

## So Far, So Good — But Room for Improvement

Derek Hodson

A year after the launch of the *Canadian Journal of Science, Mathematics and Technology Education* is a good time for taking stock and for assessing the extent to which we have met our expectations for the journal and succeeded in our ambition to establish 'a journal with a distinctive and independent voice, a voice that not only welcomes but celebrates diversity and promotes a fundamental concern for excellence and equity in science, mathematics and technology education' (Hodson, Hanna, & Désautels, 2001, p. 5).

We can certainly be proud of the exceptionally high quality of the material we have published during our first year, the diversity of subject matter covered, and the interesting contrasts in writing styles among the published authors. Readers will be pleased to learn that we have many more fine manuscripts in our publication schedule and that we are confident we can maintain the high standard of writing we have quickly established as a *CJSMTE* tradition. Of course, the Editors received much good-natured ribbing as a consequence of our first Editorial ('Finally, a Canadian Voice') being placed directly ahead of a collection in which three of the five major articles originated in British universities. However, Canadian content has grown substantially during our first year, such that 75% of major articles in volume 1, number 4, were written by Canadians. The number of manuscripts in French has been disappointing. Of course, the community of Francophone scholars within Canada is small, though vigorous and industrious. We cannot expect that group to be solely responsible for maintaining the French content of the journal. Thus, I urge science, mathematics, and technology educators in other French-speaking countries around the world to consider *CJSMTE* as a suitable publication vehicle for your work.

The Canadian voice has also been strongly represented in the *Newsround* column, thanks to the strenuous efforts of David Blades to secure suitable items. For a column such as *Newsround* the demand for items never stops, of course, so I urge Canadian readers of *CJSMTE* to maintain a steady and early flow of information to David (preferably by e-mail to david.blades@ualberta.ca). During 2001 we were often short of suitable items concerning mathematics education, and we were particularly short of material in French. Material written in French should, in the first instance, be sent to Jacques Désautels (preferably by e-mail to Jacques.Desautels@fse.ulaval.ca).

Perhaps the most innovative feature of the journal is the *Viewpoint* column, intended as a forum for the expression of personal views on science, mathematics, and technology education issues and practices. *Viewpoint* is intended to be provocative, even controversial, and to generate feedback from suitably provoked readers, preferably in time for publication in the following issue of the journal. Peter Taylor and Nathalie Sinclair (volume 1, number 1), Jerry Ameis (number 2), Gérard Fourez (number 3), Larry Bencze (number 3), and Chuck McFadden (number 4) have provided the stimulus and the controversy, but feedback has not been forthcoming. If *CJSMTE* is to be the lively forum for debate that we seek to establish, we need your responses, by e-mail to the Editor (at dhodson@oise.utoronto.ca).

## Special issue: Scientific literacy

Volume 2 of *CJSMTE* sees the introduction of an additional feature: the special issue. It is our intention to devote the first issue of each volume to a particular topic. For this first special issue, an invitation was extended to Professor Peter Fensham to write a provocative piece on a topic of his choice. Thankfully, Peter gracefully accepted my invitation and chose to write an excellent article on scientific literacy. Thus was decided our focus for the special issue. Despite a decade or more of use in the science education literature, there is no universal agreement about precisely what scientific literacy entails (Jenkins, 1990; Eisenhart, Finkel, & Marion, 1996; Galbraith, Carss, Grice, Endean, & Warry, 1997). Some see it as the capacity to read, with reasonable understanding, lay articles about scientific and technological matters published in newspapers and magazines; others regard it as being in possession of the knowledge, skills, and attitudes deemed necessary for a professional scientist. The more ambitious, such as the authors of *Science for All Americans*, attempt to include both elements: a scientifically literate person, they say, 'is aware that science, mathematics, and technology are interdependent human enterprises with strengths and limitations; understands key concepts and principles of science; is familiar with the natural world and recognizes both its diversity and unity; and uses scientific knowledge and scientific ways of thinking for individual and social purposes' (AAAS, 1989, p. 4). They also direct attention towards scientific literacy for a more socially compassionate and environmentally responsible democracy when they state that science can provide knowledge 'to develop effective solutions to its global and local problems' and can foster 'the kind of intelligent respect for nature that should inform decisions on the uses of technology' and without which, they say, 'we are in danger of recklessly destroying our life-support system' (p. 6).

Those familiar with Peter Fensham's writing over the years will not be surprised that his article ('Time to change drivers for scientific literacy') is both highly distinctive and provocative—calling for a radical rethinking of the concept of scientific literacy and who should define it. Since this meets the 'design brief' of the *Viewpoint* column, a decision was taken to use the article in a twofold capacity: as the focus for the special issue and as a stimulus to debate via *Viewpoint*. Consequently, instead of adopting the usual practice of issuing a general call for articles on a specified topic for a special issue, and instead of waiting for responses to the provocation (possibly in vain, given our experience with *Viewpoint* in 2001), I decided to invite responses from a number of prominent science educators in a number of countries. I also invited Nancy Law (University of Hong Kong) to contribute an article detailing the research on scientific literacy that she and her colleagues have been conducting in Hong Kong, Beijing, and Guangzhou—research that is prominently featured in Peter Fensham's article. I am delighted to report that almost everyone I approached responded positively to my invitation, such that we are able to extend the responses to Peter's article over this and the next issue of *CJSMTE*. In this issue, we publish responses from Joan Solomon (Open University, UK), David Treagust (Curtin University of Technology, Australia), Wolff-Michael Roth (University of Victoria), Jim Gaskell (University of British Columbia), and Glen Aikenhead (University of Saskatchewan). Following the article by Nancy Law, *CJSMTE* volume 2, number 2, will include responses by Richard Duschl (King's College London), Robin Millar (University of York), and Peter Hewson (University of Wisconsin—Madison).

## Call for papers

The special issue topic for volume 3, number 1, will focus on curriculum, teaching, and learning in *technology education*, an area that *CJSMTE* has neglected somewhat during 2001. This Editorial is a call for interested authors to submit articles on aspects of technology education in Canada and elsewhere, in English or in French. Manuscripts should be submitted to the Editor, following the guidelines on the inside back cover, by 15 July 2002.

## References

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