
PREFACE

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EGAN

During the winter of 2011, while attending an executive meeting of the Saskatchewan Mathematics Teachers' Society (SMTS) in Saskatoon, it was brought to my attention, via a birthday cake, that the SMTS would be turning 50 in August 2011. At the end of the meeting, during the "other business" portion of the agenda, I mentioned that I was (now, having heard the news) interested in putting together a special issue of *vinculum: Journal of the Saskatchewan Mathematics Teachers' Society*, which would, somehow, celebrate 50 years of the SMTS and *vinculum* (in its many different renditions).

Driving home from the meeting, now liking the idea I floated to the executive more and more, I started to get ahead of myself. With access to 50 years of journal articles I could "easily" put together one special issue of *vinculum*. In fact, I could probably put together two special issues. By the time I got home, I decided to go with 10 articles from each of the past 5 decades. In other words, I wanted to represent/celebrate 50 years of the SMTS and its journal with 50 articles. However, my plans were contingent on the availability of back issues.

The next morning I phoned the Saskatchewan Teachers' Federation (STF), not sure what to expect. After getting through to the archives, I started describing (clumsily) the project, how the idea came about and, ultimately, what I was trying to accomplish. Their response, on the other

end, was quite succinct: "That sounds wonderful. Yes, we have every issue from October 4, 1961, which is volume 1, number 1. Do you want to schedule your visitation now?" Stammering a bit (my idea had just turned into a reality), I mentioned that I would call back in the next few days and set up a time to visit.

Smash cut to Gale Russell and me walking down the steps to the STF archives. Simply put, the archives are meticulous. Further, the people we met "down there" were instrumental in making our daunting task, that is, choosing 50 articles to represent 50 years of the journal, much, much easier. For example, when we realized during the first day that we would only get through one decade (the 1960s) and, further, it was impossible to choose only ten articles at that time, MacKinley Darlington (and others), over the next few days, scanned the umpteen articles we had chosen, placed them in a Dropbox folder, sent us an email indicating that our articles were ready for viewing, and also asked when we would next be visiting the archives.

Gale and I decided that we would next pare down the number of viable articles for the sixties with a second cut, more specifically, from umpteen to (approximately) 30. Only then did we make our second appointment with the archives. In the end, the approach that we took for the 1960s became the approach that we adopted for each of the subsequent decades. Each visit to the archives resulted in umpteen articles for each decade. In total, our first cut resulted in approximately 500 articles. Subsequently deliberating over the scanned articles placed in our Dropbox folder, we again pared down each decade. In total, our second cut resulted in approximately 150 articles. Even though we had made our first and second cuts and our time at the archives was over, our work, essentially, had just begun. We now had to deliberate over approximately 150 articles and, with a third cut, choose only 50! (That is an exclamation point and not a factorial symbol.)

If you are wondering, yes, choosing 50 articles to appropriately represent/celebrate the SMTS and its journal took a very, very long time, resulted in many cuts (and "uncuts") and numerous quibbles (over particular articles for particular decades), which, more often than not, blew up into full-on arguments. In the end, however, we did it; we ended up with 50 articles to represent/celebrate 50 years of the SMTS. Thinking I was close to being done, I was unaware (at the time) that my journey with this project was just beginning.

As you can imagine, you learn a lot reading (in some instances, skimming) through 50 years of a journal. One thing I learned, while reading through the SMTS journal articles from the sixties, was that the British Columbia Association of Mathematics Teachers (BCAMT) and the Mathematics Council of the Alberta Teachers' Association (MCATA), and their respective journals, came into existence in similar time frames. For example, certain articles published in the SMTS journal in the sixties were originally

published in the journals of the BCAMT and the MCATA. In addition, the SMTS journal would, in the information section, regularly reference the activities (conferences, journals, meetings and others) of the BCAMT and the MCATA. This got me thinking.

After sending a few emails back and forth between to the current editors of the *Vector: Journal of the British Columbia Association of Mathematics Teachers* (Peter Liljedahl and Sean Chorney) and *delta-k: Journal of the Mathematics Council of the Alberta Teachers' Association* (Gladys Sterenberg), I now had projects, similar to what Gale and I had done in Saskatchewan, underway in British Columbia and Alberta. (Of course, at this point, I decided to press my luck: I then sent emails to the current editors of the provincial mathematics teacher organizations and associations in all the other provinces in Canada and asked if they were interested in working on a similar project, to no avail). With three similar projects underway now, clearly, the scope of the project had increased. With the increase in scope, and with the blessing of Peter and Sean (in BC) and Gladys (in AB), I started presenting the idea of the books to different publishers.

In the proposal(s) that I sent to different publishers (yes, we were rejected a few times), I described that the book would be comprised of 50 articles from each of the five decades and, further, we would have modern-day Introductions to and Commentaries on the selections for each decade—all written by prominent members of the mathematics education community in British Columbia, Alberta, and Saskatchewan.

The three proposals:

- Selected writings from the *Journal of the Saskatchewan Mathematics Teachers' Society: Celebrating 50 years (1961–2011) of vinculum*;
- Selected writings from the *Journal of the Mathematics Council of the Alberta Teachers' Association: Celebrating 50 years (1962–2012) of delta-K*;
- and selected writings from the *Journal of the British Columbia Association of Mathematics Teachers: Celebrating 50 years (1962–2012) of Vector*

were picked up by Information Age Publishing and are now part of the *The Montana Mathematics Enthusiast: Monograph Series in Mathematics Education*. (Fittingly, Alberta is one of three Canadian provinces, with British Columbia and Saskatchewan being the others, that share a border with Montana). Excitedly, I emailed Gladys and told her it was time for us to get to work.

GLADYS

Egan's invitation was timely. As editor of *delta-K*, I had been thinking about possibilities for celebrating the contributions of mathematics educators in

Alberta during the past 50 years. In 1995, a special monograph highlighting the history of MCATA was published and the current executive was extremely interested in issuing a follow-up volume. This project surpassed expectations.

Drawing on my own collection of *delta-K* issues and those stored in the archives of the University of Alberta library and the Alberta Teachers' Association, I scanned copies of the research articles from the 1970s. Egan and I decided to independently rank the articles, taking into consideration the representation of repeated topics, curricular changes, prominent Albertan authors, research initiatives, and teaching ideas addressing the range of grades from kindergarten to twelve. Egan and I had many video conferences as we justified what we felt were the significant articles. We reached a consensus after much discussion, and this initial grappling informed the process for the other article selections across the remaining decades.

One important theme that emerged was the integration of research and classroom practice. It was clearly evident that post-secondary faculties of education and departments of mathematics were integral to the professional practice unfolding in the schools. We decided to include a special feature article for each decade in the Alberta book that demonstrated the prominent role of the researcher in the classroom.

Once articles had been chosen, we generated a list of mathematics educators and teachers who might help us make sense of the articles within contemporary and historical contexts. When I invited people to participate in the project as authors for the introductions and commentaries, I was overwhelmed by their graciousness and willingness to share their perspectives. After drafts of the authors' writings were submitted, we did an initial edit and then relied on the expertise of Karen Virag, the supervising editor of publications at the Alberta Teachers' Association, and her staff to complete the editing process. The manuscripts were returned to the authors for final review.

I feel very privileged to be part of this book publishing process. In many ways, it has helped me understand more deeply the contributions of teachers and educators to our understanding of teaching and learning mathematics. It has been an amazing project.

EGAN AND GLADYS

As you are about to read, the teaching and learning of mathematics in Alberta has a long and storied history. An integral part of the past 50 years (1962–2012) of this history has been *delta-K: Journal of the Mathematics Council of the Alberta Teachers' Association*. This volume, which presents ten memorable articles from each of the past five decades—that is, 50 articles from the past 50 years of the journal—provides an opportunity to share this rich history with a wide range of individuals interested in the teaching

and learning of mathematics and mathematics education. Each decade begins with an introduction, providing a historical context, and concludes with a commentary from a prominent member of the Alberta mathematics education community. As a result, this edited volume provides a historical account as well as a contemporary view of many of the trends and issues in the teaching and learning of mathematics. This volume is meant to serve as a resource for a variety of individuals including: teachers of mathematics, mathematics teacher educators, mathematics education researchers, historians, and undergraduate and graduate students. Most importantly, this volume is a celebratory retrospective on the work of the Mathematics Council of the Alberta Teachers' Association.