FROM YOUR COUNCIL

From the President's Pen



We are now several months into the new century but as we march forward into Y2K and beyond, it is important to remember where we have been. Here are a few recollections from the past and a few hopes for the future.

Once upon a time in a land very much like this one, there lived a group of people who wanted to educate their children and another group of people who were willing (for a price) to do so.

They gathered the children together, separated them by age and ability, and put them all together in institutions that were called schools. Schools were modeled after prisons, hospitals and factories—the only other large buildings in existence at the time. Laws were passed which required children (up to a certain age) to attend these schools on a daily basis (usually from 9 to 5) modeled after the workday. Day visits home were allowed on weekends and the timing of extended paroles varied according to the location (farm, city, climate zone and so on). Days at school had to be organized efficiently and orderly as literally

hundreds of students would be attending them and "doing their time" each day. Bells rang, blocks of time called periods were devised and a curriculum was instituted that would emphasize the prevailing culture, thus ensuring the easy integration into society and uniform conformity for all. Our discipline of mathematics more than adequately reflects this time from long ago. Over time, however, beliefs have changed. In 1989, the National Research Council in the United States published a document called *Everybody Counts* which is a report to the nation on the future of mathematics education. In the margins of this document can be found numerous "myths" regarding mathematics education. Although over a decade old, many of these myths are still espoused today. Here is a sample:

1. As computers become more powerful, the need for mathematics will decline.

- 2. What is good enough for me is good enough for my child.
- 3. Early use of calculators will prevent children from learning the basic facts of arithmetic.
- 4. Learning mathematics means mastering an immutable set of basic skills.
- 5. Students learn by remembering what they are taught.
- 6. The way to improve students' mathematical performance is to stress the basics.
- 7. Only objective tests yield reliable results.

After reading this list of myths, I am reminded of my youngest son's definition of myth—a female moth—and wonder why these myths were relegated to the margins of the piece. Clearly they should be front and centre and represent a potpourri of the traditional customs, tales and sayings of the common people with respect to teaching, learning and even research. Certainly they represent the life and the spirit of the mathematics education that we were given and a good chunk of the mathematics education that we have delivered!

All of the myths listed above can easily be debunked by a heavy dose of reality. Arguments could be put forward that are clear, concise and logical for each one of them. In fact, some of the myths seem so trivial that it is a wonder that anyone still holds them! Life marches on and we can choose to move along with the flow or simply be run down by the stampede. However, we need to understand our past in order to make better sense of the future. We must recognize these myths for what they are—female moths ready to eat away our significance and *not* Moses' stone tablets of truth. The point is that they were believed and adhered to from generation to generation partly because they were useful for the time and because nobody ever questioned them. It is time to cast these myths from our belief system and create a new reality about teaching and learning of mathematics that befits the 21st century. Watch MCATA as together we march into the new millennium.

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