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Volume 22, No.3, September 2011

Contents

Editorial

Jack Holbrook, Bulent Cavas.....156

The effect of informal and formal interaction between scientists and children at a science camp on their images of scientists

Gulsen Leblebicioglu, Duygu Metin, Esra Yardimci, Pinar Seda Cetin158

Teachers' use of visual representations in the science classroom

Michelle Cook.....175

Jordanian Prospective and Experienced Chemistry Teachers' Beliefs about Teaching and Learning and their Potential Role for Educational Reform

Siham A. Al-Amoush, Silvija Markic, Imfadi Abu-Hola, Ingo Eilks.....185

Stakeholder views on attributes of scientific literacy important for future citizens and employees - a Delphi study

Aveliis Post, Miia Rannikmäe, Jack Holbrook202

Investigation of primary students' motivation levels towards science learning

Betül Sevinç, Haluk Özmen, Nevzat Yiğit.....218



International Council of Associations for Science Education

Supporting and promoting science education internationally

Editorial

Welcome to the September issue of Science Education International (SEI). This issue consists of 5 articles, coming from Turkey (2), Germany & Jordan, Estonia and USA.

The first article investigates the effect of informal and formal interactions during a science camp between scientists and children on their images of scientists. The researchers interact with the children throughout the camp both formally and informally. They found that the only stereotypical images from a pre-test were that scientists were male and slightly older. Almost equal numbers of male and female scientists were drawn in the post-test and this time most were middle aged or young.

The second article explores how high school science teachers use visual representations in their teaching. The author found that course content, student characteristics, and resource availability affect how teachers select and use graphics in their science courses.

The third article explores Jordanian chemistry student teachers' and experienced teachers' beliefs about teaching and learning. The research revealed that both Jordanian chemistry student teachers and experienced teachers hold quite traditional beliefs, which are teacher- and purely content-centred when it comes to chemistry teaching practices. Student teachers tend to profess beliefs which are even more profoundly traditional.

The fourth article is related to the creation of a theoretical tool for determining competencies and knowledge in science education, which stakeholders value as necessary for students to become productive members of the future work force, as well as responsible citizens. The authors also give information about conducting the Delphi study. The result of the study indicated that stakeholders expected future employees to possess higher levels of scientific literacy, although this is far from being unanimous. The study also pointed to the Delphi approach being appropriate for such research

The last article examines the motivation levels of students towards science learning. The result of the study shows that the motivation level of female students was higher than male students; academic achievement and taking private lessons increased the motivation; while laboratory activities, and parents' educational levels did not have an effect on students' motivation.

Special issue of SEI

The December SEI journal will be a special issue focusing on student career aspirations, with particular regard to science careers, seen as a priority in many countries across the world. The issue will be edited by Susan Rodrigues.

Acknowledgement of Reviewers

The SEI would like to thank reviewers (listed below) who reviewed one or more articles for the Science Education International between December 01, 2009 and September 01, 2011.

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