

SERG News

November 7, 2008

Inside This Issue

- 1 Welcome
- 2 Introduction to the SERG executive 2008-2009
- 3 2008 SERG conference summary report
- 4 Canadian Journal of Science, Mathematics and Technology Education
- 5 CRYSTAL's third national conference
- 6 Researcher profile
- 7 Message from SERG Past President
- 7 Important dates and deadlines



Welcome!

We are very pleased to bring you this inaugural issue of the SERG newsletter. We hope that this semi-annual publication will be a way to build community and encourage communication among SERG members. It will include announcements, research profiles, news, job postings, and anything else of relevance to the Canadian science education community.

Of particular importance at this time is the upcoming CSSE submission deadline of November 12. We encourage all members to submit their research proposals to SERG so that we can continue our conversations from CSSE 2008 and build a strong conference program for CSSE 2009. We also would like to take this opportunity to remind everyone to renew their SERG membership when renewing for CSSE.

Looking forward to seeing you in Ottawa in May 2009!

Sincerely,

Wendy Nielsen, Azza Sharkawy, Marie-Claire Shanahan
SERG Executive 2008-2009

Bienvenue!

Nous sommes très heureux de vous apporter ce bulletin inaugural de SERG. Nous espérons que cette publication semi-annuelle sera une manière de cultiver notre communauté et d'encourager la communication parmi les membres de SERG. Elle inclura des annonces, des profils de recherches, des nouvelles, des signalisations de travail, et toute autre chose d'importance pour la communauté canadienne d'éducation dans la science.

D'importance particulière est la date-limite pour les soumissions au SCEE qui nous arrive rapidement: le 12 novembre. Nous encourageons tous les membres à soumettre leurs propositions de recherches à SERG de sorte que nous puissions continuer nos conversations de SCEE 2008 et établir un programme fort de conférence pour SCEE 2009. Nous également voudrions saisir cette occasion de rappeler chacun de renouveler leur adhésion de SERG en renouvelant leur adhésion de SCEE.

On vous attend à Ottawa au mois de mai 2009!

Sincèrement,

Wendy Nielsen, Azza Sharkawy, Marie-Claire Shanahan
Directeurs 2008-2009 de SERG

An introduction to the SERG Executive 2008-2009

In 2004, Samson enlisted me to assist him when he was Secretary of SERG. So, naturally, as he moved to Vice President, I became Secretary, and now, with the rules of succession, I am President. I am fortunate to have been mentored into SERG, and enjoy the terrific relationships that have developed over these few years.

After many years as a high school teacher in both California and BC, my doctoral work is just now concluding, and it is indeed a privilege to work in the university setting and build from my own classroom teaching experience. As a researcher and teacher educator, I hope, as we all do, that my work is meaningful for science teachers and students. SERG is one of the ways for me to share my work with the wider science education community.

When I am not at school, I enjoy outdoor pursuits and occasionally ditch my office on a sunny day to walk on the beach or go for a long bike ride. I also enjoy team sports, and am currently learning to play field hockey, complete with its funny rules. I live in an overpriced apartment in Vancouver and wish I had a cat.

Wendy Nielsen, President, (nielsenw@gmail.com), 604-822-2302.

Greetings Everyone! I hope in my capacity as Vice-president of SERG that I will rise to the challenge of continuing the wonderful work of my predecessors. I am excited about the opportunity to serve a community that I have benefited much from in past years, first as a fledgling graduate student, and in more recent years, as a new faculty member. It will be an honour and a pleasure to work with my talented colleagues: Wendy Nielsen (President of SERG) and Marie-Claire Shanahan (Secretary-Treasurer) – both bring a passion and commitment to building a strong and rich science education research community.

I am also fortunate, at Queen's University, to have the opportunity to work with a talented and diverse group of academics. Through my research, I hope to contribute to our knowledge of how to make science education more accessible and how to use science education as a vehicle for positive social change.

As soon as conference proposals for the upcoming CSSE conference in Ottawa are turned in, you will be hearing from me again: I will be on the lookout for generous volunteers willing to review proposals! I look forward to hearing from you in the near future and to another productive and engaging conference in Ottawa this coming May.

Best wishes, Azza Sharkawy, Vice-President, (sharkawa@queensu.ca), 613-533-6000 Ext. 77429.

Hello SERG members! It is a pleasure to have joined the SERG executive in the capacity of secretary-treasurer. I look forward to working with you and my executive teammates Wendy and Azza.

Last year I made the big move across much of Canada from Toronto to Edmonton. I completed my doctoral studies at OISE in 2007 and have just completed my first year as a faculty member in the Department of Elementary Education at the University of Alberta. As a student and now faculty, I have found that SERG has always provided an excellent community in which to learn about science education research and share results with colleagues from across the country. I hope that our executive team this year, through initiatives such as this newsletter, can engage in further community building throughout the year. Canadian science educators are doing exciting and important work and we should continue to come together to share it and build on it.

See you in Ottawa in May!

Marie-Claire Shanahan, Secretary-Treasurer, (mcshanahan@ualberta.ca), 780-492-0870.

2008 SERG Conference Summary Report

Wendy Nielsen, 2008 Conference Chair

For 2008, we received 53 proposals. This represents a tremendous increase from 2007, where SERG received 24 proposal submissions. In 2008, 32 proposals were accepted, representing an acceptance rate of 60%.

Each proposal was reviewed by at least two people, and of the 40 volunteers this year, each person reviewed from two to seven proposals. My thanks go out to these people for their willingness to be involved with SERG in this very important capacity.

SERG was allocated a total of 10 sessions during the 2008 CSSE conference at UBC, as shown in Table 1 below.

Table 1
Summary of SERG sessions

Presentation Type	Number of Sessions	Number of Papers
Multi-paper	7	29
Poster	1	1
Roundtable	1	2
Annual General Meeting	1	N/A

From three to five papers were presented in each multi-paper session.

The number of sessions allocated is a function of SERG proposal submissions and space allocation during the conference, and is related to the total number of proposals submitted to CACS, since we are a subset of this organization. CACS received 137 submissions.

For the first time this year, SERG hosted a pre-conference. My thanks to Patrice Potvin and his group for coming to UBC to hold a gathering of francophone science and technology educators. We look forward to a growing presence of and future collaborations with our francophone colleagues.

I love attending CSSE/SERG and getting to visit different university campuses across Canada. While this year the conference was at my home university (UBC), my other favorite part of the conference is getting the chance to meet new colleagues and get reacquainted with ones I've met previously. (Wendy Nielsen)



Coming as it does at the very end of the school year, CSSE seems to offer a more relaxing atmosphere for conference participants, and I find there are greater opportunities for interaction during the conference sessions and at the myriad of social events throughout the four days of the conference. (Wendy Nielsen)

The CSSE conference this past May in Vancouver was a terrific opportunity to connect with old colleagues, meet new ones, indulge in many interesting and inspiring discussions with science education scholars across Canada, and listen to the musical talents of some of our members! Many thanks to Wendy Nielsen for organizing our annual celebratory SERG dinner! It was extremely well attended and provided a comfortable space to come together as a community and enjoy a relaxing meal. (Azza Sharkawy)



Canadian Journal of Science, Mathematics and Technology Education

This year marks the beginning of a new era for the Canadian Journal of Science, Mathematics and Technology Education, housed at OISE at the Centre for Science, Mathematics and Technology Education. Many of you will be aware that the founding editors, Derek Hodson, Gila Hanna and Jacques Desautels, have now retired from their editorial roles after several years of distinguished service. The new editorial team consists of, John Wallace, as Editor-in-Chief, based at OISE, University of Toronto, well supported by Editors, Rina Zazkis and Nathalie Sinclair from Simon Fraser University, and Sophie Renée De Cotret from University of Montreal.

Further, after a seven year association with University of Toronto Press, the Journal is now published by Routledge, a significant development providing a vehicle to extend the scope and international reach of the Journal. Under the new editorial team and publisher, and served by a strong, international editorial board, CJSMTTE will continue to publish high quality, peer-refereed research and commentary in science, mathematics and technology education in both English and French.

The Journal aims to be both Canadian and international — acting as the Canadian journal of record for work in our fields, exploring international issues from a Canadian perspective, inviting research and viewpoints from international scholars, and debating issues of national and international concern. We invite contributions from the SERG members across a range of research genres, including (but not limited to) experimental, qualitative, ethnographic, historical, philosophical, or case study approaches; critical reviews of the literature; policy perspectives; and position papers, curriculum arguments, and discussion of issues in teacher education.

We would like to take this opportunity to thank you all for your patience during this time of transition. As CJSMTTE enters its 8th year of publication, it is well positioned to become an authoritative international voice in the fields of science, mathematics and technology education.

We invite and encourage you (and/or your institution) to subscribe to the journal if you have not already done so, and to submit manuscripts. Information about subscriptions or submissions is available on the website <http://smt.oise.utoronto.ca/> or from the Journal email address cjsmte@oise.utoronto.ca. You may have also noticed the front cover of the journal, which marks a new beginning with Routledge, and a new era for the journal.

Once again, thank you for your continued support.

Best wishes,



Erminia Pedretti
Professor and Director of the
Centre for Science, Mathematics
and Technology Education



John Wallace
Professor, Science Education
Editor-in-Chief

Cultivating classroom-ready results: CRYSTAL's third national conference



The third national CRYSTAL conference was hosted by the Sherbrooke CRYSTAL centre this September at the Université de Sherbrooke. CRYSTAL (Centres for Research in Youth, Science Teaching and Learning) is a five year pilot project funded by NSERC with five centres across the country established to enhance Canadian math, science and technology education.

Sixty plus members of this CRYSTAL community gathered to showcase approximately thirty presentations centered around five themes related to the teaching and learning mathematics, science and technology in Canada:

1. Teaching and learning the language of science and mathematics
2. Informal learning contexts for science and mathematics
3. Teaching reasoning and deep understanding in science and mathematics
4. Teacher practices and teacher education for science and mathematics
5. Identifying risk and protective factors in learning science mathematics

The impact their collaborative projects are having on the teaching and learning of math and science was front and centre; learning resources, visualizations, and outreach to in-service and pre-service teachers were highlighted. Presentations varied from the creation of text resources, systems thinking and sustainability education to models for teacher professional development and science in the media.

The focus over the next two years will be on consolidating results and materials. In the meantime, NSERC will be deciding over the next several months what it wants to do with CRYSTAL once the pilot is finished. All options are open.

Carolyn Freed, Information Officer
CRYSTAL—Alberta
www.CRYSTALNational.ca

CENTRES FOR RESEARCH
IN YOUTH, SCIENCE TEACHING
AND LEARNING

CRYSTAL



Centre de recherche sur l'enseignement
et l'apprentissage des sciences
Université de Sherbrooke

PACIFIC CRYSTAL PROJECT

Researcher Profile: Samson Nashon

Dr. Samson Nashon, an Associate Professor of Science Education at the University of British Columbia (UBC) in collaboration with other researchers from UBC and Moi University, Kenya is running a SSHRC funded research project in East Africa (EA), which investigates EA students' ways of knowing and learning experience of participating in science curriculum units that integrate classroom activities and fieldtrip experiences in locally evolving industries known as "Jua Kali". This has been motivated by a desire to improve EA science curriculum and pedagogy. Moreover, the fact that EA Governments desire to have the region attain industrialised nation status by the year 2020 is an added catalyst for this study since true revolution to attaining industrialised nation status resides in the science and technology embedded in local innovations. The study is starting to reveal the positive effect of integrating classroom science activities with local industry experiences on EA students' perception of the nature of science and learning. In other words, understanding the students' ways of knowing, which are rooted in their socio-cultural milieu including Jua Kali activities and connecting and harnessing these to the benefit of relevant science curriculum and instruction has proved motivating and elucidating to EA science teachers and students. For more information, please contact Samson or David at samson.nashon@ubc.ca or david.anderson@ubc.ca respectively.

Student Perspectives: Majid Malekan

When I was doing my Masters program at OISE, people were not surprised to hear that my area of research/interest was Science Education (SE). This was not just because I had taken 10 courses on different aspects of SE, but more importantly because I was in a "curriculum program". My research interests in socio-cultural aspects of elementary science did not change during my doctoral program. However, now at the verge of finishing my PhD, I have difficulty in explaining that my major was Cultural and Policy Studies (CPS). Many colleagues have asked me: How come? With an interest in SE, what are you doing in CPS?

In my view, this "frequently asked question" can be explained in two ways. First, cultural studies of science education are a newly recognized area of research. The first independent journal in this area only started in 2006. It seems natural or at least understandable that many people have not heard about it. The second reason refers to the nature of CPS in North American Faculties of Education. Certainly CPS in education has done a service to educators by bringing the issues of social class, race, gender, sexuality, culture, dis/ability, and power relationships to the forefront of educational research. But what does CPS as a program give to many of our BEd and Masters students who are going back to schools to teach? The short answer is a critical perspective, which I acknowledge, but is that enough? I strongly believe that no solid critique of the status quo can alone qualify as an alternative. That is why I see an urgent need for science educators in CPS to move beyond critiquing the current practices and try to create coherent alternatives for day-to day practices (e.g., teaching, assessment, and hands-on activities). The century-old question of "what I am going to do on Monday morning" is still on the table for teachers. We cannot postpone our answers to a day that current issues discussed in CPS are resolved. We cannot afford to leave these questions to be answered by supporters of the status quo either.

All that said, I hope that nobody asks me that "frequently asked question" when I go for an interview for a position in SE!

Majid Malekan is a doctoral student at the Faculty of Education, Queen's University graduating in spring 2009. With many years of International and Canadian experience in science education, his focus is elementary science education with an orientation of teaching science for social justice.

From the SERG Past President

It gives me great pleasure to acknowledge the great work Dr. Wendy Nielsen, SERG President, Dr. Azza Sharkawy, SERG Vice President, and especially, Dr. Marie-Claire Shanahan, SERG Secretary-Treasurer, have done to launch this inaugural newsletter. Their innovative and futuristic endeavours will surely ensure that as a community we have a voice and noticeable presence at national as well as international fora. This inaugural newsletter will certainly bring to our awareness research and other scholarly activities we are all engaged in to the benefit of our graduate and B.Ed. students. Let us give them and future SERG executive all the support to ensure our continued visibility here in Canada and beyond!

Dr. Samson Nashon, SERG Past President

Important Dates and Deadlines

CSSE Proposal submission deadline	November 12
CSSE early registration deadline	March 31
CSSE/SERG	May 23 - 26

NOVEMBER 2008						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	<u>12</u>	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

MARCH 2009						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	<u>31</u>				

MAY 2009						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	<u>23</u>
<u>24</u>	<u>25</u>	<u>26</u>	27	28	29	30
31						

