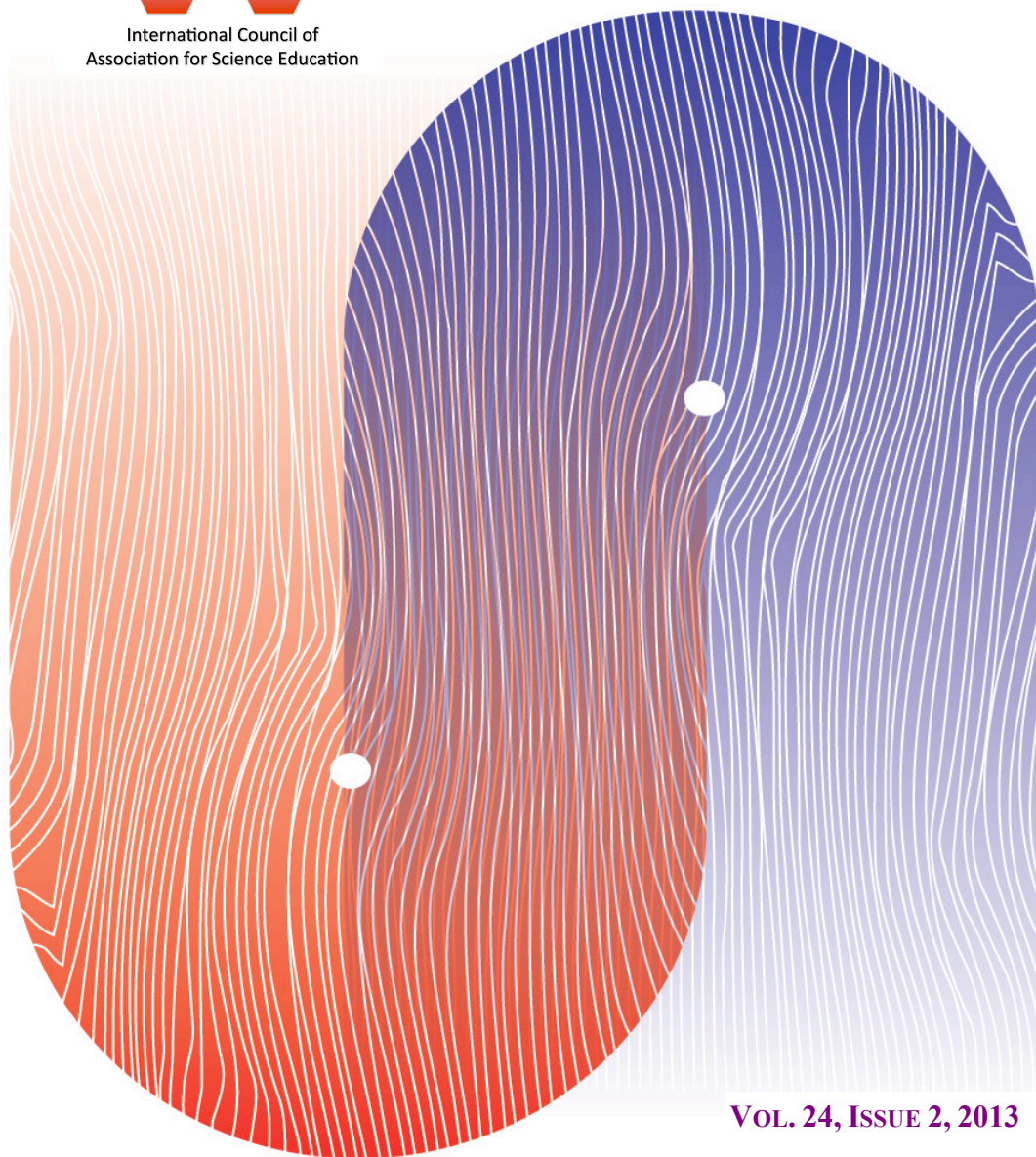


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Editorial

Welcome to the second issue of SEI for 2013! I would like to start by thanking the guest editor, Peter Gray and Assistant Editor, Minkee Kim for their great efforts in publishing the previous special issue of Science Education International. And let me also thank Prof. Jack Holbrook (a member of the ICASE publications standing committee) for his efforts with the final English check of all published articles since 2009.

The second issue of the journal includes 5 articles from 5 different countries: Turkey, Finland, Germany, USA and New Zealand. Totally, the 10 authors of the 5 articles worked very hard to revise their articles after the review process.

The first article aims to reveal students' and pre-service teachers' understanding of light, sight and related concepts at different educational levels, from primary to higher education. The second article is a design research study to improve the quality of environmental literacy and sustainability education in chemistry teaching through combining a socio-scientific issue and a life-cycle analysis with inquiry-based learning. The third article explores German student teachers' and trainee teachers' understanding of sustainability and education for sustainable development (ESD), including their viewpoints on chemistry education. The fourth article investigates how instruction in the Toulmin Argumentation Protocol (TAP) impacted pre-service science teachers' ability to write sound and logical scientific arguments. Finally, the last article proposes a framework for quality assessment in science which focuses on five important areas: teaching, the students, evidence of learning, future decision making and impact.

I hope you will find it interesting and enjoyable reading and sharing articles in this issue. We also look forward for your contributions to further issues of Science Education International.

Bulent Cavas, PhD
Editor