Y4MA

the path is made by *walking*



differentiated instruction | assessment for learning | the mathematical processes

learning tools | curriculum connections | social justice | research | pd models

OAME 2008

May 8-10 2008 | OAME Annual Conference | Sheraton Parkway Conference Cnetre Richmond Hill, Ontario

Table of Contents

Welcome to OAME 2008		3
OAME Board 2007-2008		4
OAME President's Message		5
Texas Instruments Mini-Conference		5
Sheraton Parkway Welcome Letter		6
OAME 2008 Conference Organizers		7
General Conference Information		8
Social Events		9
Keynote Speakers	❋ Thursday ❋ Friday	11
Conference Program	❋ Thursday ❋ Friday ❋ Saturday	12 37 70
Conference Planner		90
Conference Registration Form		91

WELCOME
OAME DELEGATES!

Sheraton Parkway Toronto North
HOTEL & SUITES

For Reservations at the **OAME 2008 Group Rate**, Please call **before April 8th**:

1-800-668-0101
600 Hwy 7 East
Richmond Hill, Ont. L4B 1B2
E-mail: sales@sheratonparkway.com
www.sheratonparkway.com
www.bestwesternparkway.com

Please visit our website at http://www.oame2008.ca/ for more information.

Welcome to OAME 2008



Dear OAME member,

Welcome! We are thrilled to be your OAME 2008 Conference Co-Chairs! This year's conference, proudly hosted by York[4] Mathematics Association, will be held at the Sheraton Parkway Toronto North Hotel and Conference Centre in Richmond Hill on May 8, 9, and 10, 2008.

The theme of the conference is "The Path is Made by Walking" which honours the many and various paths we take on our different journeys in mathematics education. During the conference, delegates will explore paths including differentiated instruction, assessment, mathematical processes, learning tools, curriculum connections, social justice, research, and professional development models. It is our hope that the conference will encourage and inspire as you move forward on your journey.

We have exceptional keynote speakers and workshop leaders providing opportunities to explore these various paths. One new path to explore is the path of Social Justice, which we hope will encourage delegates to make connections between mathematics and the impact on people around the world.

Join us on our path to a deeper understanding of mathematics! We hope to see you there!

Sincerely,

Connie Quadrini & Gina Micomonaco
Co-Chairs, OAME 2008

OAME Board 2007-2008

Visit the OAME website at www.oame.on.ca

OAME Executive

President	❋	Jacqueline Hill
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❋ Bill Otto	❋ Duncan LeBlanc	❋ Beverly Farahani
❋ Blanche Thomas	❋ Walter Whiteley	❋ Dennis Caron

OAME Chapters and Representatives

CHAMP	Credit Humber Association for Mathematics Promotion	Lynda Ferneyhough
COMA	Carleton Ottawa Mathematics Association	Patricia A. Kehoe
GOLDEN	Golden Section Mathematics Association	Laura Tonin
GVMA	Grand Valley Mathematics Association	Robert Gleeson
ISOMA	Independent Schools of Ontario Mathematics Association	Diane Lang
MAC^2	Mathematics Association for Cottage Country	Danielle Blair
NOMA	Northern Ontario Mathematics Association	Susan Melville
NWOAME	NW Ontario Association for Mathematics Education	Tom Boland
PRMA	Pine Ridge Mathematics Association	Sandra Jean Price
QSLMA	Quinte St. Lawrence Mathematics Association	Robert Sherk
SAME	Scarborough Association for Mathematics Education	Debbie Drape
SWOAME	SW Ontario Association for Mathematics Education	Joe Goulet
TEAMS	Toronto Educators' Association for Mathematics	Laurissa Werhun
WOMA	Western Ontario Mathematics Association	Ann Michele Stenning
Y^{4}MA	York to the Fourth Mathematics Association	Ada Cartaginese

OAME President's Message

On behalf of the Ontario Association for Mathematics Education, I would like to welcome each and every delegate to the Annual Conference. I would like to thank the presenters, as without them there would be no conference. Last but not least, I would like to send special thanks to the organizing committee. As a team, they are a force to be reckoned with. Their special attention to detail should make this a fantastic journey. The *Path is Made by Walking* should encourage you to take the journey through the sessions with the big picture in mind. Never loose sight of the students you teach and the difference you make to math education in the province of Ontario.

Yours in Mathematical fun,
Jacqueline Hill
OAME President

Texas Instruments Mini-Conference

As part of this year's conference, Texas Instruments is hosting a Mini-Conference.
A selection of international and local speakers will present T^3 workshops.

The T^3 workshops are listed within this program and represented by the following symbol:

Please drop by our exhibit for a complete listing of the T^3 sessions.
Visit our Technology Playroom and meet the experts and see exciting new products.
Pick up free demo software CDs.
Let TI N-Spire your students.

www.education.ti.com

Sheraton Parkway Welcome Letter

Sheraton Parkway Toronto North & Best Western Parkway Hotels

Welcomes OAME 2008 Conference Attendees!

May 7th - 10th, 2008.

We're happy to have you with us

We are excited to welcome you to the newly renovated Sheraton Parkway Hotel. We look forward to sharing all the wonderful things we have to offer. If we can answer any questions or do anything to make your stay more comfortable, please don't hesitate to ask our dedicated staff. Whether you're traveling on business or taking a much needed vacation, we'll help put you in touch with the things that matter most.
Because you don't just stay at Sheraton. You belong.

Special rates:

$139/night

$109/night

Hotel Guest Services

- 312 guestrooms and suites
- Our 90 suites feature a living area and Jacuzzi bathtub
- Crave restaurant, Spirit Lounge and Starbucks coffee bar
- Room Service available
- 1 Outdoor / 2 Indoor heated pools in the 25,000 square foot Fitness Club. Complimentary access for all guests.
- State-of-the-art fitness equipment with 24-hour access
- New full-service spa
- New Link @ Sheraton with complimentary Internet access
- On-site Business Centre
- High-speed internet and Wi-Fi access available
- Club Level offers exclusive access to the Club Lounge with breakfast, evening hors d'oeuvres and upgraded in-room amenities

For Reservations Please Call:
1-800-668-0101



OAME 2008 Conference Organizers

Committee	Chairs	Members
Conference Co-chairs	Gina Micomonaco Connie Quadrini	
Facilities	Jeff Brown	Marisa Palma Elizabeth Ainslie Rocco DiDonato
Finances	Diana Vena	
Program	Sandra Fraser Karen Timson	Gina Micomonaco Connie Quadrini
Promotions	Rosey Mastrofrancesco Keith AuYeung	Ada Tsui Robert Goldbloom
Exhibits	Leslie Burchat	Dan Bruni Diana Santos
Registration	Ada Cartaginese	Tanya de Gregorio Chi Hang Antonia Katsinos Christina Marchese Rosalba Teti
Hospitality	Pietrina Orlandi	Cheryl Costigan Claudia LaValle-Belardi Vania Mandatori Anna-Rita Muccin Sue Wilson
Faculty of Education Student Volunteers	Gina Micomonaco	Rocchina Antunes Linda D'Andrea
Student & Teacher Showcase	Connie Quadrini	
MCIS & Conference Support	Greg Clarke Sue Hessey	
Volunteers		York University Faculty of Education Students

General Conference Information

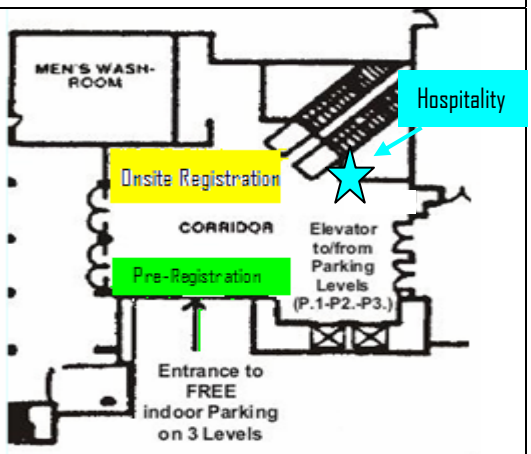
<table>
<tr><td>Registration</td><td>To register for this year's conference, please refer to page 91 of this program or visit our website, www.oame2008.ca and download the Conference Registration form. Please send this completed form with credit card information, or a cheque made payable to OAME 2008 within 10 business days to:

OAME 2008, c/o Diana Vena
St. Elizabeth CHS, 525 New Westminister Drive, Thornhill, Ontario, L4J 7X3
or fax to #519-471-6324

<u>Note:</u> A change of $25.00 will apply to NSF cheques. Refunds will be granted up to April 23, 2008, with an administration fee of $25.00.</td></tr>
<tr><td>Conference Fee Structure
(*lunch is included on Thursday & Friday)</td><td>New or Renewing OAME Membership Fees: 1 year: $45; 5 years: $205; Student: $25

The Path Is Made by Walking Conference Fees
<table><tr><th>OAME Status</th><th>FULL*</th><th>THURS* & SAT</th><th>FRI* & SAT</th><th>THURS* ONLY</th><th>FRI* ONLY</th><th>SAT ONLY</th></tr><tr><td>New or Existing OAME Member</td><td>260</td><td>215</td><td>215</td><td>185</td><td>185</td><td>65</td></tr><tr><td>Retired OAME Member</td><td>245</td><td>195</td><td>195</td><td>165</td><td>165</td><td>55</td></tr><tr><td>Student OAME Member</td><td>185</td><td>150</td><td>150</td><td>130</td><td>130</td><td>50</td></tr><tr><td>Non-Member</td><td>295</td><td>245</td><td>245</td><td>200</td><td>200</td><td>75</td></tr></table></td></tr>
<tr><td>Registration & Hospitality Desks</td><td>You can pick up your conference package at the registration desk. The registration desk will be open during the following hours:
Thurs., May 8th, 8:00 am to 5:00 pm
Fri., May 9th, 8:00 am to 5:00 pm
Sat., May 10th, 8:00 am to 11:00 am

Admission to sessions is by registration only. If you have not pre-registered, please check the registration desk for available sessions.


</td></tr>
<tr><td>Accommodations</td><td>The Sheraton and Best Western are two connected franchised hotels with connected conference facilities which are independently owned and operated by Parkway Hotels And Convention Centre Inc. The 312 room Sheraton is a full service hotel offering luxurious rooms and jacuzzi suites in two towers. Guests of the 129 room Best Western are entitled to use most of the amenities of the Sheraton while enjoying economically priced accommodation in traditional rooms and longer stay efficiency suites.
For Reservations at the OAME 2008 Group Rate, Please Call <u>before</u> April 8th</td></tr>
<tr><td>Parking</td><td>Free parking is available on-site.</td></tr>
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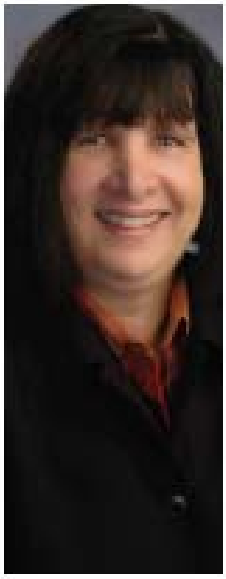
Social Events

Wednesday, May 7th, 2008	
Meet and Mingle following Early Registration. Join us for a casual evening of networking prior to the conference at the Sheraton Parkway Toronto North Hotel. Location: Sheraton Hotel, *Spirits Lounge* Time: 5:00 pm to 7:00 pm	
Thursday, May 8th, 2008	
Past Presidents' Luncheon Location: Sheraton Hotel, Vaughan West Room Time: 12:00 to 1:30 pm	
Cocktails and Conversations at Marlowe Restaurant and Bar. Join us for appetizers and drinks after an exciting conference day at a "wine and martini lounge of epic ambience". Location: Marlowe Bar & Restaurant 155 York Blvd. Unit 1 Richmond Hill Time: 4:30 pm to 6:30 pm Website: www.themarlowe.ca/richmondhill	
University of Waterloo Alumni Dinner Location: Sheraton Hotel Parkway Hotel, Thornhill Room Time: 6:00 pm to 9:00 pm	University of Waterloo
Nine and Dine at the Maples of Ballantrae Golf Club, a golf experience in the "country close to the city". Enjoy a 9-hole executive golf game followed by a delicious dinner in the relaxing setting of Ballantrae. Location: Maples of Ballantrae Golf Club 14248 Markham Road Stouffville Time: 5:30 pm to 9:00 pm Website: www.maplesofballantrae.com	

Social Events (continued)

Friday, May 9th, 2008	
OAME Annual General Meeting Location: Sheraton Parkway Hotel, Thornhill Room Time: 5:00 pm to 6:00 pm	
Vaughan Mills Come join us for a trip to Vaughan Mills Mall. Delegates may visit the NASCAR SpeedPark or Lucky Strike Lanes, or shop at the many outlet stores. Transportation to the mall is included. Location: Vaughan Mills Time: 5:00 pm to 10:00 pm	
OAME Awards Ceremony and Banquet at the Premiere Ballroom and Convention Centre, located just steps away from the Sheraton Parkway Toronto North Hotel. Come celebrate an evening of achievements in mathematics education! Location: Premiere Ballroom & Convention Centre 9019 Leslie Street Richmond Hill Time: 6:30 pm to 10 pm	

Keynote Speakers



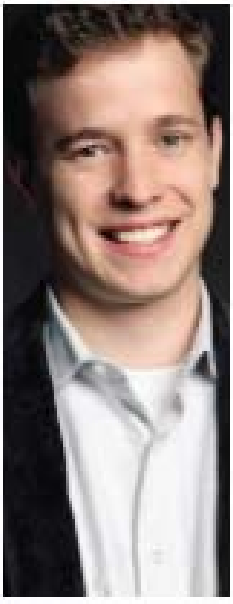
Thursday, May 8 – Moving from Theory to Practice: How Differentiating Instruction Can Really Happen!

Dr. Marian Small, Author, Researcher and Former Dean of Education at the University of New Brunswick

Marian Small is the former Dean of Education at the University of New Brunswick. She has been a professor of mathematics education for many years and is a regular speaker on K-12 mathematics throughout Canada and the US.

The main focus of her writing has been the development of curriculum and texts for students of mathematics. She has been an author on seven text series at both elementary and secondary levels in Canada, the US, Australia, and the country of Bhutan and a senior author on five of those series. She has served on the author team for the National Council of Teachers of Mathematics Navigation series, PreK-2 and, for four years, as the NCTM representative and chair of the Mathcounts question writing committee for middle school mathematics competitions throughout the US.

Most recently, she has led the research resulting in the creation of maps describing student mathematical development in each of the five mathematical strands for the K-8 level and created the associated professional development program, *PRIME*. She has also developed materials, conducted research and provided consultation focused on differentiated instruction and teacher questioning, and is a senior author on the new Nelson Education Ltd. High school mathematics series for Ontario and the Math Focus K-9 series for the Western provinces. She has also recently authored a methods text for pre-service and in-service teachers: *Making Math Meaningful to Canadian Students, K-8* for Nelson Education Ltd.



Friday, May 9 – Me to We: Educating Creative, Compassionate, and Committed Young Leaders

Marc Kielburger, Executive Director, Free The Children

Marc Kielburger is an accomplished social advocate, leadership specialist, New York Times best-selling author and a speaker with a powerful message. He is the co-founder and chief executive director of Leaders Today, a world renowned youth leadership organization. He is also the chief executive director of Free The Children, the world's largest network of children helping children through education.

As chief executive director of Free The Children, Marc oversees a unique, youth-driven charity that has changed the lives of more than one million young people around the world. The organization has built more than 450 schools that provide daily education to more than 40,000 children. Free The Children's many accomplishments in the areas of education, alternative income, health care, water and sanitation provision and peace-building have earned three Nobel Peace Prize nominations and facilitated high profile partnerships with organizations such as the United Nations and Oprah's Angel Network.

Marc is the co-author of the bestsellers Take Action!—A Guide to Active Citizenship, Take More Action and Me to We: Turning Self-Help on Its Head. His most recent book, Me to We: Finding Meaning in a Material World is a New York Times best-seller co-authored with his brother Craig and published by Simon & Schuster. This inspirational volume empowers people of all ages to live the Me to We philosophy of volunteerism, service to others and social involvement. Together with Craig, Marc also writes a regular column for Canada's largest newspaper, the Toronto Star, and for Canada's most read magazine, Canadian Living.

Conference Program – Thursday May 8th



Strand Legend: CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice; DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research			
Thursday 8:30 to 9:45 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
T1.01	CC	Int, Sen, PostSec	From Intended to Delivered – Implementing the Revised Secondary Mathematics Curriculum. With the release of the revised secondary school mathematics curriculum now complete, the focus shifts to implementation. This session will focus on how to gauge the level of implementation of the revised mathematics curriculum by using the six principles that have guided the revision process. An overview will also be shared outlining the resources that have been funded by the Ministry of Education to support the implementation of the revised secondary mathematics curriculum. Presenter: Anthony Azzopardi
T1.02	CC, SJ	12	Lesson Ideas for MDM 4U One strength of the grade 12 Data Management course is how well it relates to the "real world". In this session, examples and sample lessons will be given that integrate current social issues with the Data Management curriculum to make learning for the students both meaningful and real. Presenter: Raymond Ho
T1.03	AL	Jr, Int	Assessment of Mathematical Processes: lessons from the UK One of the biggest problems in implementing the new mathematics curriculum is the assessment of mathematical processes. For almost 20 years now, however, secondary teachers in the UK have been assessing open-ended student coursework and such assessment is no longer seen as problematic. This session will explore some of the ways in which approaches and strategies devised in the UK may help with assessment in Ontario. Presenter: Kate Mackrell

Conference Program – Thursday May 8th

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Thursday 8:30 to 9:45 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
T1.04 (& T2.04)	DI	Jr, Int, Sen, PostSec	DOUBLE SESSION: The Math is Made by Flashing Have you done a little work with Flash, or other programming tools, and want to learn more? Interested in creating engaging learning objects? Come to this hands-on workshop where you will create your own Flash animation learning object, and find out some of the tips and tricks from members of the CLIPS development team. Some previous programming experience is required – ideally with some exposure to Flash. Presenters: Greg Clarke & Ross Isenegger
T1.05	LT, SJ	Int, Sen (7-12)	Social Justice through Statistics In this workshop, participants will be introduced to teaching about social justice issues through statistics (e.g., gender inequities, income disparity). Specifically, participants will be shown useful Statistics Canada datasets, such as Community Profiles data and international Census at School data, that can be used to accomplish this worthy goal in mathematics teaching and learning. Participants will be also provided with ideas for mathematics lesson plans with a >social justice focus. Presenters: Joel Yan & Jennifer Hall
T1.06 (& T2.06)	DI, MP	7-8	DOUBLE SESSION: Teaching Intermediate Math through Centres This session will explore ways to engage students, differentiate instruction, spiral the curriculum, and target the 7 mathematical processes through the use of centres in the intermediate classroom. Presenter: Sandra Jean Price & Sharon Buschbeck
T1.07	R	Sen	The College Mathematics Project-Supporting Student Success in Mathematics Now in its third year, the College Mathematics Project is a program focused on improving student success in first year college programs, through analyzing students' mathematics achievement scores at secondary school and college and deliberating with schools and colleges about the reasons for success and failure and about ways to increase student success. Come and learn about how students are doing in first semester college mathematics and the strategies that are being implemented by colleges and school boards to support student success. Presenters: Laurel Schollen & Trish Byers

Conference Program – Thursday May 8th



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Thursday 8:30 to 9:45 a.m.

Session Code	Strand	Grades	Session Description
T1.08 (& T2.08)	CC	Pri	DOUBLE SESSION: It is My Data, So I Care Students who collect data about their own class and community and write problems about the data are able to make connections to basic facts, place value, problem solving and games. Presenter: Trevor Calkins
T1.09	MP	Int (7-9)	Developing Proportional Reasoning Through a problem solving process, participants will explore models and strategies to support students in developing proportional reasoning. All problems and some possible solutions for each will be provided in a handout at the end of the session. Presenter: Michelle Lang
T1.10 (& T2.10)	DI	Pri, Jun	DOUBLE SESSION: Bansho: A Collective Thinkpad (Beginners) What does it really mean to teach and learn mathematics through problem solving? Come and learn about Japanese bansho, a key strategy for understanding and organizing student solutions for their learning of mathematics. A formative assessment tool will be used Presenter: Kathy Kubota-Zarivinij & Patricia Margerm
T1.11 (& T2.11)	CC	K, Pri	DOUBLE SESSION: Making Math Meaningful This will be a hands-on workshop. Participants will actively examine ways to make math meaningful for all students in their classroom. Children need to see connections between math taught in the classroom and their lives. Different math concepts will be covered as we examine ways to make math real to primary students. By doing this, teachers can meet the needs of all students in their classroom. Presenters: Cathy Kyle & Shelagh McCarthy

Conference Program – Thursday May 8th

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Thursday 8:30 to 9:45 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
T1.12	LT	Gr. 11	Nspiring Students in Grade 11 College This is a hands-on session looking at activities created for Grade 11 College that use the N-Spire CAS handheld. This session is designed for the beginner to intermediate user. Presenter: Paul Alves
T1.13	LT, CC	Int, Sen	A Picture is Worth More than a Thousand Words: Connecting the Math Around Us. Come and see how TI technology and everyday pictures can bring math concepts to life. This will be a hands on activity based session for Grades 9 – 12. Presenter: Darryl Marchand
T1.14 Commercial	LT, DI	K-6	"Back to Square One" – 101 Ways to Use The Learning Carpet, a 100 Square Floor Grid This is a fast-paced, interactive workshop introducing many and varied ways to use The Learning Carpet, a 6'x6' 100 square floor grid. Teachers will actively experience concepts in all five strands of mathematics, as well as practical strategies for teaching map and globe skills. Presenter: Wendy Hill
T1.15	R	Sen, PostSec	Pre-service Teacher Efficacy in the Context of an Intermediate/Senior Mathematics Education Course. Research has shown that teacher efficacy, or the confidence in one's 'teaching ability', is influenced and influences teacher development and classroom practice. The results of the Teachers' Sense of Efficacy scale and written course work shows a remarkable and complex sense of teaching practice development and orientation to teaching, and provides possible insight into improving in-service teacher efficacy. Presenter: Jamie Pyper

Conference Program – Thursday May 8th

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Thursday 8:30 to 9:45 a.m.

Session Code	Strand	Grades	Session Description
T1.16	DI	Jun, Int	Engaging Math Games Come experience first-hand how math games can engage junior and intermediate students as part of a balanced math program. We will explore a variety of ways to differentiate activities to meet the needs of all students in your grades 4-8 class. Presenter: Sean Hanna
T1.17	CC, DI	Pri, Jun (2-6)	Finding Math in All the Usual Places – Street, Market, Buildings Participants will preview and review a generous collection of math investigations designed to help teachers help kids see that, "Math looks good! Feels good! And Tastes good!" A variety of math adventures will be proposed that include: The Twelve Days of Christmas, The Never Ending Story, Hours Alive, Math with a Deck of Cards, and an Outstanding Collection of Math Tails. Come, collect, build, and enjoy instructional images designed to help kids learn to love math. Presenter: Paul Lessard
T1.18	DI, MP, R	Int	Creating a Math Talk Community A mathematics classroom that is rich in discourse supports students to explore ideas together and to justify, prove and defend their thinking. This workshop will explore ways of developing a math talk community with the most reluctant learners and will use video footage to support dialogue and discussion. Presenter: Kathy Prince & Shawn Perry
T1.19 (& T2.19)	CC	Jun, Int	DOUBLE SESSION: Rising to the Challenge! Each year, TVDSB hosts a Junior and Intermediate Math Challenge where schools send teams of students in grades 4-8 to participate in a half day of mathematical fun and frolic, with an emphasis on working cooperatively to solve problems. In this workshop, we will share the organizational structure for our Math Challenge as well as a range of activities from years past for both junior and intermediate students. Come prepared to experience the activities and to discuss ways to implement a Math Challenge for your school or district. This session is appropriate for both classroom teachers and math consultants. Presenter: Cheryl McQueen and Scott Armstrong

Conference Program – Thursday May 8th

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Thursday 8:30 to 9:45 a.m.

Session Code	Strand	Grades	Session Description
T1.20	LT	Jr, Int (7-10)	GSP4AT IEP's sometimes carry the notation that a student should be using ICT for learning. However, this recommendation is sometimes made with little thought as to the details of this usage. This presentation will cover why students might be recommended for Assistive Technology, and how The Geometer's Sketchpad in particular could be viewed and utilized as AT. Presenter: William Lundy
T1.21	DI	Int, Sen	How to Build Success in Your Essential and Workplace Mathematics Courses This workshop will highlight successful teaching strategies, classroom management strategies, curriculum, resources and assessment and evaluation, based on the needs of students taking these courses. Presenter: Cheryl Warrington
T1.22	LT	Int, Sen	Texas Instruments is Bringing in the Expert! Come meet the expert from Texas Instruments. Sit down and talk about anything: calculator questions, Navigator, presentation tools, OS questions, data collection, Press to Test or Test Guard. Bring your calculator – no questions too big or small. Come drop in and visit us! Hosted by Len Catleugh

Conference Program – Thursday May 8th

Strand Legend: CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice; DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research			
Thursday 10:00 to 11:15 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
T2.01	MP, LT	Sen	A Story About Change: The Grade 12 Calculus & Vectors Course, MCV4U This session will familiarize teachers with some of the learning resources developed for the Calculus and Vectors course through a joint project involving the Ministry of Education, the O.A.M.E. and O.M.C.A. The resources will also be used to highlight some of the key features of the Calculus and Vectors course that include an investigative approach to the derivative. Some applications involving technology will be demonstrated and participants will have an opportunity to share and discuss implementation ideas. Presenter: Anthony Azzopardi
T2.02	CC	Int	Improving Grade 9 with Fun Strategies. This session will provide you with tahcer developed and student tested classroom activities. The activities are fun for the students, improve student learning and have been researched and proven to be effective. Strategies include: Unit Review Games, Concept Attainment and Cooperative Learning Activities that are quick and easy to implement in a classroom. Each participant will receive a copy of the activities presented. Come out and learn some new and engaging activities for your classroom. Presenter: Jacquie Brodsky
T2.03	LT	Pri, Jun	Math and Literature In this workshop, participants will experience hands-on stations that focus on the five Mathematics strands, and incorporate books, manipulatives, and a variety of tools to help Math come alive! Presenter: Anthony Levy & Rita Cohen
T2.04	DI	Jr, Int, Sen, PostSec	DOUBLE SESSION: The Math is Made by Flashing (see T1.04) Presenters: Greg Clarke & Ross Isenegger

Conference Program – Thursday May 8th



Strand Legend:
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Thursday 10:00 to 11:15 a.m.

Session Code	Strand	Grades	Session Description
T2.05	LT, CC	10-12	How to Use Real Data from E-STAT for Modeling and Curve Fitting for the Grade 10- 12 Curriculum Statistics Canada's E-STAT is a dynamic interactive teaching and learning tool which offers an enormous warehouse of over 36 million reliable time series about Canada and its ever-changing people. In this workshop, teachers will learn how to model real data from E-STAT using mathematical functions with Fathom. We will also hand out lessons for the new grade 11 and 12 curriculum which involve odeling interesting real data from E-STAT with quadratic, trigonometric, sinusoidal, and exponential functions. Presenters: Joel Yan & Jennifer Hall
T2.06	DI, MP	7-8	DOUBLE SESSION: Teaching Intermediate Math through Centres (see T1.06) Presenter: Sandra Jean Price & Sharon Bushbeck
T2.07	MP	9	Implementing a Reading-Intensive Grade 9 Applied Mathematics Program A reading-intensive mathematics program was implemented in a grade 9 applied mathematics class. Louis shares classroom-ready, classroom-tested resources which use reading strategies in mathematics to help with learning, vocabulary development, and reflection. Presenter: Louis Lim
T2.08	CC	Pri	DOUBLE SESSION: It is My Data, So I Care (see T1.08) Presenter: Trevor Calkins
T2.09	CC	4-12, PostSec	Blockbuster Math From the obvious "Proof" and "Deal or no Deal" to the more obscure "Dumb & Dumber" and "Ma & Pa Kettle". Math is everywhere in movies and TV. See some examples of where math shows up and how you can incorporate these examples into your classes. Presenter: David Petro
T2.10	DI	Pri, Jun	DOUBLE SESSION: Bansho: A Collective Thinkpad (Beginners) (see T1.10) Presenter: Kathy Kubota-Zarivinij & Patricia Margerm

Conference Program – Thursday May 8th

Strand Legend:
CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice;
DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research

Thursday 10:00 to 11:15 a.m.

Session Code	Strand	Grades	Session Description
T2.11	CC	K, Pri	DOUBLE SESSION: Making Math Meaningful (see T1.11) Presenters: Cathy Kyle & Shelagh McCarthy
T2.12	LT, R	9-12	The Peel DSB CAS Journey This session will present details on a two year project conducted in the Peel District School Board involving 21 schools that examined the effective use of CAS particularly to support struggling learners. Participants will have an opportunity to work through a model lesson, view how it played out in the classroom, and view a professional learning session with Dr. Carolyn Kieran from the University of Quebec at Montreal. Presenter: Paul Alves & Irene McEvoy
T2.13	LT, CC	9-12	Exploring Problems with TI-Nspire This hands-on session is designed to show participants the power of TI-Nspire. Relevant mathematics problems will be showcased with step-by-step instructions and more advanced features of this learning technology will be demonstrated. No previous experience with TI-Nspire is needed. Presenter: Mary Bourassa
T2.14 Commercial	LT, DI	K, Pri, Jun	"Back to Square One" – 101 Ways to Use The Learning Carpet, a 100 Square Floor Grid This is a fast-paced, interactive workshop introducing many and varied ways to use The Learning Carpet, a 6'x6' 100 square floor grid. Teachers will actively experience concepts in all five strands of mathematics, as well as practical strategies for teaching map and globe skills. Presenter: Wendy Hill
T2.15	MP	Pri	Problem Solving is Walking the Path of Thinking This path of thinking in problem solving wanders through a First Nations' context of primary level numeracy. A model for problem solving relevant to children in grades 1, 2, and 3 incorporates the cultural connections that all of us can experience, learn from, and grow with. The nature of problem solving as a 'thinking activity' and a 'connecting activity' is approached through a visual and graphic sense of patterns and classroom activities. Presenter: Jamie Pyper

Conference Program – Thursday May 8th

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Thursday 10:00 to 11:15 a.m.

Session Code	Strand	Grades	Session Description
T2.16	CC	Int, Sen	Taking Stock In Your Future A session for you and your students with guaranteed returns! Your students will develop a life skill – money management. You will leave this session with: an innovative cross-curriculum approach to financial literacy; a free classroom-ready resource including lesson plans, assessment and instructional strategies; and insights into financial planning and investing. Presenter: Christine Alum
T2.17	CC, DI	2-6	Finding Math in All the Usual Places – Street, Market, Buildings Participants will preview and review a generous collection of math investigations designed to help teachers help kids see that, "Math looks good! Feels good! And Tastes good!" A variety of math adventures will be proposed that include: The Twelve Days of Christmas, The Never Ending Story, Hours Alive, Math with a Deck of Cards, and an Outstanding Collection of Math Tails. Come, collect, build, and enjoy instructional images designed to help kids learn to love math. Presenter: Paul Lessard
T2.18	DI	Jun, Int	The Path Towards Differentiating Area This session is designed to share a concrete example of differentiating instruction based on grade level. The concept of area, differentiated from grades 3 to 8, will be presented. Marilyn Burns' idea of using "menu cards" as a way of differentiating is the basis for this session. Participants will have the opportunity to try a variety of menu card activities as well as investigate the application of this approach in the classroom. A set of student area menu cards as well as a teacher set will be supplied to everyone who attends this session. Presenter: Ruth Inglis
T2.19	CC	Jun, Int	DOUBLE SESSION: Rising to the Challenge! (see T1.19) Presenter: Cheryl McQueen & Scott Armstrong

Conference Program – Thursday May 8th

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Thursday 10:00 to 11:15 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
T2.20	LT	4-6	Sketchpad for Junior Students Let The Geometer's Sketchpad become a textbook alternative! Teachers of the junior division will be taken on a tour to see how they can use this powerful tool in several strands, both supplementing and replacing less-engaging traditional methods. Using both scratch-built and pre-made sketches, participants will be shown the remarkable fit between GSP use and addressing curriculum requirements. This will be a demonstration presentation, not a hands-on workshop. Presenter: William Lundy
T2.21	CC, R	K, Pri	Early Childhood Geometry Many strands of research confirm that young children live in 3-D and master a range of geometry far richer than the current curriculum offers. Some research shows that delaying the introduction of ideas actually encourages misconceptions which make the material harder to learn, later. As part of a Canadian Mathematics Education Forum project, we are developing activities, and proposals which will support a richer curriculum based on this research. We will investigate some of the activities, materials, and big ideas. Presenter: Walter Whiteley
T2.22	LT	Int, Sen	Texas Instrument is Bringing in the Expert Come meet the expert from Texas Instruments. Sit down and talk about anything: calculator questions, Navigator, presentation tools, OS questions, data collection, Press to Test or Test Guard. Bring your calculator – no questions too big or small. Come drop in and visit us! Hosted by Len Catleugh

PUBLISHERS' DISPLAY: 11:15 to 11:45 a.m.

Conference Program – Thursday May 8th

Lunch and Keynote: 11:45 a.m. to 1:45 p.m.



Moving from Theory to Practice: How Differentiating Instruction Can Really Happen!

Dr. Marian Small, Author, Researcher and Former Dean of Education at the University of New Brunswick

Theory and common sense tell us that teachers should differentiate instruction to meet the varied needs of their students, but how can it be accomplished in a manageable way?

Many of the suggestions teachers get are not easy for them to follow through on. In this keynote, Marian will talk about what we know about the different needs of students in mathematics classroom throughout the grades and discuss practical strategies for differentiating instruction, while preserving the integrity of the class as a community of learners.

Conference Program – Thursday May 8th

Strand Legend: CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice; DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research			
Thursday 1:45 to 3:00 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
T3.01	DI	Int	Using Rich Questions as a Way to Meet the Needs of More Students in the Intermediate Grades Come and join our keynote speaker, Dr. Marian Small, to further explore differentiated instruction. Participants will work together with Marion to adapt activities to make them richer and more appropriate for a broader range of intermediate students. Presenter: Dr. Marian Small
T3.02 (& T4.02)	MP AL	K , Pri, Jun, Int	DOUBLE SESSION: Teaching in a Problem-Based Classroom First impressions last forever. Having that right environment sets the tone for the success of your math class. Learn how to motivate mathematical thinking through puzzles and games, create an intriguing mathematics environment in your classroom, and ask/create questions to probe higher level thinking for assessment. Presenters: Caroline Rosenbloom & Jung Choi-Perkins
T3.03 (& T4.03)	LT	Sen	DOUBLE SESSION: Gaining Access to the Best Canadian Health Microdata for the MDM4U Course. We will provide all attendees at this workshop with the latest edition of a very useful, easy-to-use CD-ROM containing over 1,000 variables from the Canadian Community Health Survey (CCHS). This survey of 130,000 Canadians facilitates detailed analysis and cross-tabulations of the many health and demographic variables available at the health district level. At this hands-on workshop, teachers will learn how to use this data and also receive a package of teacher materials that have proven useful in implementing use of this data in MDM classes across Ontario. Presenter: Patricia Misner, Shelah Pickett & Betty Temmer
T3.04	LT	Int, Sen	Smart Teaching with a SMARTBOARD This session introduces you to the power and advantage of using an interactive whiteboard (Smartboard). Topics covered: organizing courses, preparing lessons, linking, sounds, providing notes for students, tools and more. The talk will be useful for those curious about this technology or those using or embarking on the use of this technology. Presenter: Michael Hamilton

Conference Program – Thursday May 8th



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Thursday 1:45 to 3:00 p.m.

Session Code	Strand	Grades	Session Description
T3.05 (& T4.05)	SJ, DI	Jun, Int (4-10)	DOUBLE SESSION: Teaching Social Justice Through Math / Learning Math In a Just Way This workshop will provide examples of how to integrate social justice issues with the mathematics curriculum, predominately through data management, for students in Grades 5 to 8+. We will also discuss how our methods for teaching mathematics and assessing mathematics are a matter of social justice so every child has an opportunity to become mathematically powerful. Presenter: Daniel Peter
T3.06 (& T4.06)	DI, MP, LT	Int (7-8)	DOUBLE SESSION: Integer Interaction for Intermediates This session will focus on the teaching and learning of integers in the intermediate division. Participants will have the opportunity to use a variety of tools (SMART Board, algebra tiles, number lines) to differentiate the instruction to address the interests, readiness and learning styles of their students. Presenter: Rose Salerno & Geri Puritch
T3.07	MP	K, Pri , Jun	Building a Mathematical Learning Community This workshop will explore strategies for building a mathematical community where children are engaged in accountable, productive talk that deepens their understanding of and thinking about mathematics through problem solving. Presenter: Christine Mainguy, Lynne Cohen &Tracey Cox

Conference Program – Thursday May 8th

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Thursday 1:45 to 3:00 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
T3.08	CC	Int, Sen	Investigating the New Secondary Math Curriculum The focus of the new curriculum includes much more exploration and investigation. This hands-on session will allow you to try out some of these types of lessons. From measuring with rulers to the latest in learning technology these activities will help all students better understand the mathematics we teach. Suitable for Grades 9-12. Presenter: Mary Bourassa
T3.09	MP, LT	K, Pri	What the Heck is a Rekenrek? Do you want to help your students understand numbers? What if they could see number relationships? Would you like them to be able to recall basic addition and subtraction facts? Do you wish your students could visualize numbers and make connections between mathematical operations? Then we have a tool for you! Come and see students using Rekenreks, try one for yourself and have some laughs along the way. You'll leave with a handout and the answer to the burning question, 'What the heck is a Rekenrek?' Presenter: Laurie Moher & Anna Jupp
T3.10	DI, MP	Int, Sen	Some Theorems And Formulas Seem Much More Difficult Than They Really Are. In this workshop, we will explore: a simplified version of the Quadratic Formula and some of its applications; solving a system of linear equations using the Cramer's Rule; two Euclidian theorems for the right angle triangle and the use of them in proving the Pythagorean Theorem; and another simple and easy way to prove the Sine law and Cosine law from Sine and Cosine Law to the Heron's formula for the area of the triangle and some of its applications. Presenter: Varvara Nika

Conference Program – Thursday May 8th

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Thursday 1:45 to 3:00 p.m.

Session Code	Strand	Grades	Session Description
T3.11	LT, CC	Sen	Optimization Problems on the TI-Nspire Calculator Participants will use TI-Nspire to explore and to model dynamically many classic optimization problems taught in grades 11 and 12. Each problem will be solved by linking the four core applications on the handheld – Notes, Graphs & Geometry, Lists & Spreadsheet, and Computer Algebraic Systems. Presenter: Jerry Scherer
T3.12 (& T4.12)	LT, AL	Int, Sen (9-12)	DOUBLE SESSION: TI-Navigator in the High School Curriculum This session demonstrates the use of the Texas Instruments TI-Navigator Wireless Network System in the Ontario High School Mathematics Curriculum. Participants will see examples of how the system can be used in each of the 4 grades, along with all features of the system, i.e. Creating a Class, Screen Capture, Quick Poll, Activity Centre, Class Analysis and Learning Check Apps. Teachers will be students and will be guided through an activity-based session. See how dynamic your classroom can truly be. Presenter: Gino DiPede
T3.13	CC	Pri, Jun	DPA and Math – A Perfect Match! Come and experience how math concepts can be practised and reinforced through DPA activity. The concept of developing problem solving strategies through Physical Activity and game play will be discussed. Come prepared to move, experience and feel refreshed. Presenter: Sandee Fennell

Conference Program – Thursday May 8th

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Thursday 1:45 to 3:00 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
T3.14	SJ, CC	Jun, Int, Sen (4-12)	Global Ed. Math: Measures of Justice This workshop connects mathematical concepts with issues that are facing our society, such as climate change, child labour and racism. It will provide a forum for educators to share ideas for incorporating social and environmental issues into the math curriculum. It also offers educators tools, resources, and sample materials that they can use in their own classrooms. Presenter: Michelle Munk
T3.15	DI, CC	Sen	Journals Games and Activities for Grade 11 Come spend some time connecting a variety of strategies to specific situations in grade 11 math. One particular way to use journals will be explored. Many activities (manipulatives and calculator based) will be used as well as games to get your students up and moving around. All activities are classroom ready. Bring some of your favourites to share. Some of these ideas can be easily modified for grades 9, 10 or 12. Presenters: Edmund Ching and Marcel Te Bokkel
T3.16	MP, CC	K-8	SNAP Math Fairs will inspire your students! Do you love recreational mathematics? Are you trying to inspire your students to problem solve? If you answered yes, then this session is for you! Come learn about SNAP Math Fairs. Student projects involve solving math puzzles/problems, building a model, and then presenting it to their school community. Students are engaged because it's math with a real purpose for a real audience! This workshop is informative, exciting, hands-on and will inspire you! Presenter: Tanya Thompson

Conference Program – Thursday May 8th

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Thursday 1:45 to 3:00 p.m.

Session Code	Strand	Grades	Session Description
T3.17	LT, MP	Int (7-10)	It's More Than Just X's and Y's… Algebra becomes more important in mathematics as students move from the intermediate to the senior grades. A sound foundation in algebra can help students from grade 6 through high school and beyond. In this hands-on session, participants will investigate how to help students understand algebra through problem solving and algebra tiles in the intermediate grades. We will also look at the importance of these models in the curriculum and in the TIPS 4RM resource. Presenter: Jamie Majeski
T3.18 (& T4.18)	DI	Jun	DOUBLE SESSION: Imagine the Geometric Path Imagine a world where things are not quite what they seem. Look - and look again, and you will notice different learning styles and entry points into geometry. By focusing on the math processes and differentiation, you can fill your suitcase with different strategies to travel down the geometric path. Come play, discuss and reflect, in our double session journey. Presenters: Blanche Thomas & Michelle Belsher
T3.19	MP	Jun	"Please, Just Tell Me How to Solve this Problem!" While many students in our classrooms embrace challenging mathematics, others shut down as soon as a problem is posed. Research tells us that teaching through problem solving leads learners to a deeper understanding of mathematical concepts. In this session, a collection of strategies and structures will be shared to help all learners engage in rich problem solving. Presenter: Paul Gautreau
T3.20	MP	Jun, Int (4-10)	Math and Literacy – Both Sides of the Same Coin In this presentation, basic literacy strategies and mathematics strategies are blended. Learn how to make your literacy and Math programs directly support each other including modes of assessment. Using effective technology, learn how reading, writing and oral communication skills and procedures can be applied to all strands of mathematics to create more solid learning. Presenter: Fraser Gordon

Conference Program – Thursday May 8th

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Thursday 1:45 to 3:00 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
T3.21	DI	Pri, Jun	Visit and Record – A Classroom Strategy for Differentiating Instruction Visit and record is a teaching strategy that creates true differentiated instruction within the classroom. Students are able to self-pace and self-direct. Time is created when students are actively engaged in meaningful activity so the teacher can work in small group setting or one-on-one with struggling students. In this hands-on workshop, participants will have the opportunity to experience the Visit and Record strategy using a host of math manipulatives. Relevant examples will be shared for each of the five math strands. Teachers will go away with a new strategy for their classroom repertoire and numerous recording sheets to supplement a differentiated numeracy program. Presenters: Anna-Marie Boulding & Troy Comish
T3.22	LT	Int, Sen	Texas Instrument is Bringing in the Expert Come meet the expert from Texas Instruments. Sit down and talk about anything: calculator questions, Navigator, presentation tools, OS questions, data collection, Press to Test or Test Guard. Bring your calculator – no questions too big or small. Come drop in and visit us! Hosted by Len Catleugh

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Thursday 3:15 to 4:30 p.m.

Session Code	Strand	Grades	Session Description
T4.01 Commercial	DI	7-11	Success for Your Struggling Students, Grades 7 - 11 What is there to support students in need of basic math skills? How can you reach students at their level with high interest activities? What about English Language Learners? Experience sample activities and approaches from Psycan's mathematics textbooks and resources designed to serve the needs of these students. Presenter: Peter Saarimaki
T4.02	MP, AL	K , Pri, Jun, Int	DOUBLE SESSION: Teaching in a Problem-Based Classroom (see T3.02) Presenters: Caroline Rosenbloom & Jung Choi-Perkins
T4.03	LT	Sen	DOUBLE SESSION: Gaining Access to the Best Canadian Health Microdata for the MDM4U Course. (see T3.03) Presenter: Patricia Misner, Shelah Pickett and Betty Temmer
T4.04	LT	4-12	GSP - Works in Progress Are you working on a GSP sketch, but can't get it to do exactly what you want? Have a great idea that you'd like to get some help in making a reality? Would you like to investigate The Geometer's Sketchpad further, find out some new authoring techniques, and bring your skills up to the next level? This is the session for you! Come work with two math consultants who have been involved in the TIPS and PRISM projects and who will serve as tutorial leaders for this session. NOTE: You will be contacted by email prior to the conference by the presenters. Presenter: Greg Clarke
T4.05	SJ, DI	Jun, Int (4-10)	DOUBLE SESSION: Teaching Social Justice Through Math / Learning Math In a Just Way (see T3.05) Presenter: Daniel Peter
T4.06	DI, MP, LT	Int (7-8)	DOUBLE SESSION: Integer Interaction for Intermediates (see T3.06) Presenter: Rose Salerno & Geri Puritch

Conference Program – Thursday May 8th

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Thursday 3:15 to 4:30 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
T4.07	MP, CC	K-6	Mathematical Problem Solving and Communication Designed for primary and junior teachers, this session will focus on how rich mathematical problem solving can be used to effectively promote written and oral communication in mathematics. Participants will be discoursing in a variety of different contexts during the workshop and will leave with a bank of ideas to get them started on building a mathematics program where communication is an integral part of learning and using mathematics. Presenter: Kerri Dunford & Joanne Graham
T4.08	PD	K-12	Enhancing Instruction through Records of Practice By analyzing video of classroom lessons – authentic records of teaching practice – we have the opportunity to slow down teaching, witness and critique those cultural tendencies, and move towards enhancing our instruction. In this session, we will analyze records of practice and discuss both the power and challenges of using them as a professional learning tool. Furthermore, we will explore how these records could be used within professional learning communities, and identify the conditions and structures needed for the learning to maintain its integrity and focus. Presenter: Craig Featherstone
T4.09	MP, LT	K, Pri	What the Heck is a Rekenrek? Do you want to help your students understand numbers? What if they could see number relationships? Would you like them to be able to recall basic addition and subtraction facts? Do you wish your students could visualize numbers and make connections between mathematical operations? Then we have a tool for you! Come and see students using Rekenreks, try one for yourself and have some laughs along the way. You'll leave with a handout and the answer to the burning question, 'What the heck is a Rekenrek?' Presenter: Laurie Moher & Anna Jupp

Conference Program – Thursday May 8th

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Thursday 3:15 to 4:30 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
T4.10 Commercial	CC, LT	12	New Approaches in Advanced Functions 12 Join Wayne and Larry as they present ways to investigate different functions, including rates of change and their other features, and consolidate learning through a variety of methods, using examples from McGraw-Hill Ryerson's new Advanced Functions 12 textbook and other resources. This session will also look at how this course should be developed as a both a final high school mathematics course, as well as a bridge to the new Calculus and Vectors course. Classroom ready handouts will be provided. Presenters: Wayne Erdman & Larry Romano
T4.11	LT, CC	11,12	Optimization Problems Using Cabri™ Jr. on the TI-84 Plus Graphing Calculator Participants will use Cabri Jr. to explore and to model dynamically many classic optimization problems taught in grades 11 and 12. The TI-SmartView Emulator Software will be used during the presentation. Bring a calculator to receive Cabri Jr. AppVars files. Presenter: Jerry Scherer
T4.12	LT, AL	Int, Sen (9-12)	DOUBLE SESSION: TI-Navigator in the High School Curriculum (see T3.12) Presenter: Gino DiPede
T4.13 Commercial	MP	Pri, Jun, Int	The Write Math This workshop addresses the practical ways of integrating writing and other types of communication strategies into your mathematics program. Teachers will participate in a variety of fun activities which encourage students to learn mathematical concepts as well as explore their own mathematical thinking. Journal writing and cooperative writing are some of the strategies that will be discussed. We will also explore ways to engage students in problem solving. Presenter: Cathy Marks Krpan

Conference Program – Thursday May 8th

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Thursday 3:15 to 4:30 p.m.

Session Code	Strand	Grades	Session Description
T4.14	CC	Int, Sen	Halton Team Math Contest Come hear about an exciting team math contest that the Halton Board is currently running. Students work in teams of three, answers are checked immediately, and scores kept in real time. Participants will experience a mock contest. Presenter: Jason Van Rooyen
T4.15	AL	Int (9)	Improving Grade 9 Scores – How to Make It Happen! Come and observe how a school can use the improvement planning cycle to systematically diagnose and implement strategies to support student success in Grade 9 Mathematics. This session will focus on how a school can implement a transitional support plan for mathematics. System, school and classroom leaders in mathematics are invited to participate in this session. Presenter: Joe Servidio
T4.16	AL	Int, Sen	Expanding Your Repertoire of Assessment and Evaluation Strategies and Tools In this session we will explore a variety of formative and summative assessment strategies and tools that can be used with many topics in Gr. 9-12. These can be used in addition to, or instead of, quizzes and tests. We will present suggestions for assessment of learning such as student-created comic strips, photo essays, storybooks, and conducting interviews. Suggestions for assessment for learning will include skill checks, student-created quiz portfolios, on-line journals, as well as several active strategies. Presenters: Karen Timson & Agatha Kowalewski
T4.17	LT, MP	Int (7-10)	It's More Than Just X's and Y's….. Algebra becomes more important in mathematics as students move from the intermediate to the senior grades. A sound foundation in algebra can help students from grade 6 through high school and beyond. In this hands-on session, participants will investigate how to help students understand algebra through problem solving and algebra tiles in the intermediate grades. We will also look at the importance of these models in the curriculum and in the TIPS 4RM resource. Presenter: Jamie Majeski

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Thursday 3:15 to 4:30 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
T4.18	DI	Jun	DOUBLE SESSION: Imagine the Geometric Path (see T3.18) Presenters: Blanche Thomas & Michelle Belsher
T4.19	DI, MP	Int (9)	Alternatives for At-Risk Grade 9 Students We've had success with our mathematically at-risk grade 9 students. Come and hear about our GLS100 credit course, which students take concurrently with MFM1P0. Developed and delivered by mathematics teachers, the course combines Learning Skills and Mathematics. Presenter: Terry Hinan
T4.20	MP	Pri, Jun	Just the Facts? Math "Facts" and a Whole Lot More! Come and experience a strategies-based approach to developing elementary students' mental math skills and understanding of essential higher-level mathematics concepts. This session will show teachers how to unpack multiplication "facts" in a systematic manner so that their students will be able to apply the underlying concepts flexibly and efficiently in a variety of contexts. Video footage of an elementary student explaining her work will be used to illustrate the strategies that will be discussed. Presenter: Lionel Lacroix
T4.21	DI	Pri, Jun	Visit and Record – A Classroom Strategy for Differentiating Instruction Visit and record is a teaching strategy that creates true differentiated instruction within the classroom. Students are able to self-pace and self-direct. Time is created when students are actively engaged in meaningful activity so the teacher can work in small group setting or one-on-one with struggling students. In this hands-on workshop, participants will have the opportunity to experience the Visit and Record strategy using a host of math manipulatives. Relevant examples will be shared for each of the five math strands. Teachers will go away with a new strategy for their classroom repertoire and numerous recording sheets to supplement a differentiated numeracy program. Presenters: Anna-Marie Boulding & Troy Comish

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Thursday 3:15 to 4:30 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
T4.22	LT	Int, Sen	Texas Instrument is Bringing in the Expert Come meet the expert from Texas Instruments. Sit down and talk about anything: calculator questions, Navigator, presentation tools, OS questions, data collection, Press to Test or Test Guard. Bring your calculator – no questions too big or small. Come drop in and visit us! Hosted by Len Catleugh

END OF THURSDAY SESSIONS

Conference Program – Friday May 9th



Strand Legend: CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice; DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research			
Friday 8:30 to 9:45 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F1.01	AL	Int, Sen	Opening Classroom Doors…Analyzing Records of Practice Records of practice enable teachers to reflect on teaching and learning through various lenses. Come and learn how the analysis of records of practice, including video, student work, assessment tools and lesson plans, can provide you with the opportunity to reflect on teaching and learning. Engage in this powerful professional learning experience, through dialogue with colleagues from around the province, in order to develop new understandings. Presenter: Shelley Yearley
F1.02 (& F2.02)	DI, MP, AL	Jun	DOUBLE SESSION: Teaching Mathematics Through Problem Solving What does it mean to teach mathematics through problem solving? During this session, participants will experience learning mathematics using a problem-solving lesson design. Experience "bansho" analysis and annotation of solutions to ensure learning for all. Presenter: Joyce Tonner
F1.03	SJ, CC	Jun, Int, Sen	Environmental Math for All Students With so much concern being raised about the environment why are we not using real environmental data with our math students so that they can form their own opinions on global warming, pollution, over population, etc. In this workshop, we will explore several websites you can use in your Data Management/Number Sense Strands. An elaborate handout listing and describing many environmental websites will be shared. Come help save the planet. Presenter: Dan Charbonneau

Conference Program – Friday May 9th

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Friday 8:30 to 9:45 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F1.04	LT, SJ	Sen, PostSec	Tips on Using StatCan's Latest Data and Teacher Support Resources in your MDM4U & MAP4C Classes Finding rich datasets can be a challenge when teaching MDM4U. In this workshop, participants will have the opportunity to explore Statistics Canada's latest detailed data and teacher support resources for the MDM4U and MAP4C class. Come and try out our latest datasets and activities using Fathom or Excel. We will also demonstrate how our data can used in a social justice context. Complete lessons and a mini-project assignment will be provided for use with E-STAT and our Census and NLSCY youth microdata files. Resources to be used include: - Statistics Canada datasets, lessons and more at http://www.statcan.ca/english/kits/courses/smath2.htm - Ontario specific resources at http://teacherweb.com/on/statistics/math/ . Presenters: Joel Yan & Jennifer Hall
F1.05 Commercial	SJ, CC	Jun, Int	Math for Social Justice: Maththatmatters This hands-on workshop is about demonstrating that math and social justice are interdependent: race, class, gender, global economics, and power can effectively transform a "why are we doing this?" classroom into one of social responsibility, action, and....fantastic math learnings. Based on the new math resource book of 50 lessons, "Maththatmatters". Presenter: David Stocker
F1.06 Commercial	CC	11	The New MBF 3MC Course The grade 11 college math course (MBF 3C) has undergone a great amount of change. Using examples from McGraw-Hill Ryerson's new Foundations for College Mathematics 11 textbook and other resources, Steve will help teachers establish connections between the diverse number of concepts addressed in the curriculum. Classroom-ready activities will drive the hour! Presenter: Steve Etienne

Conference Program – Friday May 9th

Strand Legend: CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice; DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research			
Friday 8:30 to 9:45 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F1.07 (& F2.07)	LT, DI	Pri, Jun	DOUBLE SESSION: Bansho: A Collective Thinkpad (Advanced) Let's practise planning and implementing bansho for the teaching and learning of mathematics. Planning and assessment tools will be provided and used to improve our use of this strategy in classrooms and for teacher professional learning. This session is intended for educators who have some experience with bansho. Presenters: Kathy Kubota-Zarivnij & Mary Lou Kestell
F1.08	DI, AL	Gr. 9	Don't Despair- RESCUE is here! Remediate Every Student – Create Understanding Everywhere! How can we help ensure success for students in Grade 9 Mathematics who are working below grade level? At Middlefield CI, we created a Locally Developed course specifically focused on student success. Classroom ready activities/investigations will be presented, including the use of PRIME, to illustrate how we can increase students' conceptual understanding leading to a decrease in Grade 9 failure rates. We aim to illustrate strategies of what can be done with students coming into Grade 9 who are not yet prepared for the Grade 9 Applied or Academic curriculum. Presenters: Rosey Mastrofrancesco & Mike Morin
F1.09	LT, DI	Jun	Math - It's Clear to Me Now Engage your students in on-computer activities that help to develop the conceptual knowledge needed for the five math strands. In this presentation, lesson plans designed to effectively enhance the learning environment and learning experiences are incorporated through the use of technology. Methods and strategies for applying technology to maximize student learning will be demonstrated. Teachers will receive lesson plans following a REACH lesson plan format, incorporating effective technology-enhanced learning environments. Presenter: Cynthia Rutledge

Conference Program – Friday May 9th

Strand Legend: CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice; DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research			
Friday 8:30 to 9:45 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F1.10	AL	Gr. 1	Pedagogical Ninjas – Stories and Images of Formative Assessment This workshop will examine the day to day 'assessment for learning' decisions in Primary mathematics. We will share stories and images from Grade 1 classrooms dealing with formative assessment tasks targeted at the Number Sense and Numeration strand. The focus will be on the collaborative analysis of student work, representations of math concepts, teacher feedback to students and the development of effective strategies and next steps to help students progress and to further enhance whole class instruction. Presenter: Anna Brunette
F1.11	MP, CC	Int, Sen, PostSec	The Sliding Ladder Problem plus much more If we pull the bottom end of a ladder that is leaning against a wall so that it is becomes 10 cm further from the wall, is it true that the top of the ladder will fall by 10 cm? This simple problem will be the basis of a hands-on activity that is designed to enhance student understanding of the concepts of rate and rates of change. The activity can be used with students in grades 7-12 and topics that will be addressed include the Pythagorean Theorem, equations of circles and trigonometry. The TI83/84/NSpire and Sketchpad will be used to support the activity. Presenter: Ron Lancaster
F1.12	LT	Int, Sen	Introduction to TI-Nspire The new TI-Nspire has a Windows-like screen, menu-driven functionality and a computer algebra system that can change the way you teach algebra, graphing of functions, calculus, data management, to name just a few areas of mathematics. This session will introduce you to the TI-Nspire calculator and computer program - from the basics of the calculator, to creating documents that will enhance student learning. Presenter: Duncan LeBlanc

Conference Program – Friday May 9th



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Friday 8:30 to 9:45 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F1.13	DI, MP, CC	Pri, Jun, Int	Move, Groove and Visualize! Experience the joy of learning by actively engaging students through creative movement. Active learning improves student performance, academic achievement and cardiovascular fitness. Create simple creative movement pieces by using concepts taught in geometry and number sense. Presenter: Laurie Rossi
F1.14	MP, CC	Jun, Int	Mathematics Homework - A License to Thrill! This session will look at what types of out-of-school math experiences (otherwise known as math homework assignments!!) are helpful in assisting children in acquiring deeper mathematical understandings. Ideas and activities will be shared that can be used by teachers and parents. These tasks are interesting, can be easily implemented, and could be used to ensure that any time spent on math homework will be time well spent. Presenter: Cathy Chaput
F1.15 (& F2.15)	CC	Pri	DOUBLE SESSION: Making the Home Connection This double workshop will provide teachers with a variety of activities and resources they can use to get parents involved in doing mathematics with their child. The session will include ideas for grade one, grade two and grade three Family Math Nights. Each grade specific night includes activities from the five math strands along with handouts that parents and students take home. You will go away with all the resources you need to run your own Family Math Nights. The activities are integrated with the Early Math Strategies research and the Ontario Curriculum. Presenters: Angela McHardy, Darlene Charrette

Conference Program – Friday May 9th

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Friday 8:30 to 9:45 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F1.16	MP, LT	Pri, Jun	They Can Do It, But Do They Understand It? As elementary teachers, we spend a lot of time teaching children the "how to"s of the basic operations. Many children become competent at the algorithms, but do they really understand what they are doing? At my school, we discovered that even competent "doers" struggled to explain what they were doing. Hear about how we have worked to solve this problem using concrete manipulatives and clear language to develop understanding. Presenter: Eric Golombek
F1.17	CC	Int (7-10)	Geometry and Art Participants will have the opportunity to create a kaleidocycle using various design and colour patterns on connected 2D rhombuses. The rhombuses will be folded and glued into a working kaleidocycle. This is a fabulous activity which engages all students and produces very effective results involving patterning, problem solving, geometry and art. Presenter: Kathy McConkey
F1.18	MP, A	Pri, Jun	No Problem with Problem Solving Participants will explore teaching through problem solving in primary and junior classes. Come and examine how students share solutions during a math congress. Assessment and evaluation will also be addressed. Presenters: Duane Heide & Mark Toale

Conference Program – Friday May 9th

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Friday 8:30 to 9:45 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F1.19	LT, CC	Jun	Build Your Tool Box - Engaging Implementation Strategies for Junior Students Hook your junior students right from the start with engaging implementation strategies. Increase your repertoire of diverse approaches. Strategies addressing different learning styles, manipulatives, lesson structures, technology, and links to literacy will be demonstrated. Participants will receive a CD and corresponding lesson support materials which can be used in a variety of learning environments ranging from resource, intervention, enrichment and regular classroom use. Presenter: Perry Gelakis
F1.20 (& F2.20) Commercial	LT	Sen	DOUBLE SESSION: Teaching MHF4U and MCV4U: A Visual Approach Beauty through simplicity. Come join two McGraw-Hill Ryerson authors, Jay Speijer and Cheryl Warrington, as we tackle the curriculum expectations that begin with phrases such as: 'determine, through investigation with technology. The surprisingly straightforward techniques are aimed at concept development and making connections between algebraic and graphical representations. The session will be hands-on, so bring your favourite gadgets if you have them. Some activities will be drawn from the new grade 12 textbooks from MHR. Presenters: Jay Speijer and Cheryl Warrington

Conference Program – Friday May 9th

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Friday 8:30 to 9:45 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F1.22 GAINS	DI, MP	Int, Sen	TIPS, CLIPS AND GAINS for Grades 7-12 Follow' these research-based paths to differentiate instruction. 'Hear' from the developers and practitioners. 'See' video clips of promising practices in Ontario – classroom lessons, SMARTboard, records of student learning. 'Play' with the tools developed to engage students. 'Walk' away with a wealth of resources – lessons, assessments, samples of student work, recordings of professional learning sessions and supports for math coaches. Presenters: Greg Clarke, Myrna Ingalls, Irene McEvoy, Judy Dussiaume & Ross Isenegger

Conference Program – Friday May 9th

Strand Legend: CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice; DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research			
Friday 10:00 to 11:15 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F2.01	AL	Int, Sen	Opening Classroom Doors…Analyzing Records of Practice Records of practice enable teachers to reflect on teaching and learning through various lenses. Come and learn how the analysis of records of practice, including video, student work, assessment tools and lesson plans, can provide you with the opportunity to reflect on teaching and learning. Engage in this powerful professional learning experience, through dialogue with colleagues from around the province, in order to develop new understandings. Presenter: Shelley Yearley
F2.02	DI, MP, AL	Jun	DOUBLE SESSION: Teaching Mathematics Through Problem Solving (see F1.02) Presenter: Joyce Tonner
F2.03	CC	11-12	Using QuickTax In the Classroom QuickTax is available through OSAPAC to all Ontario schools. It has recently been introduced into the MEL4E program. This hands-on training workshop will help teachers who would like to learn how to use the software. Presenter: Denise Porter
F2.04	DI, LT	Pri	Information & Communication Technology for Numerical Literacy K-3: From Initiating Integration to Interactive Whiteboards Come and learn how to use ICT in your primary classroom to enhance your math program and better differentiate instruction! Participants will engage in hands-on activities using Ministry-licensed software, web-resources and interactive whiteboard technology. Presenter: Wendy Sahi

Conference Program – Friday May 9th



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Friday 10:00 to 11:15 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F2.05 Commercial	SJ, CC	Jun, Int	Math for Social Justice: Maththatmatters This hands-on workshop is about demonstrating that math and social justice are interdependent: race, class, gender, global economics, and power can effectively transform a "why are we doing this?" classroom into one of social responsibility, action, and....fantastic math learnings. Based on the new math resource book of 50 lessons, "Maththatmatters". Presenter: David Stocker
F2.06 Commercial	CC	12	"I Now Pronounce You Calculus and Vectors, May the Force Be With This Marriage!" There is no limit when it comes to helping your students derive an instantaneous and continuous relationship with the processes of the MCV 4U course. Be prepared to do some work when experiencing a sampling of investigative activities from McGraw-Hill Ryerson's new Calculus & Vectors text that are sure to help you project some excitement when teaching this course. Maximize your time by bringing your graphing calculator. It's no coincident that you will walk out with some student ready materials for your classes. That's just plane truth! Presenter: Antonietta Lenjosek, Roland Meisel
F2.07	LT, DI	Pri, Jun	DOUBLE SESSION**:** Bansho: A Collective Thinkpad (Advanced) (see F1.07) Presenters: Kathy Kubota-Zarivnij & Mary Lou Kestell

Conference Program – Friday May 9th

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Friday 10:00 to 11:15 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F2.08 Commercial	PD, AL	K-8	Numeracy Nets: Quick Assessment Tasks for Mathematics Numeracy Nets are a series of powerful questions and tasks designed to give teachers clear and instant information on which students will experience difficulty achieving grade-level expectations, and why. Based on ten years of research, each grade level Numeracy Net identifies and quickly assesses the critical understandings that need to be in place for success to occur; it then provides specific links to readily available classroom textbooks, Ministry documents, and professional resources for additional instructional support. This session will share the various elements of this new resource, how it works in the classroom, and how it could contribute to a school or system data wall. Presenter: Craig Featherstone
F2.09	LT, DI	K-3	You can REACH them all! Participate in this differentiated instruction for teaching elementary math! Topics include counting, place value, operations, problem solving, patterning, fractions and decimals. In this presentation, lesson plans designed to effectively enhance the learning environment and learning experiences are incorporated through the use of technology. Methods and strategies for applying technology to maximize student learning will be demonstrated. Teachers will receive lesson plans following a REACH lesson plan format, incorporating effective technology-enhanced learning environments. Presenter: Cynthia Rutledge

Conference Program – Friday May 9th

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Friday 10:00 to 11:15 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F2.10	AL	Gr. 1	Pedagogical Ninjas – stories and Images of Formative Assessment This workshop will examine the day to day 'assessment for learning' decisions in Primary mathematics. We will share stories and images from Grade 1 classrooms dealing with formative assessment tasks targeted at the Number Sense and Numeration strand. The focus will be on the collaborative analysis of student work, representations of math concepts, teacher feedback to students and the development of effective strategies and next steps to help students progress and to further enhance whole class instruction. Presenter: Anna Brunette
F2.11	LT	Int	CAS Activities for Grade 9 & 10 Applied This session will introduce users to the TI N-Spire CAS handheld unit and feature activities prepared by teachers of grade 9 and 10 applied Mathematics using CAS (Computer Algebra Systems). Participants will receive sample activities for use in their own classes. Presenter: Dwight Stead
F2.12	CC	Gr.12	Data and Statistics on the TI-NSpire Calculator Using the TI-NSpire calculator in Data Management to support the data and statistics requirements. Some experiences and assignments while acting as a pilot site will be shared. See how some features of Fathom have been adapted for the handheld. Presenter: Lynda Ferneyhough

Conference Program – Friday May 9th

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Friday 10:00 to 11:15 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F2.13	CC, MP, DI	Pri, Jun, Int	Move, Groove and Visualize! Experience the joy of learning by actively engaging students through creative movement. Active learning improves student performance, academic achievement and cardiovascular fitness. Create simple creative movement pieces by using concepts taught in geometry and number sense. Presenter: Laurie Rossi
F2.14	MP, CC	Sen	Six Faced Star – A Vector Construction Activity Participants will construct simple 3-dimensional objects, including a six faced star, to help Grade 12 Calculus & Vectors students feel and see vectors in space. The shapes are used both to introduce vectors and in culminating/review activities. Worksheets will be provided. Presenter: Bonnie Edwards
F2.15	CC	Pri	DOUBLE SESSION: Making the Home Connection (see F1.15) Presenters: Angela McHardy, Darlene Charrette
F2.16	LT, CC	7-12	Web 2.0 and Your Math Class How do we use Web 2.0 objects (blogs, wikis, mashups, RSS and other online production/publication sites) to support mathematics instruction and assessment? A variety of examples, in particular those that are free and "filter friendly", will be worked through for later online retrieval. Presenter: Calvin Armstrong

Conference Program – Friday May 9th

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Friday 10:00 to 11:15 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F2.17	CC	7-10	Geometry and Art Participants will have the opportunity to create a kaleidocycle using various design and colour patterns on connected 2D rhombuses. The rhombuses will be folded and glued into a working kaleidocycle. This is a fabulous activity which engages all students and produces very effective results involving patterning, problem solving, geometry and art. Presenter: Kathy McConkey
F2.18	MP, LT	4-12	Mathletes - This Isn't Your Everyday Math Club Are you looking for an interesting way to support creative thinking and collaborative problem solving in a fun, extra-curricular setting? If so, this is a session you won't want to miss. Teams compete against other schools using team relays and challenge problems. Practice materials and competition relays will be shared. Presenter: Mary Ellen Diamond
F2.19	DI, LT	Jr, Int, Sen, PostSec	Teaching Mathematics to the Visually Impaired Teaching Mathematics to a visually impaired student can be a challenge, with the complex notation used and the reliance on the visual representations. We will share some of our experiences as student and teacher last year with you; it was a wonderfully interesting time for both of us. We will explain some of the hurdles, discuss what works and what doesn't, and provide examples and resources for you to use. Presenter: Peter Thompson and Roisin Hartnet
F2.20 Commercial	LT	Sen	DOUBLE SESSION: Teaching MHF4U and MCV4U: A Visual Approach (see F1.20) Presenters: Jay Speijer and Cheryl Warrington

Conference Program – Friday May 9th

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Friday 10:00 to 11:15 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F2.21	MP, R, DI	Jun	Patterning and Algebra: A Powerfully Amazing Path Mathematics is "the science of patterns", and patterning and algebra is the strand in which the different components of mathematical thinking are integrated. In this session, we will outline the lesson sequence and how this supports student learning. Participants will be invited to engage in a variety of activities in patterning and algebra. We will also briefly highlight some of the results from our 4-year research project, particularly those that relate to student achievement, and to differentiated instruction. Presenters: Pat Milot and Ruth Beatty
F2.22 GAINS	DI, MP	Int, Sen	TIPS, CLIPS AND GAINS for Grades 7-12 Follow' these research-based paths to differentiate instruction. 'Hear' from the developers and practitioners. 'See' video clips of promising practices in Ontario – classroom lessons, SMARTboard, records of student learning. 'Play' with the tools developed to engage students. 'Walk' away with a wealth of resources – lessons, assessments, samples of student work, recordings of professional learning sessions and supports for math coaches. Presenters: Greg Clarke, Myrna Ingalls, Irene McEvoy, Judy Dussiaume & Ross Isenegger

PUBLISHERS' DISPLAY: 11:15 to 11:45 a.m.

Conference Program – Friday May 9th

Lunch and Keynote: 11:45 a.m. to 1:45 p.m.

Me to We: Educating Creative, Compassionate, and Committed Young Leaders

Marc Kielburger, Executive Director, Free The Children



It isn't easy to be a young person these days. Students struggle to cope with the realities of inequality, poverty and violence, in their own communities and across the globe. They are often portrayed as uninterested in the world around them, and considered incapable of taking action to change it for the better. The fact that young people are frequently on the receiving end of so much in our society—be it advice, instruction or homework often reinforces their feelings of insecurity and powerlessness.

Today, young people can benefit from giving help as much as they can from receiving it. Helping others enables youth to connect with a variety of people, develop new skills, and prove themselves worthy of trust. Studies show that students who volunteer get better grades, are less likely to drop out of school, and have higher self-esteem and better attitudes towards society. Young people who are involved in their communities tend to be more productive, and less likely to make harmful decisions. In a world rife with challenges, it is now more important than ever that educators empower students to embrace social involvement.

Marc Kielburger can empower educators to bring character education, social responsibility and leadership training into the classroom, helping students and educators alike to live the Me to We philosophy of social involvement, volunteerism and service to others.

As a co-founder of a trio of highly successful international organizations – Free The Children, Leaders Today and Me to We—this world-renown youth empowerment specialist has the passion, expertise and experience to motivate educators to inspire students, and equip them with the tools they need to be successful.

With three Nobel Peace Prize nominations, high profile partnerships with organizations including the United Nations and Oprah's Angel Network, and four best-selling books, Marc knows how to connect people with issues that matter. To date, he has changed the lives of more than a million people around the world.

Conference Program – Friday May 9th



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Friday 1:45 to 3:00 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F3.01	CC	Jun	The Artsy Mathematician or the Mathy Artist This hands-on workshop will explore many of the big ideas of visual arts and music as the context for interesting mathematics in all of the strands. Both presenters are passionate about their subjects and have been thrilled to uncover the connections in classroom-tested lessons that fuse geometry, number sense, patterning and measurement with visual representations in multi-media arts applications. While focusing on the junior grades, their collaborative work is designed to address expectations along the continuums of both mathematics and the arts. Teachers will leave with both original lesson plans and a package of "best picks" from several excellent resources that are ready-to-go. Presenters: Glynnis Fleming, Gerda Klassen
F3.02	MP	Int	Engaging Grade 9 Applied Students The mathematical processes form the basis of mathematics instruction. This workshop will explore and highlight activities and strategies that focus on helping students develop their problem solving skills and become more confident mathematicians by applying the processes. Sample activities, assessments and student exemplars will be shared. Presenter: Shirley Dalrymple

Conference Program – Friday May 9th

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Friday 1:45 to 3:00 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F3.03	CC	11-12	Modeling the World The new curriculum calls for modeling real life data with various functions while avoiding the "black box" of regression and trendlines. In this session, we will provide data sets from the real world and model them using graphing calculators and Fathom. This reinforces student understanding of functions and transformations from grades 9 to 12, thereby empowering students to solve application problems. Presenters: Peter Thompson & Aparna Singhal
F3.04 (& F4.04)	LT, CC	Jun	DOUBLE SESSION: Hands-On Census at School How fast are your reflexes? Do you have a good memory? Do your body measurements follow the golden mean? Find out by trying the new Census at School project, which allows Junior students to measure these and other attributes, using a fun on-line questionnaire. Part I: Register to use Census at School, how to set up your class to collect data, enter the data online, and how to download your class results into dynamic statistical software. Part II: Participants will use the data from Part I in several learning activities from different grade levels. Learn how to use TinkerPlots and Fathom. Investigate how this project could be used to meet curriculum expectations in several subject areas and grade levels. Presenters: Sheona Duthie, Sandra McIntyre & Cynthia Rutledge

Conference Program – Friday May 9th

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Friday 1:45 to 3:00 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F3.05	AL	Gr. 7-10	Planning with the Final Performance Task in Mind What does design down planning look like in mathematics? How has planning evolved? Follow the route used by a group of teachers, in developing a final course performance task. See how this leads to a plan for the rest of the course. Begin planning a task to use with your own students. Presenter: Christine Adam-Carr
F3.06	MP	Pri	Incorporating the Processes Expectations into the Primary Classroom This session will explore the mathematical processes expectations and how they develop a deeper understanding of concepts in primary students. Participants will learn how to integrate these processes into their daily lessons through an inquiry-based learning model and a three-part lesson format. Presenter: Kenneth Maheu
F3.07	DI	K, Pri	The Weave! Putting the Best Strategies Together for Student Learning We have found that our students are learning to use comprehension strategies such as inferring, making connections and asking questions in reading but have difficulty transferring this knowledge to other subject areas such as math. We have been working on using balanced literacy and comprehension strategies together to develop understanding of mathematical content and processes. Come and see and hear about our adventure in co-planning and co-teaching a variety of differentiated lessons using wonderful picture books. Leave with a deeper understanding of how to weave these subject areas together and with practical lessons to implement in your own classroom. Presenters: Beth Morrison & Laurie Moher

Conference Program – Friday May 9th

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Friday 1:45 to 3:00 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F3.08	SJ	Pri, Jun, Int, Sen	Religion and Numeracy: History, Mystery and Morality Number yourself among the chosen ones who were counted as the participants in a session that explored the links between numeracy and religion. This session will explore the importance of numbers in the Bible, the role of the Church in the history of numbers in the western world, and the justice implications and practical strategies for linking the social teachings of the church to numeracy lessons. Presenters: Christine deHaas & Michael Way Skinner
F3.09	R, MP	K-10	What I Did During My Summer Vacation - Japanese Lesson Study Immersion What do Japanese mathematics classrooms really look, sound, and feel like? During this session, participants will view and discuss aspects of school culture and mathematics teaching and learning in Japanese classrooms, using video and archives I gathered from my Japanese Lesson Study Immersion program in 2007. Presenter: Kathy Kubota-Zarivnij & Patricia Margerm
F3.10	LT, CC	7-12	Learning Algebra with a Variety of Tools This session will explore using algebra tiles and CAS (TI89 and TI N-Spire) in concert with paper and pencil to develop conceptual understanding of important algebraic ideas in Grades 7-12. Presenter: Tom Steinke

Conference Program – Friday May 9th

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Friday 1:45 to 3:00 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F3.11	LT, CC	Sen	Understanding Measures of Spread in Foundations of College Math Let's examine efficient ways of using the TI-83 Plus and the Inequality APP to help students understand measures of spread with real data through a visual method. Presenter: Derrick Driscoll
F3.12	LT	Sen	Using technology with an 11U/C class The use of technology can help students better understand mathematics. Activities used with students in an 11U/C class will be shared. Presenter: Beverly Farahani
F3.13 (& F4.13)	PD, MP	Pri, Jun, Int	DOUBLE SESSION: Towards a New Vision of Telling in Mathematics Education Many new approaches for teaching mathematics position the teachers as a facilitator, not a teller of mathematics. Teachers new to these approaches can struggle trying to help students develop mathematically accurate or efficient problem-solving strategies, without traditional telling. This session will begin with a brief overview of strategies to guide and push students' mathematical thinking, and then teachers will work in small groups on cases from real classrooms to determine effective teacher moves to further develop student mathematical thinking. To wrap up, participants will collaboratively summarize their best practices. Presenters: Diane Tepylo & Cecilia Kutas

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Friday 1:45 to 3:00 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F3.14 (& F4.14)	DI	Jun	DOUBLE SESSION: Looking for the Path to Student Success? Walk the "DI" Way! Dr. Lilian Katz has stated that when a teacher always teaches the same thing to the entire class at the same time "chances are one third of the kids already know it, one third will get it; and the remaining third won't". So two-thirds of the students are wasting their time. One of the current educational buzzwords is "differentiated instruction", but what does that really mean in mathematics? How do you differentiate? In this session, investigate practical, engaging strategies to reach all of your students and make the most of their learning time. Presenters: Jan Crofoot & Stephanie De Angelis
F3.15	MP	11-12	The Ascent to the Peak Solving good problems is like mountaineering. It requires effort, patience, resilience and skill. Those who dare are rewarded with a fulfilling journey, the great satisfaction of earned success, and an exhilarating view from the top. Both climbing and problem solving also require preparation and guidance. I will present a number of interesting problems and, most importantly, we will discuss ways to guide the students through the process, giving them just enough to keep them on track, but not so much that we spoil the problem for them. I will also give out a handout with other problems with suggestions of gradual hints. Presenter: Alexandru Pintilie

Conference Program – Friday May 9th

Strand Legend: CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice; DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research			
Friday 1:45 to 3:00 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F3.16	SJ, AL	Int, Sen	Placing ELL Students for Success This session will outline the Dufferin-Peel CDSB's revised assessment that places ELL students in the appropriate secondary Mathematics course. This assessment can quickly determine a student's prior Mathematical knowledge and recommend a Mathematics course. The process of how the assessment was developed and how the tool is administered will be shared. Presenters: Dwight Stead, Vesna Nikolic, Alexis Galvao, Wendy Lam
F3.17	CC	Pri, Jun, Int, Sen	The Math & Science of Motorsports: A Proving Ground for STEM Skills In this hands-on session, use the excitement and cutting edge technology of auto racing to answer the question, "Why am I learning this?" Participants use radio-controlled cars to engage in integrated mathematics, physics and technology activities. Elementary Math2Go students practise measurement, basic physical science, graphing and computation; advanced students use technology (3-D design software), physics and calculus to optimize performance. Implement these applied mathematics strategies on your own or join other schools collaborating and competing in Math2Go Challenges and the FastTrack Racing Challenges. Presenter: James Frielink

Conference Program – Friday May 9th

Strand Legend: CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice; DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research			
Friday 1:45 to 3:00 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F3.18	MP, AL	4-8	Taking the Story to Task Performance tasks are a valuable method of assessment in that both the solution and the mathematical processes are highlighted. This workshop will look at ways to weave performance tasks and mathematical stories in ways that will excite and engage all learners. In this workshop, we will look at many examples of wonderful children's literature, and link them to performance tasks for junior and intermediate students. Participants will receive a handout with suggested stories and connected performance tasks. We will also discuss practical strategies for managing the data that is yielded from the performance assessment. Presenter: Cathy Chaput
F3.19	SJ, CC	7-12	Socially-Based Math Is it possible to look at social justice issues in your math class? We will present a unit that was developed for the Ontario Secondary School Teacher's Federation. The focus of the unit is to teach students about personal and household budgets by examining the financial realities of minimum wage earners in Ontario. Students examine the concept of a "living wage" by researching the monthly expenses for various scenarios (for example: single persons vs. families). We will report on students' feedback in response to the unit and ways to implement the unit in various classes. Presenter: Hayssam Hulays

Conference Program – Friday May 9th



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DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research

Friday 1:45 to 3:00 p.m.

Session Code	Strand	Grades	Session Description
F3.20	PD, LT	Pri, Jun	Joyce Public School: A Recipe for Achievement in Mathematics Is there a recipe for achievement in mathematics? Over the last four years, Joyce Public school, an inner-city elementary school has consistently achieved math results above the provincial norm. In this session we will share our "ingredients" for creating a culture of mathematics in our school. These include how we develop mathematical expertise in teachers, how we use technology (software, SMARTboards) to support mathematical understanding, how we involve parents to support achievement, how we support special-needs children and how we build partnerships with other schools, universities and businesses to support our goals. Presenter: Cheryl Paige
F3.21	MP, LT	Int	Using Interactive Whiteboard Technology to Teach with Technology, Manipulatives and TIPS Activities will cross grades and strands and will be taken from the grades 7-10 TIPS and other resources. Mathematical processes are integrated throughout the activities and opportunities for assessment will be discussed. A SMARTBoard will be the platform to launch other technologies and manipulatives, including GSP, TI SmartView, SMARTNotebook, TinkerPlots, algetiles, link cubes...it's endless. The environment will model the interactive classroom and the sessions will be as interactive as the willing participants. The files are classroom ready and available to share. Presenter: Paul Costa

Conference Program – Friday May 9th

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Friday 1:45 to 3:00 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F3.22	DI, MP	Int, Sen	TIPS, CLIPS AND GAINS for Grades 7-12 Follow' these research-based paths to differentiate instruction. 'Hear' from the developers and practitioners. 'See' video clips of promising practices in Ontario – classroom lessons, SMARTboard, records of student learning. 'Play' with the tools developed to engage students. 'Walk' away with a wealth of resources – lessons, assessments, samples of student work, recordings of professional learning sessions and supports for math coaches. Presenters: Greg Clarke, Myrna Ingalls, Irene McEvoy, Judy Dussiaume & Ross Isenegger

Conference Program – Friday May 9th

Strand Legend: CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice; DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research			
Friday 3:15 to 4:30 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F4.01	CC	Jun	The Artsy Mathematician or the Mathy Artist This hands-on workshop will explore many of the big ideas of visual arts and music as the context for interesting mathematics in all of the strands. Both presenters are passionate about their subjects and have been thrilled to uncover the connections in classroom-tested lessons that fuse geometry, number sense, patterning and measurement with visual representations in multi-media arts applications. While focusing on the junior grades, their collaborative work is designed to address expectations along the continuums of both mathematics and the arts. Teachers will leave with both original lesson plans and a package of "best picks "from several excellent resources that are ready-to-go. Presenters: Glynnis Fleming & Gerda Klassen
F4.02	LT, SJ	Int, Sen, PostSec	Exploring Whole-School Student Ownership of TI N-Spire In this session, Tom will share his lived experience moving his grades 7 - 12 school away from the expensive and unsustainable class set model of school purchased handheld technology towards a more effective, affordable, and sustainable model of student ownership of TI Nspire CAS handheld Learning Tools - Social Justice technology. Challenges, successes, social justice issues, and strategies will be shared. Presenter: Tom Steinke

Conference Program – Friday May 9th

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Friday 3:15 to 4:30 p.m.

Session Code	Strand	Grades	Session Description
F4.03	SJ	Jun, Int, Sen	Environmental Math for All Students With so much concern being raised about the environment, why are we not using real environmental data with our math students so that they can form their own opinions on global warming, pollution, over population, etc. In this workshop we will explore several websites you can use in your Data Management/Number Sense strands. An elaborate handout listing and describing many environmental websites will be shared. Come help save the planet. Presenter: Dan Charbonneau
F4.04	LT, CC	Jun	DOUBLE SESSION: Hands-On Census at School (see F3.04) Presenters: Sheona Duthie, Sandra McIntyre & Cynthia Rutledge
F4.05	MP	Int	Learning through the Mathematical Processes Come and engage yourself in a variety of activities that promotes learning math content through the mathematical processes. These activities will focus on the Grades 7-9 curriculum. Presenter: Patricia Steele
F4.06 Commercial	CC	11	From McGraw-Hill Ryerson . . . Introducing the New Functions & Applications Resource! Join Steve Etienne as he introduces a new resource for the grade 11 College/University math course (MCF 3M) from McGraw-Hill Ryerson. Hands-on activities from the resource will lead teachers to a better understanding of the new curriculum and the pathways leading into and out of this course. Presenter: Steve Etienne

Conference Program – Friday May 9th



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Friday 3:15 to 4:30 p.m.

Session Code	Strand	Grades	Session Description
F4.07	CC, MP	4-8	Recreational Mathematics: Capturing the AHA! Feeling How do we get students to want to investigate mathematical concepts, to enjoy the challenge of problem solving, to discover the wonder of that AHA! moment? Well, recreational mathematics provides one avenue. By incorporating mathematical games, puzzles, and other recreational activities into the math program, you can lead students to the wonder and beauty of mathematics. A handout will be provided. Presenter: Julian D'Angela
F4.08	MP, AL	Pri	Assessment in the Primary Math Class Participants will look at how to set clear, student-friendly targets and select assessments that will identify instructional starting points, guide the teacher in moving the students forward, and assess their understanding at the end of a unit of study. Presenter: Kim Stolys
F4.09	CC	PostSec	Mathematics with New Vision: Ferns, Galaxies and Fractals The advent of new technologies allows for amazing mathematics that take us to the world of Discrete mathematics. This workshop looks to future directions for mathematics in the 21st Century using fractals and recursive. Presenter: Nahid Golafshani
F4.10	MP, CC	8 & 12	Gambling and Probability The Problem Gambling Project at the Centre for Addiction and Mental Health has developed curriculum materials related to probability and gambling prevention which connect to the grade 8 and 12 mathematics courses. Gambling prevention programs should be part of any comprehensive school health program. Our material will soon be available free from our web page at www.ProblemGambling.ca. The presentation will introduce educators to these creative lessons plans which meet curriculum expectations. Presenter: Colleen Tessier

Conference Program – Friday May 9th

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Friday 3:15 to 4:30 p.m.

Session Code	Strand	Grades	Session Description
F4.11	LT, CC	Sen	Probability Simulations for Foundations of College Math Use the TI-83 Plus to satisfy curriculum expectations for probability. Help students understand that experimental probability converges to theoretical probability with a large number of trials. Presenter: Derrick Driscoll
F4.12	DI, LT	Int, Sen	TI-89 and CAS for beginners This session will introduce participants to the TI-89 and the use of CAS in the Grades 9, 10 and 11 courses. This is an introductory to CAS and will help familiarize participants to the power of using the calculators to enhance the learning of Algebra. Presenter: Duncan LeBlanc
F4.13	PD, MP	Pri, Jun, Int	DOUBLE SESSION: Towards a New Vision of Telling in Mathematics Education (see F3.13) Presenters: Diane Tepylo & Cecilia Kutas
F4.14	DI	Jun	DOUBLE SESSION: Looking for the Path to Student Success? Walk the "DI" Way! (see F3.14) Presenters: Jan Crofoot & Stephanie De Angelis
F4.15	DI	Int, Sen	Project Imagination The most rewarding projects lead students to begin from a common theme, and then develop meaningful, engaging pursuits. Approachable at many levels, and with teacher conferences and a variety of evaluation strategies, these projects move students to research, reason and communicate in a rich mathematical method. A hallmark of this program is the involvement of the teacher throughout the development of a student's project. Workshop participants will be introduced to a model for planning interesting, challenging, extended projects for their math students. A collection of outlines and samples will be tabled for discussion. The group will collaborate on developing project themes for their next classes of students. Presenter: James Hay

Conference Program – Friday May 9th



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Friday 3:15 to 4:30 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F4.16	MP	SK – 2	Walking with Piaget Learn strategies for creating a classroom where students work towards autonomy through games and discourse. We will discuss how to encourage children to communicate their thinking orally in a risk-free learning environment. A review of Constance Kamii's research and application of Piaget's theory in how children invent arithmetic will be the focus of the presentation. Presenter: Chester Makischuk
F4.17	PD	K, Pri, Jun, Int	Improving Numeracy with School Teams How can we get beyond the event based professional development model? Should administrators and resource teachers be included in numeracy improvement? This session will expose participants to a professional development model is being used in St. Clair Catholic DSB. Having school teams participate in ongoing sessions is helping to begin to change some school cultures and beliefs. The organizational structure, short term and long term goals as well as some challenges and lessons learned will be shared. Presenter: Jamie Majeski
F4.18	LT	Jun, Int	Cuisenaire Rods – What Are They and How Can I Use Them? Investigate ways to use Cuisenaire Rods/Relational Rods for various math strands focusing on the intermediate level. Hands-on introduction. Lessons and ideas that you can use in the classroom next week. Presenter: Elaine Buzovetsky
F4.19	LT	Jun, Int, Sen	Rotation and Mirror Symmetry in 3-D In this hands-on workshop the participants will investigate the rotation and mirror symmetries of several 3-dimensional solids using manipulative materials. Relationship between the symmetry axis and mirror planes will be studied. Presenter: Aniceta Skowron

Conference Program – Friday May 9th



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Friday 3:15 to 4:30 p.m.

Session Code	Strand	Grades	Session Description
F4.20	LT, CC	Int (7-8)	Build Your Tool Box - Engaging Implementation Strategies Hook your students right from the start with engaging implementation strategies. Increase your repertoire of diverse approaches. Strategies addressing different learning styles, manipulatives, lesson structures, technology, and links to literacy will be demonstrated. Participants will receive a CD and corresponding lesson support materials which can be used in a variety of learning environments ranging from resource, intervention, enrichment and regular classroom use. Presenter: Perry Gelakis
F4.21	MP, LT	Int	Using Interactive Whiteboard Technology to Teach with Technology, Manipulatives and TIPS Activities will cross grades and strands and will be taken from the grades 7-10 TIPS and other resources. Mathematical processes are integrated throughout the activities and opportunities for assessment will be discussed. A SMARTBoard will be the platform to launch other technologies and manipulatives, including GSP, TI SmartView, SMARTNotebook, TinkerPlots, algetiles, link cubes...it's endless. The environment will model the interactive classroom and the sessions will be as interactive as the willing participants. The files are classroom ready and available to share. Presenter: Paul Costa

Conference Program – Friday May 9th

Strand Legend: CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice; DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research			
Friday 3:15 to 4:30 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
F4.22	DI, MP	Int, Sen	TIPS, CLIPS AND GAINS for Grades 7-12 Follow' these research-based paths to differentiate instruction. 'Hear' from the developers and practitioners. 'See' video clips of promising practices in Ontario – classroom lessons, SMARTboard, records of student learning. 'Play' with the tools developed to engage students. 'Walk' away with a wealth of resources – lessons, assessments, samples of student work, recordings of professional learning sessions and supports for math coaches. Presenters: Greg Clarke, Myrna Ingalls, Irene McEvoy, Judy Dussiaume & Ross Isenegger

End of Friday Sessions

Conference Program – Saturday May 10th



Strand Legend: CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice; DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research			
Saturday 8:30 to 9:45 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
S1.01 Commercial	DI, MP	9-12	Engaging the Applied and College Bound Mathematics Learner Engagement and on-going support of the applied and college-bound learner is critical to their success with high school mathematics. This workshop will explore the nature of this learner and their unique learning styles, and explore strategies that have proven effective in addressing their diverse learning needs. Strategies and activities used in the Pearson Applied and College Mathematics series will be shared. Presenter: Cathy Heideman
S1.02 (& S2.02) Commercial	LT, DI	Pri, Jun	"Back to Square One" - 101 Ways to Use The Learning Carpet, a 100 Square Floor Grid This is a fast-paced, interactive workshop introducing many and varied ways to use The Learning Carpet, a 6'x6' 100 square floor grid. Teachers will actively experience concepts in all five strands of mathematics, as well as practical strategies for teaching map and globe skills. Presenter: Wendy Hill
S1.03 Commercial	DI, MP	7-9	Developing Mathematical Minds Math is a subject often thought of as coming naturally to some and not easily for others. We know that every student is capable of making sense of mathematics. This is our goal as math educators. This session will explore how and why students struggle in mathematics and will look at effective teaching and learning strategies to support these students in their learning. Learn about an intervention program, Mathematical Minds from Pearson Education, with which students are excited, engaged and building confidence and skills in mathematics. Presenter: Amy Lin

Conference Program – Saturday May 10th

Strand Legend: CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice; DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research			
Saturday 8:30 to 9:45 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
S1.04	LT	Sen	Making Connections using GIZMOS This workshop will provide cross-curricular examples between the revised Mathematics Curriculum and upcoming Science Curriculum. The workshop will highlight how teachers can incorporate interactive web applets (such as Gizmos) into everyday lessons. The focus of the workshop will be on the Grade 12 Calculus and Vectors course (MCV 4U), and will include applications such as: analyzing the Greenhouse Effect; the energy of objects in periodic motion, using 2D vectors to model electric and magnetic fields; torque and levers; pH analysis of household items; and , half-life of radioactive isotopes. Connections to other courses in the secondary curriculum will also be discussed. Presenter: Dan Bruni
S1.05 (& S2.05)	LT	Int, Sen	DOUBLE SESSION: Spatial Geometry and Symmetry The participants will learn how to enrich the spatial perception of students from ages 6-12 by gradually and playfully exposing them to non-algebraic mathematical concepts such as symmetry, decomposition to nets and truncation. The participants will be immersed in 3-dimensional geometry through hands-on discovery activities using new manipulative materials. The participants will build and investigate highly symmetrical 3-dimensional solids and discover why they are the main Nature's building blocks. Presenter: Aniceta Skowron

Conference Program – Saturday May 10th



Strand Legend:

CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice;
DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research

Saturday 8:30 to 9:45 a.m.

Session Code	Strand	Grades	Session Description
S1.06 (& S2.06 & S3.06)	PD	General	TRIPLE SESSION: Facilitation for Mathematics Leaders Are you a math consultant, coach, contact teacher, divisional lead or department head? Are you interested in learning how to get the most from teachers and administrators by creating buy-in, generating participation and empowering them? Then come and learn about facilitation! With its focus on listening, asking instead of telling and building consensus, facilitation is the essential skill for any leader working collaboratively with others. Through demonstrations and the application of their new learning during this session, delegates will gain a deeper understanding of the skills and knowledge required to be an effective facilitator. Walk away with a new skill set that you can use anywhere as a system leader! Presenters: Sandra Fraser & Connie Quadrini
S1.07	AL	Sen	Grade 12 Advanced Functions (MHF) Final Unit: Putting It Together! See and experience a final unit "Modeling With More Than One Function" for the Grade 12 Advanced Functions (MHF) course, developed with the end in mind. An overview of the unit will be shared as well as some complete lessons and black line masters. Try your hand at a card game to review the concepts, which can be used with your students. An assessment bank of questions for learning and of learning will be distributed. Presenters: Anne Yeager, Irene McEvoy, Paul Alves

Conference Program – Saturday May 10th

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Saturday 8:30 to 9:45 a.m.

Session Code	Strand	Grades	Session Description
S1.08	DI, CC	Sen	Journals Games and Activities for Grade 11 Come spend some time connecting a variety of strategies to specific situations in grade 11 math. One particular way to use journals will be explored. Many activities (manipulatives and calculator based) will be used as well as games to get your students up and moving around. All activities are classroom ready. Bring some of your favourites to share. Some of these ideas can be easily modified for grades 9, 10 or 12. Presenters: Edmund Ching and Marcel Te Bokkel
S1.09	LT	Sen	"No Textbook, You Say!?!?!?" Having been thrust into teaching both Advanced Functions and Calculus and Vectors without a nicely tied together package – more commonly called a textbook – I will demonstrate how a "Wiki" could change your teaching permanently. I will also detail the types of assignments that will engage students in the mathematics and get you actively involved as well. Presenter: Stewart Craven
S1.10	CC	Int, Sen	Pascal's Triangle: Patterns and Applications Pascal's triangle is a treasure trove of mathematical patterns and applications. Many see it simply as a triangle of numbers related to the previous terms. In reality, there are hundreds of patterns and applications that your students can discover and have fun with. Connections can be made to number sense, algebra, geometry, nature and probability, at any grade level. Have an enjoyable session and come away with some interesting classroom-ready ideas and materials. Presenter: Wayne Erdman
S1.11	LT, CC	Sen (11)	MCF 3M - A Hands on Approach An informative session designed to introduce the inclusion of technology and data collection into the redesigned MCF 3M course. MS Excel, the TI calculator, Logger Pro and WinPlot software are featured. Participants will receive copies of currently used summative evaluations and activities that involve collection of data for all three themes of the course (quadratic, exponential and periodic relationships). Presenter: Bryan Dennie

Conference Program – Saturday May 10th



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Saturday 8:30 to 9:45 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
S1.12	LT	Int, Sen	Creative Geometry with Cabri 3D Let students loose with Cabri 3D and what do you get? Strange structures, animated creatures – and the opportunity to apply 2D geometry concepts in a rich and creative environment. This session will report on a project involving Grade 7/8 students using Cabri 3D and will make available the learning materials that have been developed for participants to explore for themselves. Presenter: Kate Mackrell
S1.13	DI	Sen	Grade 11 College Math: building student success. This workshop will focus on using technology to help support student learning, assessment and evaluation and practical teaching strategies suitable for the curriculum of this course. It will include Geometer sketchpad activities, classroom resources and sample assessment and evaluation tools. Presenter: Cheryl Warrington
S1.14	MP	Int, Sen, PostSec	Visual Reasoning: Rates of Change without Derivatives We have developed a series of tasks, using physical models, GSP, and more conceptual reasoning which explore the optimum values of functions. In testing, these move towards 'making sense' of the situation and the proposed optimal values. They can work well from Grade 8 through to first year university, either with primarily visual reasoning or in parallel with formulae and derivatives. The problems include 2 and 3-dimensional geometric images (e.g. the GUM popcorn box problems, the field on the river) and engage some 'big ideas' connecting change of volume to surface area, and change in area to perimeter. As always, connecting multiple representations, and confirming that something from an algorithm 'makes sense' in the senses, is a powerful way to build core concepts and understanding for a diverse group of students. Such connections also provide a powerful incentive for core processes such as reasoning and communication. Participants are encouraged to bring their own examples. Presenter: Walter Whitely and Michael Seto

Conference Program – Saturday May 10th



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Saturday 8:30 to 9:45 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
S1.15	MP	Pri, Jun	Reasons for Reasoning You may have had an experience with the following rhyme: "Yours is not to question why…" Since reasoning is now a process expectation in the revised curriculum, it is now required that students learn to reason. What might reasoning look like? What tasks could be used to develop reasoning? How do students use reasoning to develop a bansho? These ideas will be explored in this session. Presenter: Patricia Margerm
S1.16	AL	Int, Sen	Expanding Your Repertoire of Assessment and Evaluation Strategies and Tools In this session we will explore a variety of formative and summative assessment strategies and tools that can be used with many topics in Gr. 9-12. These can be used in addition to, or instead of, quizzes and tests. We will present suggestions for assessment of learning such as student-created comic strips, photo essays, storybooks, and conducting interviews. Suggestions for assessment for learning will include skill checks, student-created quiz portfolios, online journals, as well as several active strategies. Presenters: Karen Timson & Agatha Kowalewski
S1.17	CC	Pri	Authentic Integrated Mathematics Come and experience authentic mathematics in a hands-on and interactive format. Learn to teach math authentically by integrating the five strands of mathematics with number sense and numeration as the primary strand. . This session will give teachers practical information to help plan more effectively. Lesson plans, lesson materials, and evaluation tools will be part of the handouts. It will be a fun and engaging workshop which will help you refocus and reevaluate your teaching and assessment methods. Presenter: Ramona Dempsey

Conference Program – Saturday May 10th

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DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research

Saturday 8:30 to 9:45 a.m.

Session Code	Strand	Grades	Session Description
S1.18	MP, AL	Pri, Jun	No Problem with Problem Solving Participants will explore teaching through problem solving in primary and junior classes. Come and examine how students share solutions during a math congress. Assessment and evaluation will also be addressed. Presenter: Duane Heide & Mark Toale
S1.19	AL	Jun, Int	Assessment OF Learning through Games Games are a powerful strategy of engaging students who struggle with math and of challenging students to create their own. Through carefully phrased questions and dynamic observations, games present an invaluable tool for assessing students' conceptual understanding and their ability in problem solving. The immediate feedback that teachers can provide has shown to be a strong motivator in students' continued interest in math class. We welcome you to join in our fun-filled game session with student exemplars (including teacher questions) galore. Presenters: Mary Rome and Wai Yin Mok
S1.20	PD	Pri, Jun, Int	What Happens in the Mathematics Classroom? During the last year we watched students become engaged as mathematicians with math-talk happening on a daily basis. We have observed deep discussion focused around student work created by students and shared with students. The use of Bansho, math congress, wait time, teacher-facilitated student dialogue and real problems have contributed to the shift in learning by our students. As consultants within the Toronto District School Board, we have approached our work with teachers through the use of traditional PD combined with co-teaching. In this workshop, we will share some aspects of our work including the use of Cathy Fosnot's resources in K-6 classrooms, and TIPS 4RM, Van de Walle and Good Questions in 7 and 8 classrooms. Presenters: Elizabeth Ainslie and Maria Bodiam
S1.21			C^3: Seeing Mathematics the Smart Way This hands on session focuses on mathematical connections, communications & the use of calculators to explore the Grade 9 strands of Number Sense, Algebra and Linear Relationships via the Smartboard, TI-SmartView and the TI-84+ graphing handheld. Participants will receive a copy of all activities presented. Presenter: Dr. Katherine Staltare

Conference Program – Saturday May 10th

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Saturday 10:00 to 11:15 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
S2.01	MP	Int (9)	Engaging Grade 9 Applied Students The mathematical processes form the basis of mathematics instruction. This workshop will explore and highlight activities and strategies that focus on helping students develop their problem solving skills and become more confident mathematicians by applying the processes. Sample activities, assessments, and student exemplars will be shared. Presenter: Shirley Dalrymple
S2.02 Commercial	LT, DI	K-6	DOUBLE SESSION: "Back to Square One" - 101 Ways to Use the Learning Carpet, a 100 Square Floor Grid (see S1.02) Presenter: Wendy Hill
S2.03	MP	Jun	"Please, Just Tell Me How to Solve this Problem!" While many students in our classrooms embrace challenging mathematics, others shut down as soon as a problem is posed. Research tells us that teaching through problem solving leads learners to a deeper understanding of mathematical concepts. In this session, a collection of strategies and structures will be shared to help all learners engage in rich problem solving. Presenter: Paul Gautreau

Conference Program – Saturday May 10th

Strand Legend: CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice; DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research			
Saturday 10:00 to 11:15 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
S2.04	LT	Sen	Making Connections using GIZMOS This workshop will provide cross-curricular examples between the revised Mathematics Curriculum and upcoming Science Curriculum. The workshop will highlight how teachers can incorporate interactive web applets (such as Gizmos) into everyday lessons. The focus of the workshop will be on the Grade 12 Calculus and Vectors course (MCV 4U), and will include applications such as: analyzing the Greenhouse Effect; the energy of objects in periodic motion, using 2D vectors to model electric and magnetic fields; torque and levers; pH analysis of household items; and , half-life of radioactive isotopes. Connections to other courses in the secondary curriculum will also be discussed. Presenter: Dan Bruni
S2.05	LT	Int, Sen	DOUBLE SESSION: Spatial Geometry and Symmetry (see S1.05) Presenter: Aniceta Skowron
S2.06 (& S3.06)	PD	General	TRIPLE SESSION: Facilitation for Mathematics Leaders (see S1.06) Presenters: Sandra Fraser & Connie Quadrini
S2.07	AL	Sen	Grade 12 Advanced Functions (MHF) Final Unit: Putting It Together! See and experience a final unit "Modeling With More Than One Function" for the Grade 12 Advanced Functions (MHF) course, developed with the end in mind. An overview of the unit will be shared as well as some complete lessons and black line masters. Try your hand at a card game to review the concepts, which can be used with your students. An assessment bank of questions for learning and of learning will be distributed. Presenter: Anne Yeager, Irene McEvoy, Paul Alves

Conference Program – Saturday May 10th

Strand Legend: CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice; DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research			
Saturday 10:00 to 11:15 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
S2.08 (& S3.08)	PD	Pri, Jun, Int	DOUBLE SESSION: Where Is The Math? Collaboratively Planning for Relevant Instruction Learning is a social activity. Students require the opportunity to talk about what they are experiencing, in a facilitated, risk-free environment to enhance their learning. Similarly, teachers who work and talk together, learn from one another and collectively have a greater impact on student learning. This session looks at the power of professional dialogue regarding mathematics instruction, and planning for relevant integration across disciplines. The goal is to improve teaching and learning in the classroom within the school and across a Board. Delegates will have the opportunity to discuss, experience and analyze the planning process in relation to their context. Presenters: Mark Kolohon and Wendy Racknor
S2.09	PD	Sen	Grade 12 Advanced Functions (MHF4U) Discussion Group This session is a discussion group for teachers of the Gr. 12 Advanced Functions course. The facilitator will share his department's experiences with the course - what worked well, what didn't, and will share resources found to be effective. Participants will have an opportunity to share their own experiences in both small and large group format. Please bring any materials you wish to share on a memory stick. These materials will be made available to participants at a later date. Presenter: Mahmood Pournasola
S2.10	MP, LT	7-12	Alternative Approaches to Developing Mathematical Thinking There are many ways to encourage and develop mathematical thinking outside the limitations provided by the textbook. I will share resources like puzzles, brain-teasers, mental math challenges, lateral thinking questions, games, manipulatives, The Simpsons, and other alternative tools that I have used successfully in my classrooms at Eastdale C.I. (a high needs school). In addition, I will share ideas on how I taught my kids to "love" algebra and do trigonometry without a calculator or trig table! Presenter: Sunil Singh

Conference Program – Saturday May 10th

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Saturday 10:00 to 11:15 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
S2.11 (& S3.11)	LT	Sen	Using the new TI-Nspire calculators and software in MCV4U Participants will try out some MCV activities that incorporate the new hand-held N-Spire devices. The use of the Computer Algebra System (CAS) and the multi-representational approach will be emphasized. The new companion N-Spire software will also be utilized. No experience with either the handheld device or the software is necessary. Presenter: Kevin Maguire and Anthony Meli
S2.12	LT	Jun, Int, Sen	Thinking in 3D with dynamic visualization software Spatial thinking plays a crucial role in many aspects of human problem solving and people process spatial information when they navigate, when they manipulate objects, and when they design them. In this workshop we explore the ways in which spatial thinking in 3D might be supported through using 3D software applications such as Cabri 3D and small software applications developed in the DALEST project, a European initiative to develop free small software applications to enhance spatial thinking in three dimensions. Presenter: Kate Mackrell and Keith Jones
S2.13 (& S3.13)	CC, DI	Jun	DOUBLE SESSION: Taking the Fear Out of Fractions! Do you have a fear of teaching fractions? Fear no more. This session will explore the conceptual development of fractions and related concepts. We will engage in hands-on, multi-modal activities to address the needs of all Junior learners. Problem solving will also be addressed through the use of bansho. Presenter: Gina Micomonaco

Conference Program – Saturday May 10th

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Saturday 10:00 to 11:15 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
S2.14	MP	Pri	Problem Solving is Walking the Path of Thinking This path of thinking in problem solving wanders through a First Nations' context of primary level numeracy. A model for problem solving relevant to children in grades 1, 2, and 3 incorporates the cultural connections that all of us can experience, learn from, and grow with. The nature of problem solving as a 'thinking activity' and a 'connecting activity' is approached through a visual and graphic sense of patterns and classroom activities. Presenter: Jamie Pyper
S2.15	CC	Pri, Jun	A Closer Look at Lesson Introductions Research tells us that the introduction or beginning of the lesson should make connections to the students' experiences. What difference does the introduction make to the mathematics that students use in a lesson? This question is the result of observing the same textbook lesson in three classrooms in the same school in which the students responded in three different ways. Did the introduction influence the ways in which the students solved the problem? Let's find out. Presenter: Patricia Margerm
S2.16	DI	Pri, Jun	Math Games for Children and Parents Math games provide a low stress, high interest opportunity for children to explore and practice their math skills. At this workshop, participants will receive instructions for a variety of math games that are popular with many children. The development of learning, including how to identify stages and challenges in understanding, will also be discussed. Presenter: Andrew Morrison

Conference Program – Saturday May 10th

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Saturday 10:00 to 11:15 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
S2.17	CC	Pri, Jun, Int	Math Stories: Building Literacy and Numeracy This session will present an array of daily word problems or "math stories" at the primary, junior and intermediate levels that develop numeracy and literacy in the classroom. The math problems will be presented through an interactive student and teacher math web site. Increase your students' literacy through numeracy and numeracy through literacy. Each participant will leave with many stories to solve and a great introduction to a math website to take back to class! Presenters: Ramona Dempsey and Stephanie Cross
S2.18	DI	Int	Alternatives for At-Risk Grade 9 Students We've had success with our mathematically at-risk Grade 9 students. Come and hear about our GLS100 credit course, which students take concurrently with MFM 1P0. Developed and delivered by mathematics teachers, the course combines Learning Skills and Mathematics Presenter: Terry Hinan
S2.19	AL	Jun, Int	Assessment OF Learning through Games Games are a powerful strategy of engaging students who struggle with math and of challenging students to create their own. Through carefully phrased questions and dynamic observations, games present an invaluable tool for assessing students' conceptual understanding and their ability in problem solving. The immediate feedback that teachers can provide has shown to be a strong motivator in students' continued interest in math class. We welcome you to join in our fun-filled game session with student exemplars (including teacher questions) galore. Presenters: Mary Rome and Wai Yin Mok

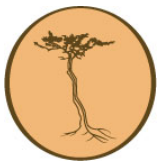
Conference Program – Saturday May 10th

Strand Legend: CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice; DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research			
Saturday 10:00 to 11:15 a.m.			
Session Code	**Strand**	**Grades**	**Session Description**
S2.20	PD	General	What Happens In the Mathematics Classroom? During the last year we watched students become engaged as mathematicians with math-talk happening on a daily basis. We have observed deep discussion focused around student work created by students and shared with students. The use of Bansho, math congress, wait time, teacher-facilitated student dialogue and real problems have contributed to the shift in learning by our students. As consultants within the Toronto District School Board, we have approached our work with teachers through the use of traditional PD combined with co-teaching. In this workshop, we will share some aspects of our work including the use of Cathy Fosnot's resources in K-6 classrooms, and TIPS 4RM, Van de Walle and Good Questions in 7 and 8 classrooms. Presenters: Elizabeth Ainslie and Maria Bodiam

Conference Program – Saturday May 10th

Strand Legend: CC – Curriculum Connections; MP – Mathematical Processes; LT – Learning Tools; SJ – Social Justice; DI – Differentiated Instruction; AL – Assessment for Learning; PD – Professional Development Models; R – Research			
Saturday 11:30 a.m. to 12:45 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
S3.01	LT	Sen	Hearing and Seeing Mathematics: Podcasting and Drawing in MHF4U This workshop will provide you with two ready-to-use culminating activities (including rubrics) for MHF4U. See how you can reach your math students through their iPods. Learn how your students can create their own podcasts to study for their MHF4U exams. Participants will also learn how to use the Draw function on the TI-83 and 84 calculators. See how your students can demonstrate their understanding of all functions taught in the MHF4U course. Bring your own graphing calculator so that you can walk away with pictoral examples composed of functions. Presenter: Jane Lee
S3.02 Commercial	PD	K, Pri, Jun, Int, Sen	Enhancing Instruction through Records of Practice Since teaching is a cultural activity, it tends to fall into unconscious patterns that are difficult to examine and evaluate, and even more difficult to improve. By analyzing video of classroom lessons – authentic records of teaching practice – we have the opportunity to slow down teaching, witness and critique those cultural tendencies, and move towards enhancing our instruction. In this session, we will analyze records of practice and discuss both the power and challenges of using them as a professional learning tool. Furthermore, we will explore how these records could be used within professional learning communities, and identify the conditions and structures needed for the learning to maintain its integrity and focus. Presenter: Craig Featherstone
S3.03 Commercial	CC	Int	The Teaching of Vectors in the New MCV Course In this session, we will focus on the new MCV course with a strong emphasis on the Algebra portion. Specifically, we will centre on some areas of difficulty students encounter as well as some coping strategies for teachers. We will also discuss Nelson's new book for this course which was designed to help teachers and students deal with these concerns in their classroom. The discussion will be led by the author of the Algebra part of the new book. Presenter: Maja Ivkovic

Conference Program – Saturday May 10th



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Saturday 11:30 a.m. to 12:45 p.m.

Session Code	Strand	Grades	Session Description
S3.04	DI	Jun, Int	Helping English Language Learners in the Math Class Stressed by 'differentiated learning'? Concerned about how to help your Engligh Language Learners? In this session teachers will use authentic texts to examine strategies that will help their English Language Learners master the language and understand the concepts of Mathematics. Presenter: Maureen Sims
S3.05	AL	Pri	Assessment in the Primary Math Class Participants will look at how to set clear, student-friendly targets and select assessments that will identify instructional starting points, guide the teacher in moving the students forward, and assess their understanding at the end of a unit of study. Presenter: Kim Stolys
S3.06	PD	General	TRIPLE SESSION: Facilitation for Mathematics Leaders (see S1.06) Presenters: Sandra Fraser & Connie Quadrini
S3.07	LT	Int, Sen	Capturing the Elusive Quadratic Even inexpensive digital cameras will usually record video clips. You can use such a camera to capture the flight of a projectile, and then enter the flight path data into the Geometer's Sketchpad® using any computer and video playback program, such as Windows Media Player or Quicktime. We'll show you a simple method of data transfer from the video directly into the Geometer's Sketchpad®, then fit a parabolic function to the data using sliders. If you have a digital camera, even a simple one, bring it along. We'll finish the session with a direct application of trajectory mathematics involving shooting springs into a target. Prizes will be awarded to those who are skilled enough, or lucky enough, to accurately render the theoretical into the practical. This session will be partly demonstration and partly hands-on activities. Presenter: Roland Meisel and Jay Speijer

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S3.09	PD	Sen	Grade 12 Advanced Functions (MHF4U) Discussion Group This session is a discussion group for teachers of the Gr. 12 Advanced Functions course. The facilitator will share his department's experiences with the course - what worked well, what didn't, and will share resources found to be effective. Participants will have an opportunity to share their own experiences in both small and large group format. Please bring any materials you wish to share on a memory stick. These will be made available to participants at a later date. Presenter: Mahmood Pournasola
S3.10	LT	Int, Sen	Bringing Math to Life with GSP4, TinkerPlots, and Fathom Ideas will be shared for making math meaningful and motivating using these three provincially licensed software applications. Explore and learn how you can capitalize on the student take home rights for GSP4 and Fathom. Every participant will receive a DVD with a rich set of resources. Presenter: Tom Steinke
S3.11	LT	Sen	Using the new TI-Nspire calculators and software in MCV4U (see S2.11) Presenter: Kevin Maguire and Anthony Meli
S3.12	LT	Sen	A Picture is Worth More than a Thousand Words: Connecting the Math Around Us. Come and see how TI technology and everyday pictures can bring math concepts to life. This will be a hands on activity based session for Grades 9 - 12. Presenter: Darryl Marchand
S3.13	CC, DI	Jun	DOUBLE SESSION: Taking the Fear Out of Fractions! (see S2.13) Presenter: Gina Micomonaco

Conference Program – Saturday May 10th

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Saturday 11:30 a.m. to 12:45 a.m.

Session Code	Strand	Grades	Session Description
S3.14	CC	Int	Using Literacy Skills to Improve Intermediate Math Skills How can the right questioning, talking and writing in an intermediate math program improve student learning? In this interactive workshop, the participants will experience various ways to improve intermediate students' mathematics skills through literacy in shared, guided and independent activities. The activities will focus on the improvement of student proficiency in mathematics and to meet the needs of all types of learners: visual, auditory and kinesthetic. Presenter: Luisa Busato
S3.15	CC	Pri, Jun, Int	Family Math Night - How, What and Why Trying to get your math message out to parents? The best way to inform parents about the mathematics that is taking place in classrooms today is to invite them to a fun, engaging, and informative math night. Holding a Family Math Night does more than just pass along knowledge about math content. It helps create a mathematical community that includes parents, children, and educators. In this session, you will learn ways to organize and run a successful Family Math Night and come away with ready to go activities and ideas for events. Presenter: Danielle Blair
S3.16	DI	Pri, Jun	Math Games for Children and Parents Math games provide a low stress, high interest opportunity for children to explore and practice their math skills. At this workshop participants will receive instructions for a variety of math games that are popular with many children. The development of learning, including how to identify stages and challenges in understanding, will also be discussed. Presenter: Andrew Morrison
S3.17	DI	Int, Sen	Self Directed Learning in Mathematics Students learn at different rates. The teaching of concepts, assessment, and evaluation, can be tailored to individual student needs. Presenter: Halyna Kopach and Bogdan Marzewski

Conference Program – Saturday May 10th

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Saturday 11:30 a.m. to 12:45 p.m.			
Session Code	**Strand**	**Grades**	**Session Description**
S3.18	PD	Pri, Jun, Int	Joyce Public School: A Recipe for Achievement in Mathematics Is there a recipe for achievement in mathematics? Over the last four years, Joyce Public school, an inner-city elementary school has consistently achieved math results above the provincial norm. In this session we will share our "ingredients" for creating a culture of mathematics in our school. These include how we develop mathematical expertise in teachers, how we use technology (software, SMARTboards) to support mathematical understanding, how we involve parents to support achievement, how we support special-needs children and how we build partnerships with other schools, universities and businesses to support our goals. Presenter: Cheryl Paige
S3.19	PD	K, Pri, Jun, Int	Collaborative Constructivism: How Do Students and Teachers Effectively Construct Knowledge in Mathematics in an Elementary School Setting?" Increasingly, the need for a paradigm shift in professional development that promotes change and best serves teachers, teacher candidates and elementary school students in mathematics education, is being sought through different models of professional development. What modes of professional development work well for teachers and students? Which pedagogical/ theoretical approach would best suit students and teachers in mathematics? During this workshop, suited best for leaders in mathematics education (Course Directors at Faculties, Administrators, Resource Staff, Professional Learning Local Staff such as PLN Teachers, and School-based teacher leaders), a model that incorporates all stakeholders will be presented and discussed. Presenter: Anna D'Armento

Conference Program – Saturday May 10th



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Saturday 11:30 a.m. to 12:45 p.m.

Session Code	Strand	Grades	Session Description
S3.20	CC	Sen	A Model for Teaching Modelling – An ISU for Functions Our classrooms are filled with students who have diverse backgrounds: We have developed a three-month, five-stage Independent Study Unit that provides students with the opportunity to learn about mathematical modeling by working on a topic of their own choosing beginning with an artifact that inspires them, eg a piece of artwork. Over three months, they develop an algebraic according to criteria they are given, evaluating and refining at each stage. Students use on-going feedback to improve and refine their models. Each student has the same opportunity for success through individual guidance and support. Although this ISU has been introduced with our Grade 11 MCR students, we are currently testing this process in Grade 10 and hope to take it through to Grade 12 Advanced Functions. Come to our session and learn more, look at exemplars, and discuss how this project could be used in your classes to effectively integrate differentiated instruction into your teaching. Presenters: Judy Mendaglio and John Rodgers

End of Saturday Sessions

OAME 2008 Conference Planner

Thursday, May 8, 2008	
8:30 – 9:45	Session 1:
10:00 – 11:15	Session 2:
11:15 – 11:45	***Exhibitor Displays***
11:45 – 1:45	**Lunch & Keynote Speaker**, *Dr. Marian Small* (Cost included in conference fees.)
1:45 – 3:00	Session 3:
3:15 – 4:30	Session 4:
4:30 – 5:00	***Exhibitor Displays***

Friday, May 9, 2008	
8:30 – 9:45	Session 1:
10:00 – 11:15	Session 2:
11:15 – 11:45	***Exhibitor Displays***
11:45 – 1:45	**Lunch & Keynote Speaker**, *Marc Kielburger* (Cost included in conference fees.)
1:45 – 3:00	Session 3:
3:15 – 4:30	Session 4:
4:30 – 5:00	***Exhibitor Displays***

Saturday, May 10, 2008	
8:30 – 9:45	Session 1:
10:00 – 11:15	Session 2:
11:30 – 12:45	Session 3:

Conference Registration Form

OAME 2008 Registration Fees:

OAME STATUS	FULL*	THURS* & SAT	FRI* & SAT	THURS* ONLY	FRI* ONLY	SAT ONLY
NEW OR EXISTING MEMBERS	260	215	215	185	185	65
OAME RETIRED MEMBERS	245	195	195	165	165	55
OAME Student Members	185	150	150	130	130	50
NON-MEMBERS	295	245	245	200	200	75

***PLEASE NOTE THAT ONE BUFFET LUNCH PER DELEGATE WILL BE PROVIDED FOR THURSDAY AND FRIDAY CONFERENCE REGISTRATION.**

Please complete the following information:

Name:			
Address:			
School Name & Board:			
Daytime Telephone #:		Fax #:	
Email:			
OAME Member:	☐ YES (Membership #: _____) ☐ NO		
	☐ I wish to become a member – enclose the membership fee and pay the New or Existing Members registration fee (Visit http://www.oame.on.ca/main/files/membership/membershipform.pdf to download the OAME membership form.)		
Special Dietary Needs (please include food allergies):			
Hotel Accommodations:	Please call 1-800-668-0101 to make reservations at the: Sheraton Parkway Hotel ($139/night) or Best Western Hotel ($109/night)		
Paid Evening Events:	☐ Nine & Dine ($50) ☐ Vaughan Mills ($5) ☐ OAME Awards Banquet ($45)		
Total Amount Enclosed: ☐ Cheque ☐ Credit Card	$	**Please include your MCIS # for processing purposes:**	

ALL PAID REGISTRATIONS WILL BE CONFIRMED BY EMAIL/FAX WITHIN 10 DAYS OF BEING RECEIVED.
RECEIPTS WILL BE AVAILABLE WHEN DELEGATE REGISTER AT THE CONFERENCE.
PLEASE NOTE THAT REFUNDS WILL BE GRANTED, LESS AN ADMINISTRATION FEE OF $25 UNTIL APRIL 23RD, 2008.

Please send this Registration Form and a cheque made payable to OAME2008 to:
St. Elizabeth CHS, c/o Diana Vena, 525 New Westminister Dr., Thornhill, Ontario, L4J 7X3
OR FAX to #519-471-6324 with Credit Card Information: ☐ VISA ☐ Mastercard

Cardholder Name (Print):		Today's Date:	
Card Number:		Expiry Date:	
Authorizing Signature:			

FOR FURTHER INFORMATION , CONTACT DIANA VENA, diana.vena@ycdsb.ca OR
SUE HESSEY, #519-471-6324, oame.hessey@sympatico.ca

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