EDITORIAL

In this the last edition of 2012 we have the usual mix of articles. In this editorial I would again like to make the reader aware of some of the reasoning behind the articles we select.

We begin with the second part of the Conference 2012 opening plenary entitled Enigma, by Doug Willians. This includes more classroom accounts that focus on ‘ways of working’, that have the potential to enable students to ‘work as mathematicians’. I am mindful that many members are unable to attend conference, so we include an account of the closing plenary by Els de Geest entitled, Becoming and being a mathematizing mathematician. You can see from these items that the theme of Conference 2012 was to explore strategies that are likely to encourage learners to become mathematicians, and help them to work in a mathematical way, as well as looking at the ways in which we, ourselves, are mathematicians. As these were the opening and closing plenary sessions at conference, we replicate this in the journal. Having articles that link back to conference will, we hope, make this particular aspect of the association’s work come to life.

Another important feature for us is to give members an opportunity to ‘react’ to what is published in the journal. Members, and readers, can ‘react’ via the website, but also by sending their reaction in the form of an article. An example of this is the contribution by Paul Stephenson’s that was inspired by John Mason’s piece, 3-D proofs of 2-D theorems, in MT 229. Paul takes the 3-D proofs of 2-D theorems article and gives it his own inimitable slant. The editors are always pleased to receive pieces that pick up a thread from an article previously published in MT. However, because of the pre-publication lead time, we replicate this in the journal. Having articles that link back to conference will, we hope, make this particular aspect of the association’s work come to life.

On occasions a thread emerges by serendipity. In this edition we have another article on division provided by Sue Pope entitled, The trouble with division. This article complements the article in MT230 by Anne Sangster revisits and explains why investigation, as a way of working, is still both viable and required in contemporary mathematics classrooms. Margaret cites the report by Alexander (2010) as part of a well argued justification. Erika Suco, Marie Samere and Siu Lun Hong, in Enabling students to understand Measures of Central Tendency and Variation, present an interesting article focusing on what we know is a tricky topic for secondary students. The authors clearly outline sources of confusion and suggest ways of working that ensure that confusions and misconceptions are dealt with. Most interesting was the account of teachers using Lesson Assessment and Refinement Process (LARP) as a tool to implement, revise, and amend a lesson. Another article that focuses on assessment, but self-assessment rather than lesson assessment is Using self-assessment to support individualized learning by Betty MacDonald. This article concerns individual learners, and how in each classroom a collection of these individuals will engage with, grasp, learn, and understand mathematical concepts at different levels, and as we know from experience, over different time-scales.

One function of this editorial is to encourage more readers to write and share their experiences of teaching and learning mathematics. This does not mean that an author need take a ‘safe’ approach as controversy is often a powerful force for enlightenment and change for the better. In addition, we hope that articles we select might inspire a response that will develop themes, or ideas, outlined by the original author.

The following articles offer a variety of perspectives on teaching and learning, and assessment of the teaching and learning process. Heather Davies gives us some advice for photocopied activities, or rather making the most of photocopied activities, in Every last drop. The need to cut the photocopying budget I am sure resonates with many of you. While ensuring that chosen activities are rich and can be followed through, is an important facet in the quality of both teaching and learning. These days, you might consider that investigations are ‘old hat’, but maybe it is just that the terminology is ‘tired’ and even ‘abused. However, in An investigative approach to teaching primary mathematics, Margaret Sangster revisits and explains why investigation, as a way of working, is still both viable and required in contemporary mathematics classrooms. Margaret cites the report by Alexander (2010) as part of a well argued justification.

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