Chemistry Education Research and Practice

rsc.li/cerp

A fully refereed electronic journal for teachers, researchers and other practitioners in chemistry education

IN THIS ISSUE

ISSN 1756-1108 CODEN CERPCE 25(3) 577-966 (2024)

PERSPECTIVE

584

Representing chemistry culture: ethnography's methodological potential in chemistry education research and practice

Shauna Schechtel and Amanda Bongers*

REVIEW

594

Modeling students' epistemic cognition in undergraduate chemistry courses: a review

Kimberly S. DeGlopper and Ryan L. Stowe*

PAPERS

613

Investigating changes in students' attitudes towards organic chemistry: a longitudinal study

Melissa A. Collini, Kristen Miguel, Rebecca Weber and Molly B. Atkinson*

625

Factors associated with chemistry faculty members' cooperative adoption of evidence-based instructional practices: results from a national survey

Megan C. Connor* and Jeffrey R. Raker*

643

Exploring diversity: student's (un-)productive use of resonance in organic chemistry tasks through the lens of the coordination class theory

Irina Braun and Nicole Graulich*

672

Planning and evaluating chemistry outreach: a case study of one collegiate group's approach

Justin M. Pratt,* Rebecca Chan - Chao and Merryn Cole

687

Depiction of scientific principles, laws and theories in Chemistry textbooks used by students in Singapore

Melvin Chan, Yong Leng Kelvin Tan and R. Subramaniam*

703

Implementing an interactive online platform in a large undergraduate general chemistry course and its impact on student learning and perceptions

Sarah L. Cresswell,* Wendy A. Loughlin and Tak H. Kim

721

Examining the role of assignment design and peer review on student responses and revisions to an organic chemistry writing-to-learn assignment

Field M. Watts, Solaire A. Finkenstaedt-Quinn and Ginger V. Shultz*

742

Analysis of organic chemistry students' developing reasoning elicited by a scaffolded case comparison activity

Daisy B. Haas, Field M. Watts, Amber J. Dood and Ginger V. Shultz*

760

Using feedback loops from computational simulations as resources for sensemaking: a case study from physical chemistry

Andreas Haraldsrud* and Tor Ole B. Odden

Exploring factors within an introductory course that influence students' perception of chemistry

Courtney D. Glenn* and Oluwatobi O. Odeleye

786

Shedding light on language difficulties in introductory spectroscopy

Christine E. Mundy,* Marietjie Potgieter and Michael K. Seery

799

Factors affecting individuals' cognitive engagement during group work in general chemistry: timing, group size, and question type

Safaa Y. El-Mansy, Alexandra Stephens, Abigale Mortensen, Joan M. Francis, Shayna Feldman, Cecilia A. Sahnow, Jack Barbera and Alissa J. Hartig*

815

How ordering concrete and abstract representations in intermolecular force chemistry tasks influences students' thought processes on the location of dipole-dipole interactions

Isaiah Nelsen, Ayesha Farheen and Scott E. Lewis*

833

Augmented reality meets Peer instruction

Daniel Elford,* Garth A. Jones and Simon J. Lancaster*

843

Modes of technology integration in chemistry teaching: theory and practice

Itsik Aroch,* Dvora Katchevich and Ron Blonder*

862

Critiquing lab technique videos prior to class: can it improve demonstrated technique?

Stephanie M. Tenney, Arlene A. Russell and Jennifer R. Casey*

877

Factors that influence general chemistry students' decision making in study strategies

Pallavi Nayyar, Betül Demirdöğen and Scott E. Lewis*

895

The development of pre-service teachers' argumentation self-efficacy through argumentation-based chemistry instruction

Pinar Seda Cetin, Gülüzar Eymur and Sumeyye Erenler*

908

Widening university participation in learning using students' contextualised storytelling in general chemistry

Karen Ho,* Yen Luong, Carl Sherwood and Douglas B. Clark

920

The relationship between self-handicapping in chemistry and chemistry academic engagement: a moderated mediation model investigation

Qian Huangfu,* Weilin Huang, Qianmei He, Sisi Luo and Qimei Chen

934

Factors shaping the choice in chemistry: insights from undergraduate students within a societal context

Shirly Avargil,* Greta Sterimbaum and Hafeeza Dahley-Zoabi

COMMENTS

Comment on "What resources do high school students activate to link energetic and structural changes in chemical reactions? - A qualitative study" by B. Pölloth, D. Diekemper and S. Schwarzer, Chem. Educ. Res. Pract., 2023, 24, 1153

Keith S. Taber

Reply to the 'Comment on "What resources do high school students activate to link energetic and structural changes in chemical reactions? - A qualitative study" by K. S. Taber, Chem. Educ. Res. Pract., 2024, 25, https://doi.org/10.1039/D3RP00232B

Benjamin Pölloth,* Dominik Diekemper, Chiara Bosch and Stefan Schwarzer