Editorial: Continuing the Vision

Michael Kamen Southwestern University

This issue of the Electronic Journal of Science Education is the first under new editorial leadership. John Cannon and David Crowther demonstrated foresight and extraordinary commitment to science education by starting and publishing EJSE for ten years. As the founding editors of EJSE they were certainly a notable force in pushing the acceptance of electronic publications as credible scholarship by the academy. Charles Eick, Julie Luft, and Molly Weinburgh deserve recognition for their close reading of manuscripts and thoughtful recommendations as associate editors. In addition EJSE would not be possible without the hard work of the editorial review board, the Southwestern University Staff (including Connie Imhof, Ansa Copeland, and Laura Marquez), the advisory board, and especially all the authors who submit manuscripts. It is an honor to have the opportunity to serve as editor of the Electronic Journal of Science Education.

My vision for EJSE is to support the dissemination of well-written and substantive research, theoretical, and innovative perspective articles. We welcome science education manuscripts that report meaningful research, present research methodology, develop theory, and explore new perspectives. EJSE is an open access journal with a vigorous peer-review process and high standards for publication. While much of academia is calling for *rigor* and *rigorous* review, I prefer the adjective *vigorous*. Dictionary definitions of *rigorous* typically include words such as *rigid*, *harsh*, *inflexible*, and *severe*. EJSE strives to be open, insightful, energetic, and helpful while maintaining high scholarly standards. Within the limits of our resources, we are committed to as fast a review process as possible while providing constructive feedback to authors.

Manuscripts are first screened by the editor, and feedback is provided to the author(s) or the blind copy is e-mailed to the editorial review board. Reviewers agree to review articles that they are most qualified to evaluate. When three reviews are completed, an associate editor reads the article and the reviews and makes a recommendation to the editor. The editor and associate editor agree on a decision and the author(s) is notified. The turn around time is getting quicker, and the reviews are thoughtful and thorough. We believe we are selecting high-quality articles while being supportive and providing helpful feedback to developing authors.

We are at a time when we need to become more creative, timely, and responsive in science education scholarship. While there is certainly a need to build on established research agendas, there is an equal or greater need to push the envelope. It is disheartening to visit schools, read state mandates, and attend policy meetings. We need scholarship that will challenge what is assumed and advocate for those who are left out. While EJSE will continue to publish a variety of kinds of articles, a priority is to continue to be an innovative force in science education. Scholars in science education are invited to use EJSE as one of their venues to develop, explore, and evaluate innovative thought and connections that teaching science in a diverse and unequal world requires. It is our

Kamen 2

goal to continually push EJSE to be diverse, vigorous, and innovative. We believe that these three elements are required to serve the needs of both science education scholars and practitioners.

We are delighted with the first set of articles we have the privilege of publishing in this issue. The seven articles from five countries have diverse foci ranging from science education research methodology to connections between art and science. Looking at methodology Scharfenberg, Bogner, and Klautke provide recommendations for designing experimental research in educational settings. The latter, an innovative perspective article by Ashkenazi, explores metaphorical and cognitive similarities between art and science and postulates that this new perspective may provoke different approaches in science education inviting the interest of more students.

The international scope of this issue is demonstrated by Dal's study, which investigates and compares French students' and student teachers' understanding of volcanism. Meichtry and Smith study a professional development program preparing teachers to implement place-based education in the context of aquatic ecology to explore its impact on teachers' confidence and classroom practice. Another manuscript authored by Garrison and Amaral documents the development of an instrument to evaluate the impact of professional development on classroom practice.

Waldrip, Prain, and Carolan investigate the demands and benefits of multi-modal representation. This publication includes two PowerPoint animations created by the subjects of the case studies. This is an example of how electronic journals can exploit their own modality to enhance the sharing of research findings. And, finally, Mitchell and Hoff address an important equity issue by examining the role of assessment in contributing to the gender gap in science.

These articles represent diversity in country of origin, research paradigm, and content. It is our intention that, through articles of this caliber, EJSE will enhance the quality of research, add to our understanding of how to facilitate science teaching and learning, and provide data needed by schools and policy makers.