

The NEWSLETTER is a publication of the  
Canadian Mathematics Education Study Group

Ce BULLETIN est une publication du Groupe  
canadien d'étude en didactique des mathématiques

*CMESG is a group of mathematicians and mathematics educators who meet annually to discuss mathematics education issues at all levels of learning. The aims of the Study Group are:*

- 1) *to study the theories and practices of the teaching of mathematics*
- 2) *to promote research in mathematics education*
- 3) *to exchange ideas and information about all aspects of mathematics education in Canada*
- 4) *to disseminate the results of its work.*

*Le GCEDM est composé de personnes oeuvrant en mathématiques et en didactique des mathématiques et qui se réunissent une fois par année pour étudier diverses questions relatives à l'enseignement des mathématiques à tous les niveaux. Les buts du Groupe sont les suivants:*

- 1) *susciter une réflexion critique sur la théorie et la pratique de l'enseignement des mathématiques*
- 2) *encourager la recherche en didactique des mathématiques*
- 3) *faciliter l'échange d'idées et d'information sur tous les aspects de l'éducation mathématique au Canada*
- 4) *faire connaître les résultats de ses travaux.*

### IN THIS ISSUE / DANS CE NUMÉRO (in order of appearance / en ordre d'apparition)

- ? President's Message / Message de la Présidente
- ? Other CMESG News / Autres nouvelles du GCEDM
  - o Executive Profiles/Profils Exécutifs
    - o Frédéric Gourdeau/Florence Glanfield
- ? What's Happening in Math Education/Ce qui se passe en didactique des mathématiques
  - o Conference Report
    - ? Changing the Culture 2004 Conference – *Malgorzata Dubiel*
  - o Forthcoming Forum
    - ? FCEM 2005 de la SMC/CMS CFME 2005 -- *Frédéric Gourdeau*
- ? More Upcoming Professional Meetings/Autres Rencontres à Venir
- ? Coordonnées des personnes à contacter / Contact Information
  - o CMESG Editors / Les Éditeurs du GCEDM
- ? L'Exécutif du GCEDM / CMESG Executive



# PRESIDENT'S MESSAGE DE LA PRÉSIDENTE

Malgorzata Dubiel, Simon Fraser University  
(dubiel@cs.sfu.ca)

Welcome to the CMESG/GCEDM Spring 2004  
Newsletter!

If you are reading this Newsletter on the web, you have probably noticed that our website looks different, and you may also have noticed that its location has changed as well although the URL [www.cmesg.math.ca](http://www.cmesg.math.ca) still works. We have a new web editor, George Gadanidis, who took over during the Acadia University strike, and has already given a new look to our website. Thank you, George, for agreeing to take the job at very short notice!

I want to express our gratitude to David Reid, who created the website and maintained it for the past six years - or was it more? Thanks to David, we have our Newsletters in electronic form and scrapbooks from our annual meetings, starting from 1999, and many other interesting links. Thank you, David!

This is the last time I will be writing an introduction to the Newsletter. My term as the CMESG President ends at the end of this month. At our Annual General Meeting, which will take place on Monday, May 31st, at Université Laval, Frédéric Gourdeau will take over as our new President. Congratulations to Frédéric, and to Florence Glanfield, who was elected as a member of the Executive for a two-year term. Congratulations also to Joel Hillel and Luis Radford, who were co-opted to the Executive for one-year terms.

Congratulations also to David Reid and Ralph Mason, who were elected members of the FLM Board of Directors, both for four year terms.

\* \* \*

Bienvenue au bulletin du printemps 2004 du  
GCEDM/CMESG !

Si vous lisez ce bulletin sur le web, vous avez probablement remarqué que notre site a beaucoup changé bien que l'adresse en soit toujours [www.gcdem.math.ca](http://www.gcdem.math.ca). Nous avons un nouvel éditeur, George Gadanidis, qui a pris la relève pendant la grève à Acadia, et il a déjà donné une nouvelle apparence à notre site. Merci George d'avoir accepté de prendre le relais si rapidement.

J'aimerais remercier David Reid qui a mis sur pied le site du groupe et s'en est occupé pendant six années, et peut-être davantage. Grâce à David, les bulletins sont disponibles sous format électronique, ainsi qu'un album photo virtuel de nos rencontres annuelles (depuis 1999) et des liens vers d'autres sites intéressants. Merci David !

Il s'agit de ma dernière introduction au bulletin puisque je termine mon mandat comme présidente du GCEDM à la fin du mois. Frédéric Gourdeau prendra la relève comme président lors de l'assemblée générale annuelle du lundi 31 mai 2004, à l'Université Laval. Félicitations à Frédéric, ainsi qu'à Florence Glanfield qui a été élue membre de l'Exécutif pour un mandat de deux ans. Nos félicitations à Joel Hillel et Luis Radford, qui sont membres désignés de l'Exécutif pour un an.

Finalement, nos félicitations à David Reid et à Ralph Mason qui ont été élus membres du Conseil d'administration de FLM, chacun pour un mandat de quatre ans.

\* \* \*



## OTHER CMESG NEWS/AUTRES NOUVELLES DU GCEDM Executive Profiles/Profils Exécutifs

### President/Président Frédéric Gourdeau

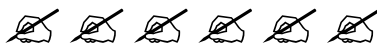
À la demande de notre éditeur préféré, je me présente: Frédéric Gourdeau, dit l'homme à la couette (qui a perdu son identité en Angleterre... vous verrez, ou plutôt vous ne verrez plus).

Je suis professeur au Département de mathématiques et de statistique de l'Université Laval.

J'ai horreur des absolus, mais comme il faut bien avoir des chouchous, allons-y...

- ? La blague mathématique que j'aime le mieux est celle des deux types dans la Montgolfière... Je vous la raconterai si vous ne la connaissez pas !
- ? Ma preuve mathématique préférée est celle dite des sphères de Dandelin pour les coniques.
- ? L'éducateur que j'admire le plus serait sans doute Paolo Freire.
- ? J'ai les absolus en sainte horreur, et je ne me répète jamais. Ce que j'aime le moins : la vérité, à moins que ce ne soit ceux qui disent la posséder...
- ? Si vous voulez m'offrir un verre, vous avez l'embarras du choix : scotch (single malt !), armagnac, eau-de-vie ou un bon vin rouge ! Ici, j'aime mieux rester vague. Vous ais-je dit que j'ai horreur des absolus ?

Et mon mot du jour... meilleur chance la prochaine fois !



### Membre de l'Exécutif/Executive Member Florence Glanfield

I've been asked to take a bit of this newsletter to introduce myself. I was recently elected to the CMESG executive and it is indeed an honor to be a part of this national organization. CMESG has a long, rich, history and I'm happy to be a part of continuing that history.

I currently work at the University of Saskatchewan, in the College of Education. I've lived in Saskatoon for 5.5 years after living my entire life in Alberta. When I first mentioned that I was moving to Saskatoon my friends teased me about how "Roy Romanow (the then premier of Saskatchewan) must be rolling out the red carpet because there are not many people who move east from Alberta to Saskatchewan!"

Moving to Saskatoon did change my life. I met my husband Andy here and my work has been exciting. I teach mostly in the undergraduate teacher education program, teaching mathematics education at the elementary, middle, and secondary levels.

Prior to moving to Saskatchewan in 1999, I was actively involved in curriculum development, curriculum implementation, and student assessment in Alberta. I've had the opportunity to work with students and teachers in all geographic regions of Canada and am actively involved in provincial, national and international mathematics education organizations.

WESTCAST in Saskatoon in 2005

The University of Saskatchewan is inviting you to participate in the Western Canadian Association for Student Teaching annual conference, February 16 – 19, 2005 in Saskatoon. Please consider sharing your research and/or teaching ideas at this conference. Please visit the website [www.usask.ca/education/westcast](http://www.usask.ca/education/westcast) for more information. I hope to see you in Saskatoon in February!



## **WHAT'S HAPPENING IN MATH EDUCATION / CE QUI SE PASSE EN DIDACTIQUE DES MATHÉMATIQUES**

### **Conferences Past**

#### **Changing the Culture 2004 Conference Mathematics Curriculum: Could Less be More?**

Malgorzata Dubiel  
Department of Mathematics  
Simon Fraser University

The seventh annual Changing the Culture conference, sponsored and supported by the Pacific Institute for the Mathematical Sciences, was held April 23rd, 2004, at the SFU Harbour Centre campus, 515 W. Hastings Street, Vancouver.

Over the last seven years, the conference has become a forum gathering school teachers from all levels, and faculty and graduate students from colleges and universities. Participants discuss issues relating to education in mathematics, and work together towards improving the teaching and image of mathematics. This year, over ninety participants took part in talks, workshops and discussions focusing on school mathematics curriculums, and students' preparation for university courses, including Calculus and Mathematics for Elementary School Teachers.

The problem of overloaded and over engineered curriculum was one of the key issues identified at the Canadian Forum on School Mathematics, held May 16 - 18th, 2003, in Montreal (see

<http://www.cms.math.ca/Events/CSMF2003/>). This topic was further discussed at the CMESG/GCEDM 2003 meeting at Acadia, and at the Education Session of the CMS Winter 2003 meeting in Vancouver (for discussion paper, see <http://www.cms.math.ca/Events/winter03/ed-panel.html>).

The conference participants were welcomed by Dr. Ivar Ekeland, Director of the Pacific Institute for the Mathematical Sciences. Three plenary talks formed the core of the conference. Stewart Craven from the Toronto School Board spoke about the recent changes in the Ontario school curriculum: compression from 13 to 12 grades, a total redesign of the curriculum, and its effects on the first new cohort which graduated last June. His talk was followed by a short talk by Peter Liljedahl, Faculty of Education, SFU, Process or Product: Exactly What Is It We Want From Our Students? Peter explored some of the problems with the BC curriculum, as an introduction to this year's workshops.

This year's workshops were closely modeled on the CMESG Working Groups. The participants had a choice to join one of the three workshops for the duration of the conference. The workshops focussed on students preparation for High School, for Calculus, and for the Mathematics for Elementary School Teachers courses offered at BC universities and colleges, in an attempt to identify what we really would like students to learn in school.

In the afternoon, a panel discussion, with Katharine Borgen, VSB/UBC, Bernice Kastner, Towson University, Petra Menz, SFU and Katie Pirquet, Edward Milne School, looked at various aspects of curriculum, from the historical through textbooks, classroom experiences, the role of the teacher, and shared personal reflections.

The conference ended with a talk A Community of Learners: Preparing Students for University and for Life, by Elaine Simmt, Faculty of Education, University of Alberta. Elaine talked about her experiences working with grade 7 teachers and students over the course of a school year, to illustrate the issues involved in achieving the desired proficiencies while using the teaching methods being promoted in the new curricula.

More information about the conference, including abstracts of the talks, can be found on the conference website, [www.pims.math.ca/ctc](http://www.pims.math.ca/ctc). A full report from the conference, including reports from the workshops and video recordings of talks, will be posted later in May on this website.



## CONFERENCES FORTHCOMING

### CMS CFME 2005

The Canadian Forum on Mathematics Education will be held May 6 – 8, 2005 at the University of Toronto and at the Fields Institute. Florence Glanfield, Frédéric Gourdeau and Bradd Hart are the co-chairs of the Forum.

To give you some idea of what the Forum is about, we can say that the program committee is currently considering the overall theme “**Why teach mathematics?**” The working groups would be grouped in 3 large sub-themes, which are (at this stage of our discussions) Mathematics and Society; Mathematics in the classroom: curriculum and pedagogical approaches; and The mathematical education community in Canada : we working together. We are planning ten working groups and even if the themes of these working groups have been largely identified, the program committee is still at work and it would be premature to be more precise.

One idea for a public event either before the meeting starts or some time during the meeting revolves around the idea “Celebrating our successes: innovative projects in mathematics education from Canada.”

We are sure that many members of CMESG will take part in the Forum and more information will be available in a few months.

### FCEM 2005 de la SMC

Le Forum canadien sur l’enseignement des mathématiques se tiendra du 6 au 8 mai 2005 À l’Université de Toronto et à l’Institut Fields. Florence Glanfield, Frédéric Gourdeau et Bradd Hart en sont les co-présidents.

Bien que les décisions ne soient pas finalisées (le comité de programme travaille encore), le thème sur lequel nous travaillons actuellement pour le FCEM 2005 serait « **Pourquoi enseigner les mathématiques?** » Nous formerons des groupes de travail autour de quelques sous-thèmes, qui sont à l’heure actuelle Les mathématiques et la société; Les mathématiques à l’école : programmes et méthodes pédagogiques; et Les enseignants de mathématiques au Canada : travaillons ensemble. En tout, nous désirons avoir une dizaine de groupes de travail et bien que nous ayons déjà identifié des sujets potentiels, il est trop tôt pour en dire davantage. Le comité de programme doit poursuivre son travail

On a lancé une idée d’activité populaire qui pourrait se tenir soit avant, soit durant le Forum, et qui tournerait autour du thème « Célébrons nos réussites : projets innovateurs en enseignement des mathématiques au Canada ».

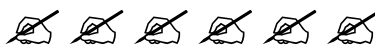
Nous sommes certains que plusieurs membres du GCEDM prendront part au FCEM et davantage d’information sera rendue disponible dans les mois à venir.

## MORE UPCOMING PROFESSIONAL MEETINGS / AUTRES RENCONTRES À VENIR

### Fields Institute Symposium

“Online mathematical investigation as a narrative experience” is the theme of the upcoming Fields Institute symposium to be held June 11 to 13, 2004, at the Faculty of Education, University of Western Ontario. The symposium’s goal is to address the nature of mathematical experience and what makes for a good mathematics story in the context of designing online mathematical investigation. Facilitating investigation adds significantly to the complexity of online instructional design. Keynote speakers include Andy diSessa, Apostolos Doxiadis, Uri Leron, and Nathalie Sinclair. The Faculties of Education and

Science at the University of Western Ontario and Harcourt Canada, along with the Fields Institute, are sponsoring the symposium. For further information go to <http://www.edu.uwo.ca/mathstory/>



## COMING TO KNOW... Numeracy in the Early Years

The College of Education, University of Saskatchewan and several Saskatoon area school districts are hosting a two-day conference on early numeracy. The conference, intended for primary teachers, school administrators, and consultants, is billed as “an opportunity to explore our own ‘coming to know’ in conversation with ...Grayson Wheatley and Geri Lorway around young children and numeracy.” For further information go to <http://www.usask.ca/education/conferences/numeracy/index.htm>



**SMC:** Du 13 au 15 juin 2004. Université Dalhousie. **CMS:** June 13-15, 2004. Dalhousie University. [www.cms.math.ca](http://www.cms.math.ca)

**ICME – 10.** July 4-11 July 2004. Copenhagen. **ICME – 10.** Du 4 au 11 juillet 2004. Copenhagen.

**Mathematical Education into the 21st Century Project Conference 2004.** June 26-July 1, 2004. Ciechocinek, Poland. [arogerson@vsg.edu.au](mailto:arogerson@vsg.edu.au)

**PME – 28 :** July 14-18, 2004 Bergen. Norway. **PME – 28** Du 14 au 18 juillet 2004. Bergen, Norway. [www.pme28.org](http://www.pme28.org)

**CMS:** December 11-13, 2004. McGill University. **SMC:** Du 11 au 15 decembre 2004. Université McGill. [www.cms.math.ca](http://www.cms.math.ca)

**PME-NA :** Du 21 au 24 octobre 2004. Toronto. **PME-NA.** October 21-24, 2004. <http://pmena.org/2004>



## CONTACT INFORMATION / COORDONNÉES DES PERSONNES À CONTACTER CMESG Editors / Les Éditeurs du GCEDM

Proceedings editors / Les éditeurs des Actes: Elaine Simmt ([elaine.simmt@ualberta.ca](mailto:elaine.simmt@ualberta.ca)), Brent Davis ([brent.davis@ualberta.ca](mailto:brent.davis@ualberta.ca))

Webpage editors/Responsables du site sur l'hypertoile: George Gadanidis ([ggadanid@uwo.ca](mailto:ggadanid@uwo.ca)), Nathalie Sinclair ([nathsinc@math.msu.edu](mailto:nathsinc@math.msu.edu)).




## Newsletter Editor / Editeur du Bulletin

Please submit contributions to / Veuillez envoyer vos contributions à:

**Doug Franks**  
Faculty of Education  
Nipissing University  
North Bay, ON P1B 8L7

Phone: (705) 474-3461 ext. 4457  
email: [dougf@nipissingu.ca](mailto:dougf@nipissingu.ca)  
Fax: (705) 474-1947

I would like to thank Frédéric Gourdeau for his major contribution as translator, reviewer, and editor of all French language text. - Doug Franks



## L'EXÉCUTIF DU GCEDM/CMESG EXECUTIVE 2003-2004

The members of the executive extend an invitation to you to contact us about any item of interest. If you have something you want to suggest, if you have a concern you wish to raise, if you want more information, etc., please let one of us know. In order to be of service to the membership, we need to be aware of what your interests are.

**Malgorzata Dubiel, President**

Department of Mathematics and Statistics  
Simon Fraser University  
Burnaby, BC V5A 1S6  
email: [dubiel@cs.sfu.ca](mailto:dubiel@cs.sfu.ca)  
Fax: (604) 291-4947

**Ralph Mason, Recording Secretary**

Dept. of Curriculum, Teaching & Learning  
272 Education Bldg.  
University of Manitoba  
email: [masonrt@ms.umanitoba.ca](mailto:masonrt@ms.umanitoba.ca)  
Fax: (418) 656-2817

**Luis Radford, Member at Large**

École des sciences de l'éducation  
Université Laurentienne  
Pavillon Alphonse Raymond  
935, chemin du lac Ramsey  
Sudbury, ON P3E 2C6  
courriel : [lradford@laurentienne.ca](mailto:lradford@laurentienne.ca)  
Fax : (705) 675-4816

Les membres du Comité exécutif vous invitent à leur faire part de votre point de vue concernant n'importe quel aspect de la vie du GCEDM. Que ce soit pour transmettre suggestions ou commentaires, ou encore pour être mieux informé, n'hésitez pas à entrer en contact avec l'un d'entre nous. En nous faisant connaître vos intérêts, vous nous aidez à mieux vous servir.

**Olive Chapman, Treasurer & Membership Secretary**

Faculty of Education  
University of Calgary  
2500 University Drive NW  
Calgary, AB T2N 1N4  
email: [chapman@ucalgary.ca](mailto:chapman@ucalgary.ca)

**David A. Reid, Vice-President**

School of Education  
Acadia University  
Wolfville, NS B0P 1X0  
email: [david.reid@acadiau.ca](mailto:david.reid@acadiau.ca)  
Fax: (902) 585-1071

**Caroline Lajoie, Co-Conference Coordinator**

Département Mathématiques  
Université du Québec à Montréal  
CP 8888, Succ. Centre Ville  
Montréal, PQ H3C 3P8  
courriel : [Lajoie.caroline@uqam.ca](mailto:Lajoie.caroline@uqam.ca)