Ontario Association for Mathematics Education
Association ontarienne pour l'enseignement des mathématiques

2007 Leadership Conference

for teachers, administrators, co-ordinators/consultants

Mathematics: Making Sense of It All

FEBRUARY 15-17, 2007
Holiday Inn Select
(970 Dixon Rd Toronto Ontario)

An opportunity to investigate the relationships among all of the pieces (characteristics of the learner, curriculum process expectations, big ideas, and available resources) that enable students to do, see, hear, and touch mathematics in a profound and meaningful way and to focus on ONE of the following:

Grades JK - 3	--- Patterning and Algebra JK-3: Five Strands Coming Together
Grades 4 - 6	--- How Do We Get There From Here? Inquiring about Teaching Junior Math
Grades 7 - 9	--- Be S.M.A.R.T!
Grades 10-12	--- Focusing the Lens on Mathematics Learning in Grades 10 to 12
At Risk 7-12	--- Taking the Risk out of "At Risk" for Grades 7-12 students
Grades K-12	--- Complexity Theory and Learning Systems II: Investigating K to 12 Math

All Inclusive Registration Fee: $435/$470 (OAME/non-OAME)
Includes: All sessions, 2 nights accommodation (2 people/room), meals, banquet, receptions, publishers' and suppliers' displays

WHY SHOULD TEACHERS, ADMINISTRATORS, AND CONSULTANTS ATTEND THIS CONFERENCE?

… to identify and link the big ideas and process expectations to student learning and teaching;
… to examine the characteristics of the learner K-12;
... to share best practices in order to to see, hear, and experience mathematics in a classroom;
... to determine ways to integrate available resources that are effective in building mathematics understanding;
... to discuss and share thoughts and views on current emergent ideas and issues with other educators

Program Overview

DAY	TIME	ACTIVITY
Thursday Feb. 15, 2007	6 p.m. – 7 p.m.	Registration outside the Trillium Ballroom
	7:15 p.m. - 9 p.m.	OPENING INTERACTIVE SESSION: **Growing Up Mathematically:** *Come do, see, hear, and touch mathematics in a profound and meaningful way as a team of OAME board members leads us in the development of a BIG idea in JK-12 mathematics.*
	9 p.m. - 11 p.m.	Reception
Friday Feb. 16, 2007	7:30 a.m. - 8:30 a.m.	Breakfast
	9 a.m. - 12 noon	WORKGROUPS and LEADERS Grades JK – 3: Glynnis Fleming , Pat Milot Grades 4 - 6 : Pat Margerm, Joyce Tonner Grades 7 - 9 : Heather Boychuk, Trevor Dewit Grades 10 - 12 : Connie Quadrini, Trish Steele At Risk, Grades 7-12: Jacqueline Hill, Charles Wyszkowski Grades K-12: Kathy Kubota-Zarivnij, Joyce Mgombelo
	12 :15 - 2:15 p.m.	Publishers'/Suppliers' Luncheon: preview of new products and an opportunity to view the many displays
	2:30 p.m. - 4:30 p.m.	WORKGROUPS continue
	4:30 p.m. - 6:30 p.m.	Free Time
	6:30 p.m. - 7 p.m.	Cash bar
	7 p.m. - 9 p.m.	BANQUET & KEYNOTE SPEAKER – **Dave Mitchell: I Enjoy, Therefore I Succeed** *One of the significant (and perhaps often overlooked) pieces of the puzzle is the enjoyment of mathematics. Dave will offer a variety of musings on how math class might be transformed into a memorable and enjoyable experience for students. He hopes you will be moved.*
	9 p.m. - 11 p.m.	Reception
Saturday Feb.17, 2007	7:30 a.m. - 8:30 a.m.	Breakfast
	9 a.m. - 11 a.m.	WORKGROUPS continue
	11 a.m. -11:30 a.m.	Checkout (before lunch and closing session). Complete evaluations.
	11:30 a.m.- 1:00p.m.	SHARING VIDEO, LUNCH, THANK YOUs AND GOOD-BYEs!

ABOUT THE KEYNOTE SPEAKER

Dave Mitchell

Dave Mitchell taught math for thirty years, ten of which he spent as Head of Math at Cameron Heights C.I. in Kitchener, Ontario. He is now a full time professional development speaker and educational publisher. He is well known for using puzzles, songs, rap and stories to make math classes memorable. His presentations involve music, puppetry, math commercials, origami and more. Dave has been awarded the OSSTF Award of Excellence, The Stewart Award for Teacher Excellence, The Ontario Cable Television Producers' Award for Youth Programming and The Roy C. Hill (Hilroy) Award for Innovation in Teaching. His ArithmeCode puzzles are published as a weekly feature in a number of newpapers across Canada and his "fifteen minutes of fame" occurred when he sang and chatted on live national radio with Peter Gzowski in 1995.

Program Details

Each participant will remain with the same workgroup for a total of 7 hours of workshop time

GRADES JK-3 WORKGROUP

Patterning and Algebra JK – 3: Five Strands Coming Together

Primary teachers have worked together to explore instructional strategies in Geometry and Number Sense that help all students to develop deep conceptual knowledge. Two questions that have frequently surfaced throughout this journey are *What about the other strands?* and *How do we fit it all in?* By collaboratively focusing on the Patterning and Algebra strand we will explore how research suggests that the enduring concepts in this strand can be developed; how these concepts relate to the K-12 continuum; and how all strands have a fundamental connection to P&A. Through research review, resource exploration, student work samples, and video clips, participants will "put the pieces together" to create a wealth of shared knowledge and a new vision of how to "fit it all in".

Workgroup Leaders:

Glynnis Fleming is an Elementary Mathematics Resource Teacher with the DSB of Niagara.
Pat Milot is a Curriculum Consultant: Elementary Math with the DSB of Niagara as well as Past President of OMCA.

GRADES 4 - 6 WORKGROUP

How Do We Get There From Here? Inquiring about Teaching Mathematics in the Junior Division

There are many questions that can be asked about effective teaching of mathematics in the junior grades. How do teachers find time for teaching mathematics when there is such as focus on teaching literacy? What mathematics is important for students to learn in the junior grades? How does the mathematics in the junior grades connect to the mathematics in primary and intermediate divisions? How can teachers deepen their understanding of the mathematics? Bring your questions and we will use them to explore the idea that there are more possibilities in a question then there ever could be in an answer.

Workgroup Leaders:

Pat Margerm teaches preservice and inservice courses at York University, writes, and works for EQAO in grade 6 math.
Joyce Tonner is a Student Achievement Officer with the Literacy and Numeracy Secretariat, seconded from Thames Valley DSB.

GRADES 7- 9 WORKGROUP

Be S.M.A.R.T!

S*trategies for Success*: Experience a range of activities used in the grade 7 to 9 classroom to help students succeed.
M*anipulatives for Thinking:* Explore manipulatives, hands-on, and see how they were used in the classroom to promote thinking.
A*sking Effective Questions:* Learn about some key strategies to incorporate effective questions, choice and differentiated learning.
R*eaching all Learners:* Discover a variety of ways to include students, from real life applications to activities that engage students.
T*echnology Galore:* GSP, TinkerPlots, Fathom, Internet resources, etc will be integrated throughout your experience!

Workgroup Leaders:

Heather Boychuk is the math program leader and teacher at Lasalle SS in Sudbury, in the Rainbow DSB.
Trevor Dewit teaches intermediate mathematics at Valley View PS, in the Rainbow DSB.

GRADES 10-12 WORKGROUP

Focusing the Lens on Mathematics Learning in Grades 10 to 12

What is successful mathematics learning? How do we empower our students mathematically? Come and see how the mathematical processes engage students in learning mathematics, and enable them in their development of mathematical understanding and communication. Using a series of hands-on activities, participants will explore and make sense of the interconnections of the 10 to 12 curriculum through the lens of the mathematical processes, and reflect upon the implications for teaching, learning, assessment, and supporting teachers.

Workgroup Leaders:

Connie Quadrini is a Program Resource Teacher for Mathematical Literacy, Grades 7 to 12, in theYork CDSB.
Trish Steele is a Mathematics Resource teacher, K-12, for Simcoe County DSB.

GRADES 7-12 AT RISK WORKGROUP

Taking the Risk out of "At Risk"

What do you do with a math student who just doesn't get it no matter what you do? We have the answers! This workshop will provide a variety of strategies, to make best use of the resources we all have. From curriculum, to Ministry Initiatives (TIPS and Think Literacy), to sound practice, and everything in-between, we will make sense of the interconnected nature of these resources to help your at-risk students.

Workgroup Leaders:

Jacqueline Hill is the OAME President-Elect, and Durham DSB K-12 Mathematics Facilitator.
Charles Wyszkowski teaches pre-service teachers at Trent University after recently retiring from Durham DSB.

GRADES K-12 WORKGROUP

Complexity Theory and Learning Systems II - Investigating the Breadth and Depth of K to 12 Mathematics

How do mathematical concepts, models, and strategies transform across K to 12? During this working group, K to 12 participants will develop and anticipate the range of solutions to rich open-ended and open-routed mathematics problems. Such problems can be solved using different representations (e.g. manipulatives, technology, diagrams) that demonstrate the interconnections of K to 12 mathematical knowledge. Further, participants will develop an understanding of and skills in using a strategy, Japanese bansho, to make sense of the diversity of mathematical thinking inherent in our mathematics classrooms.

Workgroup Leaders:

Kathryn Kubota-Zarivnij is a Student Achievement Officer at the Literacy & Numeracy Secretariat and is Past President of OAME.
Dr. Joyce Mgombelo is an Assistant Professor at Brock University where she teaches courses in mathematics education.

O.A.M.E. Leadership Conference 2007 Registration Form

Registration Fee (before December 31/06): OAME MEMBER **$435;** NON-MEMBER **$470**

Fee includes: All sessions; 2 nights at Holiday Inn Select (2 people/room);
2 breakfasts, 2 lunches, 1 banquet, 2 receptions; taxes& gratuities.

Surcharge for Single Room: $135.00. Surcharge for Registration after December 31/06: $25

Special rate (before Dec 31/06) without accommodation $335/370 (OAME MEM/NON-MEM).

REGISTRATION DEADLINE: January 15, 2007

Call Sue at 519 471 6324 to determine availability after January 15/07

Name: _____ Gender: Male ❑ Female ❑
surname first name

Home Address: _____
street city postal code

School Name: _____Board_____

Telephone #: (_____)_____ (_____)_____
home business

Fax #: (_____)_____ Email:_____

Please indicate: ❑ teacher of _____ ❑ administrator ❑ co-ordinator/consultant ❑ other _____
Grade(s) please state position

OAME Member YES ❑ NO ❑ Membership#_____

I wish to become an OAME member YES ❑ and enclose the $45 annual fee (and hence pay the member's fee for this conference).

Conference Arrangements

I will be staying at the Holiday Inn Select: YES ❑ NO ❑

I wish non-smoking accommodation: YES ❑ NO ❑

I wish to be booked accommodation with: _____
PRINT Name of Other Registrant for Conference

OR I wish shared accommodation to be arranged for me. ❑

OR I wish Single accommodation and enclose the $135 surcharge. ❑

Special Dietary Needs

Please indicate any special dietary needs _____
(eg: vegetarian, food allergies, etc)

Workshop Series Choice

Write 1 or 2 for first & second choice. Each workshop series will be filled on a first come basis

Grades JK-3 ❑ Grades 4-6 ❑ Grades 7-9 ❑ Grades 10-12 ❑ At Risk 7-12 ❑ Complexity K-12 ❑

Total Amount Enclosed (Cheque or Credit Card): $ _____

All paid registrations will be confirmed by mail/fax within 14 days of being received.

Please send this Registration Form and a cheque made out to OAME to:
70 Chestnut Crt, London ON, N6K 4J5

OR: Mail/ Fax to 519 471 6324 with Credit Card Information: VISA ❑ or Mastercard ❑

Cardholder Name (Print) _____

Card Number _____ Expiry Date _____/_____

Authorizing Signature _____ Today's Date _____

For further information phone or fax Sue or Dave Hessey: 519 471 6324
or email: oame.hessey@sympatico.ca