NCTM/MCATA 2003 Regional Conference



Message from the Conference Chair

Cynthia Ballheim

The 2003 annual conference, "Taking Mathematics to the Nth Degree," was held November 20–22 at the Shaw Conference Centre and Westin Hotel in Edmonton. This conference was held jointly with the National Council of Teachers of Mathematics (NCTM) and allowed registrants to mix with colleagues, share ideas, attend sessions with international and local speakers, and visit exhibits.

Despite lots of snow, the conference opened with a wine and cheese and entertainment with the Atomic Improvisation. NCTM president Johnny Lott gave the opening general session, "Who Is the Ultimate Mathematics Teacher?" and NCTM president-elect Cathy Seely closed the conference with "Personal Leadership to Transform Your Classroom and Your Community." Sixteen major speakers were featured throughout the conference, including Thomas Kieren, David Schwartz, James Schultz, Trevor Calkins, Keith Devlin, Helaman and Claire Fergusson, Kanwal Neel, Dale Burnett, John Van de Walle and Brent Davis.

Sharon Barry from Grande Prairie Composite High School was honoured during the opening session with MCATA's Mathematics Educator of the Year Award. MCATA members who renewed or purchased a new membership received a purple presentation folder, Penatia Multi Function pen, Calgary conference pen, two MCATA student certificates, a business card and a MCATA sticker.

Mark your calendars for the 2004 MCATA annual Conference in Calgary on October 29-30. See you there.

A Pictorial Potpourri

Klaus Puhlmann

NCTM's Canadian Regional Conference was held in Edmonton from November 19 to 22, 2003. The theme of the conference was "Taking Mathematics to the Nth Degree." In excess of 200 sessions, workshops and mini-courses were offered, with presenters from all across Canada and the United States.

The next few pages are an attempt to capture some of the presenters, participants and events.



Johnny W. Lott, NCTM president, one of many major speakers, is exploring the question, "Who is the ultimate mathematics teacher?"



NCTM members taking turns at the registration desk. (l-r) Betty Morris and Shauna Boyce.



James E. Schultz, Ohio University, Athens, Ohio, has his focus on "Technology: The Good, the Bad and the Ugly," providing many examples of proper use, misuse and inappropriate use leading to misconceptions.



Johnny W. Lott, NCTM president, making a presentation to Sandra Unrau (l), past president and 2003 program chair, and Cynthia Ballheim (r), MCATA president and 2003 conference chair, in appreciation of their work in organizing this year's conference.



Sharon Barry (1), Grande Prairie Composite High School, is the recipient of the 2003 Mathematics Educator of the Year Award, with Cynthia Ballheim (r) making the presentation. MCATA president Cynthia Ballheim made the following comments prior to presenting the award to Sharon Barry. One of my favourite parts of our annual conference is the presentation of the Mathematics Educator of the Year Award. This year is no exception. Our winner is an exemplary teacher who loves teaching mathematics. She spends hours preparing her class so that each and every student will succeed in mathematics. Her lessons are creative and she motivates her students to do their best. She spends



countless hours before and after school and during her lunch hour to prepare her students for all manner of assessments. These students are not just her students. They flock to her from all classes because of her mathematical knowledge and caring ways. Her mathematical skills and knowledge, combined with her dedication to students have made her a valued member of committees at the local and provincial level. Her contributions to her own department at the school level have encouraged many of her colleagues to improve their teaching techniques. The staff at Grande Prairie Composite High School considers her to be an inspiration to staff and students alike. It is with great pleasure that I present to you, Sharon Barry, our 2003 Mathematics Educator of the Year.

Thomas E. Kieren, University of Alberta, Edmonton, Alberta, delivering a major session on "Teaching in the Middle School: Using Interactive Intelligence and Collective Understanding."





Conference attendees are entertained by Mark Meer and Donovan Workun of Atomic Improv Company, with Cynthia Ballheim, MCATA president, and Sandra Unrau, past president, getting involved in the act.

H. E. Bourgoin School, Bonnyville, Alberta, shares a teacher's success and concerns as she moved toward a model of assessment that encourages students in their own evaluation. Her topic was "Students' Focus, Students' Assessment: Nuturing Lifelong Learners."

David M. Schwartz, author from Oakland, California, shows how exciting the results can be when children begin mathematical explorations inspired by literature. His topic was, "Students, Teachers, Authors: A Golden Triangle for Mathematical Learning."



Phoebe Astra Arcills and Ryan F. Mann, both from Parkland School Division No. 70, Stony Plain, Alberta, conducted a workshop on "What's Up with Applied Mathematics?" which contains a projectdriven strand that challenges the typical classroom.



Frances L. Schatz, Ontario Association of Mathematics Educators, Kitchner, Ontario, shares insights, experiences, instructional strategies and observations from her very successful career as a tutor.

Ron Larson, Penn State University at Erie, Erie, Pennsylvania, presents "The Three Most Important Things in Teaching Algebra" to his participants.





Keith Devlin, Standford University, Standford, California, making a major presentation on "The Evolutionary Origins of Mathematical Thinking Ability."



Klaus Puhlmann, retiring editor of delta-K, received an engraved glass plaque in appreciation for his work as editor from Cynthia Ballheim, president, at the MCATA annual general meeting. Geri Lorway (r), MCATA executive member looking on.



Bonnie Litwiller, University of Northern Iowa, Cedar Falls, Iowa, is "Navigating Through Principles and Standards: Activities from the Grades 3–5 Navigations Books."



Werner W. Liedtke, University of Victoria, Victoria, B.C., presents a popular session dealing with "Number Sense: The Key to Success and Numeracy."

Hubert J. Ludwig, Ball State University (Emeritus), Muncie, Indiana, enlightened his audience with ancient and modern points of view, historical comments and a variety of mathematical procedures involving pie and fractals. His topic was "Pie: From Measuring Fields to Fractals."





MCATA annual general meeting open to all MCATA members to attend. In addition to receiving information, this is an opportunity for input by the membership.



Helaman P. Ferguson and Claire Ferguson, Helaman Ferguson Sculpture, Laurel, Maryland, in their major session on "Mathematics in Stone and Bronze" are using slides and video to trace Helaman's creations from initial conception through mathematical design and computer graphics to their final form.



Daniel H. Jarvis, University of Western Ontario, London, Ontario, conducted a workshop on "Di Divina Proportione: The Art and Science of the Golden Ratio."



Kanwal S. Neel, British Columbia Association of Mathematics Teachers, Richmond, B.C., is engaging teachers in "Getting Ready to Teach Mathematics to the Nth Degree."







Marian S. Small, University of New Brunswick, Fredericton, New Brunswick, engages the participants in activities presented in "Navigating Through Principles and Standards: Activities from the Grades Pre-K-2 Navigation Books."

Dale Burnett, University of Lethbridge, Lethbridge, Alberta, describes the importance of technologically based notation for mathematical thinking and problem solving in his major session on "Tools and Notation: A Symbolic Relationship for the Future."





Rudy V. Neufeld, Neufeld Learning Systems, London, Ontario, is presenting strategies for using interactive software to help students understand fractions, integers, per cent, exponents, equations, algebra, graphing, probability, geometry and measurement. Dave Wagner, University of Alberta, Edmonton, Alberta, deals with the topic, "Teaching Mathematics for Peace." Mathematics is often used as a tool for destruction and injustice. He asks, Can it equip young people for peace?





Todd Steinhauer, T. D. Baker Junior High School, Edmonton, Alberta, conducted a workshop dealing with "Critical-Thinking Games and Activities (Shape-Space and Statistics-Probability)." A group of teachers actively engaged in the activities.



Anna M. Zukowski, Graminia Community School, Spruce Grove, Alberta, presents "Make a Difference: Differentiate," in which she asserts that differentiating instruction provides success for all learners.



John A. Van de Walle, Virginia Commonwealth University, Richmond, Virginia, takes a look at what a studentcentred or problembased lesson looks like in his presentation entitled, "Let Kids Be the Sense Makers, Not You! Planning for Problem-Based Lessons."



Jo Towers, University of Calgary, Calgary, Alberta, speaks about her research on "Understanding Area: Ways of Knowing," with special attention to different ways of knowing.



The NCTM bookstore and the commercial exhibits are always a favourite with the teachers and they are an important part of regional and annual conferences.