugba Horzum, Erhan Ertekin.

Comparing the development of the multiplication of fractions in Turkish and American textbooks

Tugrul Kar, Gürsel Güler, Ceylan Sen, Ercan Özdemir.

Intra-mathematical connections made by high school students in performing Calculus tasks

Javier García-García, Crisólogo Dolores-Flores.

Objectifying the adjacent and opposite angles: a cultural historical analysis

Wajeih Daher, Nadera Musallam.

On reconstruction of a matrix by its minors

Azamat Akhtyamov, Meirav Amram, Artour Mouftakhov.

Pizza again? On the division of polygons into sections with a common origin

Ilya Sinitsky, Moshe Stupel, Marina Sinitsky.

Tensor calculus: unlearning vector calculus

Wha-Suck Lee, Johann Engelbrecht, Rita Moller.

Mathematics and engineering in real life through mathematical competitions

M. More.

Erratum

Journal for Research in Mathematics Education

[Volume 49, No. 1](#)

The Role of Replication Studies in Educational Research

Jinfa Cai, Anne Morris, Charles Hohensee, Stephen Hwang, Victoria Robison, James Hiebert.

Three Conceptual Replication Studies in Group Theory

Kathleen Melhuish.

Brief Report: The Effects of Preservice Elementary School Teachers' Accurate Self-Assessments in the Context of Whole Number

Eva Thanheiser.

Exploring Longitudinal Changes in Teacher Expectancy Effects on Children's Mathematics Achievement

Faiza M. Jamil, Ross A. Larsen, Bridget K. Hamres.

Research Commentary: On Replications

Alan H. Schoenfeld.

Research Commentary: When and Why Replication Studies Should be Published: Guidelines for Mathematics Education Journals

Jon R. Star

Research Commentary: A Rejoinder: Reframing Replication Studies as Studies of Generalizability: A Response to Critiques of the Nature and Necessity of Replication

Kathleen Melhuish, Eva Thanheiser.

Research Commentary: A Rejoinder: A Reflection on the Evolution of a Replication Study

Faiza M. Jamil.

Journal of Mathematics Teacher Education

[Volume 20, Issue 6](#)

The quality of mathematics teaching: a central goal in mathematics teacher education

Despina Potari.

Prospective elementary teachers' responses to unanticipated incorrect solutions to problem-solving tasks

Allyson Hallman-Thrasher.

Teachers' construction of meanings of signed quantities and integer operation

Ruchi S. Kumar, K. Subramaniam, Shweta Shripad Naik.

Leader noticing of facilitation in videocases of mathematics professional development

Kristin Lesseig, Rebekah Elliott, Elham Kazemi, Megan Kelley-Petersen, Matthew Campbell, Judith Mumme, Cathy Carroll.