



Mathematics Council NEWSLETTER

The Alberta Teachers' Association

Providing leadership to encourage the continuing enhancement of teaching, learning and understanding mathematics.

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President's Message

Another school year is off to a good start. We have had some changes to the Math Council executive this year. I would like to thank Directors Rick Johnson and Richard Kopan for their time and service on behalf of Alberta teachers. Although they will no longer be serving MCATA, they will still be involved in math education and supporting mathematics in Alberta.

Graham Keogh, who served as vice president, director and NCTM representative also left the Council. Graham joined us as a conference chair one year and ended up serving for several more years in various roles. We will miss his great questions and organizational skills.

Shauna Boyce, our Alberta Learning representative, has decided to hit the books. Because her courses conflict with meeting dates, she has decided to leave the Council. We wish her all the best and know we'll be seeing her around. Deanna Shostak has gladly joined the Council as our new Alberta Learning representative.

Helen McIntyre is now taking on the role of vice president and NCTM representative.

Welcome to our newsletter editor who joined the Council this fall. Anne MacQuarrie, an elementary teacher, will be working hard to get great newsletters out to you. I am sure she would like to hear from you if you have a piece to submit for consideration. E-mail her at anne.macquarrie@home.com.

Continuing on the executive for another year are Cynthia Ballheim, Elaine Manzer, Donna Chanasyk, Doug Weisbeck, Klaus Puhlmann, Daryl Chichak, Lorraine Taylor, Evelyn Sawicki, Len Bonifacio,

Indy Lagu, Dale Burnett, Robert Wong, Dave Jeary and Carol Henderson. Our council has representation from all division and grade levels and represents various areas around the province.

We are looking forward to another challenging year in the area of math education. As an executive, we have been discussing the implications of the Alberta Learning K-9 mathematics education focus group summaries. At the time of writing, we are eagerly waiting to see what actions will be taken as a result of the report.

—Sandra Unrau

From the Editor's Pencil

Being the editor of a newsletter is going to be an interesting and rewarding experience. I am looking forward to an exciting year in this role and hope that you will feel free to submit interesting bits—reviews of books you may have read, commentary on practice that you have found inspiring, informative or entertaining websites, or anything that you think might be of interest to our readership.

A big thank you goes to all of you who have contributed to this issue. I know how busy you all are and I appreciate your efforts.

As Sandra Unrau said in the President's Message, I have been working hard to get a great newsletter out, but "the proof of the pudding is in the eating." I hope that this pudding is tasty.

—Anne MacQuarrie

Think About This!

Teachers of Mathematics in the Edmonton Region (TERM) will be holding meetings at Paul Kane High School in St. Albert. Join us at 5 p.m. on November 12, 2001, January 28, March 11, May 6 and June 3, 2002.

For more information, please contact Donna Chanasyk at donnajc@connect.ab.ca.

MCATA Grants

Grants worth \$500 each are available from MCATA for special math projects. Deadlines for applications are December 1 and May 1 of each year. E-mail Lorraine Taylor at lorraine.taylor@lethsd.ab.ca for criteria and application forms.



Mathematics Around the World

Last June Past President Cynthia Ballheim was chosen as the teacher observer for the grade award meeting in Mathematical Methods held in Cardiff, Wales. This was not a test-correcting session. The grade award involves all aspects of IB assessment—portfolios, predicted grades, Paper I and Paper II. These are discussed individually and in relation to each other. Boundaries are then set as to what constitutes a 7 or a 6 and so on.

To get a firsthand account of what took place during those four days in June, Cynthia and a panel of IB experts will discuss the outcomes at the MCATA Conference, October 26 and 27, 2001. They will also talk about favorite portfolios and marking IB exams and will have ideas about how IB involvement can be expanded.

Book Reviews

The Last Samurai

by Helen DeWitt

New York: Harcourt, 2000.

This book provides a superb characterization of a gifted child and a gifted mother and is sprinkled with some excellent mathematics and some interesting insights into people and education.

The Advent of the Algorithm:

The Idea that Rules the World

by David Berlinski

New York: Harcourt, 2000

“Two ideas lie gleaming on the jeweler’s velvet. The first is calculus, the second, the algorithm. The calculus . . . made modern science possible; but it has been the algorithm that has made possible the modern world.” (Taken from the Introduction.)

A Tour of Calculus

by David Berlinski

New York: Pantheon, 1995

This is the other idea on the jeweler’s velvet.

Zero: The Biography of a Dangerous Idea

New York: Viking, 2000

by Charles Seife

This is an absorbing unauthorized biography. Shakespeare said it first—*Much Ado About Nothing*, but Seife adds to the chorus.

Nonzero: The Logic of Human Destiny

by Robert Wright

New York: Pantheon, 2000

Combined with the previous book, that about covers it. It isn’t really about mathematics, although game theory does play a critical role.

The Math Gene: How Mathematical Thinking Evolved and Why Numbers Are Like Gossip

by Keith Devlin

New York: Basic Books, 2000

Devlin is a major voice in mathematics for the public. In this book, he explores the origins of number and language.

—Dale Burnett

Executive Meeting Highlight

Deanna Shostak will be the MCATA Alberta Learning representative this year and will play a key role in planning the two annual Math Leader Symposiums. Our thanks to Shauna Boyce, who worked as the Alberta Learning representative for the past year.

Read Books? Do Your Students Read Books?

Read any good books lately? Let us know what you thought—good or bad—and we'll share it with other MCATA members in the Newsletter. We'd love to hear what your students are saying, too.

Membership

Spread the word! MCATA is always looking for new members. Remember, you don't need to be an expert. There is something for everyone. We're really a fun bunch!

Have any students who might be interested? They can join on a student membership.

See our website at www.mathteachers.ab.ca for applications.

Results of the Pure Math 30 Project

Two excellent projects were submitted for judging. "The Power of Exponential Growth," submitted by Ekua Yorke, a student of Len Bonifacio, Holy Trinity High School, Edmonton, was deemed to be the winner. "The Power of Exponential Growth," submitted by Leah Hemphill, a student of Corlene Balding, Ecole Secondaire Beaumont Composite High School, Beaumont, was also outstanding. Both projects were awarded \$50 each.

Look for these projects in an upcoming issue of *delta-K*.

25th Calgary Junior High School Mathematics Contest

The awards presentation for the Calgary Junior High School Mathematics Contest was held in June. The top 50 students and their teachers were invited to attend the dinner and awards evening. As usual, more boys than girls were in attendance. (Why is that?)

Garth Boucher from the Mathematics and Statistics Department at the University of Calgary spoke to the students. He commended them for doing so well on such a challenging test and added that if he had written it at their age, he would not have done as well.

MCATA helps to sponsor this event. If you are interested in more information about the contest and questions, check out the website at www.math.ucalgary.ca/education/JrMath/info.html.



Alberta Learning Update

Learner Assessment Branch

The following are now available on Alberta Learning's website (www.learning.gov.ab.ca):

- + Applied Math 30 Project, Teacher notes for the project, Bulletin for 2001/2002
- + Pure Math 30 Project, Teacher notes for the project, Bulletin for 2001/2002
- + General Information Bulletin
- + Multiyear Reports for Achievement Tests and Diploma Exams

Copies of the projects for both Pure and Applied Mathematics 30 as well as the Bulletin were mailed to schools in early September.

The following are now available on the extranet:

- + Sample solutions to both the Applied Mathematics 30 project and the Pure Mathematics 30 project
- + School and school authority reports
- + Examiner's Report for the June 2001 diploma exams

There is a new face in the math area at Alberta Learning. Corlene Balding has joined the team as an examiner for both Pure and Applied Math 30.

Curriculum

- + TLE 11 is currently being reviewed and will be available in three batches from Nelson Canada. The final batch will be available during December/January. TLE 12 will also be delivered in three parts starting in January 2002. Both TLE 11 and TLE 12 will be available in French and English.
- + For updates to the Program of Study changes in mathematics, see Connection at <http://www.learning.gov.ab.ca/connection>.

Learning Technologies Branch

- + Student modules are now complete for the following courses: Mathematics 1, 4, 7, 8, 9; Math 10 Prep; Pure Math 10, 20 and 30; Applied Math 10; Math 31.
- + Partial student modules are available for Mathematics 2, 5; Applied Math 20.
- + Test banks for Mathematics 7, 8 and 9 are available on CD. Contact Dave Borgstrom at (780) 674-5350, ext. 235 or Dave.Borgstrom@gov.ab.ca.
- + Tools for Teachers is a LTB site that contains LTB distance learning materials linked to the Program of Studies outcomes. Materials are available for Math 31, Pure Mathematics 10–30, and Applied Mathematics 10; electronic teacher's guides for courses completed this September will be available for downloading shortly. The website address is www.tools4teachers.ab.ca. Information on how to access is given on the site.
- + For more information, see our website: www.learning.gov.ab.ca/lbt.



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