

PME NEWSLETTER

May/June 2013

Looking forward: Welcoming new researchers at PME

Message from PME President João Filipe Matos

PME37 is here, and thanks to our colleagues at Kiel the stage is almost ready for participants to take their place and bring the PME annual conference to life.

It is already a tradition to welcome newcomers to the conference – especially new researchers. In this Newsletter I would like to invite all PME members to reflect upon the problematic of integrating new researchers within PME.

This is certainly a matter of researchers' professional development and I think that the PME annual conference can play a role on that. It is expected that researchers not only create ideas—understanding the role of innovation and creativity in research, and constructively defending them—but also that they recognise new trends going beyond the obvious. This means also that in the process of professional development, researchers should cultivate critical thinking about their own work and others' work toward challenging traditional view points.

It is crucial that researchers adopt a stance that make beginning researchers and PME newcomers feel included. We can participate by promoting a variety of researchers' competences such as modelling understanding of the notion of intellectual property and critically understanding the value of open access of research results, not only within the mathematics education community but also in the wider society, and actively

seeking ways to enrich society and culture with research intervention and results.

I think that PME is an excellent learning environment for new researchers to engage in co-operative networks and working relationships with

people from different cultures. It offers opportunities to engage with others who are also committed to learning about teaching and learning mathematics and to actively seeking collaborative partners. It is the responsibility of the PME community to make those opportunities happen within the variety of sessions where people can participate – from research report presentations to research forums.

I look forward to meet you all in Kiel in July with a special word of welcome to newcomers and beginning researchers.

João Filipe Matos
President of PME



PME Message from the Editors

Welcome to the May/June 2013 Newsletter. In this issue you'll find highlights from the PME37 plenary and panel speakers, articles that introduce Jennifer Thom's new book and honour long-time PME member Zahra Gooya, and a contribution by the PME37 local organizing committee. You'll also find announcements to PME38 in Vancouver and to STEM 2014 (Science, Technology Engineering and Mathematics) also in Vancouver. As we began our March/April issue with a tribute to Kath Hart we end our May/June issue with additions and corrections to that tribute.

Although unexpected circumstances contributed to delays in publishing this issue, we hope you find the Newsletter informative and provoking. See you in Kiel in a few weeks.

Cynthia Nicol <cynthia.nicol@ubc.ca>, Silvia Alatorre <alatorre.silvia@gmail.com> and
Maike Vollstedt <vollstedt@math.fu-berlin.de>
Editors of PME-Newsletter

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Is a Half of a Half Really a Half?

A conversation with Jennifer Thom, University of Victoria, Canada

Jennifer Thom, University of Victoria, British Columbia, Canada has published a new book titled “Re-rooting the learning space: Minding where children’s mathematics grow.” The PME Newsletter editors had an opportunity to talk with Jennifer about her book. Below are excerpts from that conversation.

Your book is about “re-rooting the learning space.” Could you say a bit more about the title and its relationship to the book?

“Re-rooting the learning space” and “Minding where children’s mathematics grow” was exactly what I was trying to understand as a primary teacher and researcher. I sought a deep understanding of the learning space and examined the theoretical and practical ways that learning spaces arise. The book explores the possibilities for nurturing teaching, learning, and children’s mathematics as living systems.

Conceiving these as having roots and growing evokes very different meanings than the metaphors of “routing” or “re-routing” which assume that a particular destination and its course or courses can be determined in advance. The metaphors of “rooting” or “re-rooting”, however, imply a generative quality. So while it may be possible to identify general characteristics of teaching, learning, or children’s mathematics, what actually grows or what becomes of these cannot be predetermined with any kind of exactitude—all results are realized precisely as they emerge and evolve moment to moment.



What are the multiple ways in which your book is both about mathematical growth and flow?

The book focuses on becoming aware of how our participation on personal, social, and cultural scales contributes to the flow of teaching, learning, mathematics, and ultimately, of life.

I conceptualized growth as distinguishing significance(s) in the flow of interacting with the world. Some themes in the book related to this are: i) the simultaneity and relational nature of how we know what we know, our actions, and who we are; ii) the co-emergent and co-evolving aspects of theory and practice in mathematics teaching; iii) the shape-shifting quality of mathematics; iv) and children’s mathematical understandings as complex, embodied, and recursive.

Describe your favourite part of the book.

It’s the vignettes that feature the children and their mathematics. I learn so much being there in those unpredictable moments and then in a different way, when I reflect on them. It is not just about the students and their mathematics but also just as much about myself as teacher.

Understanding place will help us create more nurturing and mindful spaces for mathematics teaching and learning to happen...

A conversation with Jennifer Thom continued.....

You write about ecological ways of being in the mathematics classroom. What role does place have in your book and what does place mean to you?



Children working on mathematics in multiple places

Place is central to the book. It's not only about location and material features but also the roles and relations of the interactions that occur. In order to understand the learning space I had to inquire more deeply into the role of place and what this might mean for school mathematics.

The classroom is almost always referred to as the place where mathematics happens but rarely is it considered in terms of how it comes about or is sustained.

So while I believe it is essential to have a specialized knowledge of mathematics to be able to teach concepts and processes, I also believe that mathematics teaching requires focus and consideration for the places created where school mathematics occurs.

To understand a phenomenon you need to understand the place it comes from. Understanding place will help us create more nurturing and mindful spaces for mathematics teaching and learning to happen, as well as for mathematics itself. So for me, sense of place and place have everything to do with mathematics education.

Your book is a piece of art. What inspired you to write it in such an innovative, non-linear format that includes poetry, artwork, and images?

For me the book had to communicate how particular theories and practices impact mathematics teaching and students' learning. The book was to document, examine, and explore the ideas and their evolution while I also paid attention to my sense-making in situ. I saw the ideas and their meanings as nonlinear, co-emergent and present in the everyday life of the classroom. I also saw the ideas as

poetry, as different kinds of prose, as particular temporal, spatial, spoken, written, and symbolic images.

I wasn't so much inspired to make a "different" book but instead it was through artful-inquiry that other opportunities then opened up for me to explore the ideas further. For example, juxtaposing, revisiting, or weaving together previous ideas, all-generated new conceptual spaces for me to examine the theoretical and practical aspects of mathematics teaching.

You use quotes very creatively throughout the book. What is one of your favourite quotes?

Gregory Bateson: "...the pattern which connects... How are you related to this creature? What pattern connects you to it?" (1980, p. 9). Here, Bateson was thinking about a lobster, and in my book, I ask, what if this creature was mathematics? What might this mean?

Traditionally, school mathematics almost always revolves around the idea of "What is it?" For example: What is $2+2$? What is a triangle? what is a half of a half? as if *it*, "mathematics", could only be as textbooks define them... in one way; usually static.

But, when we think about the dynamic patterns and relationships that enable us to "know" mathematics, it is here in asking a genuine question like, "is a half of a half *really* a half?", where mathematics comes to life and exists as it's brought into being via the relationships that we create with mathematics as we interact with it.

How do you hope the book will be used?

In the same spirit and manner as I wrote the book— as if exploring a living tree. I hope readers are able to find their place within the ideas so that they may explore the ideas for themselves and develop their own new understandings of what it means for teachers and students to adventure in worlds of mathematical knowing together.

References

Bateson, G. (1980). *Mind and nature: A necessary unity*. New York, NY: Dutton.

Thom, J. (2012). *Re-rooting the learning space: Minding where children's mathematics grow*. Rotterdam, The Netherlands: Sense.

PME 37 Plenary Speakers Get Personal

We invited all PME 37 plenary speakers to contribute to this issue by responding to the questions: **How many PMEs have you attended? Where and when was your first PME? and How does your research life connect with the conference theme: *Mathematics Learning Across the Life Span***

Doug Clarke

Director of the Mathematics Teaching and Learning Research Centre, Australian Catholic University Melbourne.

Number of PMEs attended: 3

Year and place of first PME: PME 30, Prague, Czech Republic, 2006

I have had a longstanding research interest in the professional learning of mathematics teachers. Within that broad area, my research has included the changing role of the mathematics teacher in a problem solving classroom, assessment interviews as a tool in building teacher expertise, assessing teacher PCK, and teacher strategies for building persistence as students work on challenging tasks.

My talk is titled "Understanding, assessing and developing children's mathematical thinking: Task-based interviews as powerful tools for teacher professional learning". It

connects to the theme of the conference "Mathematics Learning Across the Life Span" in that in developing and using assessment interviews, we had the opportunity to follow 323 students for seven years, interviewing them once or twice each year from the age of 5 to the age of 11. This provided extensive, rich data on what children know and can do at various stages of primary schooling.

The greatest pleasure in my work remains the opportunity to work alongside students and teachers, as we seek to make mathematics relevant, challenging, engaging, and enjoyable



Iddo Gal

Senior Lecturer and Chair of the Department of Human Services (Faculty of Health and Welfare Sciences), University of Haifa, Israel.

Number of PMEs attended: 2

Year and place of first PME: PME 16, Durham, USA, 1992

My empirical research and teaching cover two separate but related areas. I focus on the acquisition and assessment of adult numeracy and statistical literacy skills, wondering how people, both students and adults (i.e., citizens, clients, workers), can improve their ability to cope effectively with real-world tasks with mathematical or statistical components. In parallel, I also focus on service management and on skills and empowerment of both workers and clients in service organizations.



My plenary talk aims to examine what we need to know about the formation of mathematical and statistical literacies over the lifespan, taking into account policy-oriented perspectives regarding human capital and citizen empowerment, and using illustrative examples from large-scale studies. The talk benefits from the above interests, as well as from experiences gained as part of my work on the conceptualization and assessment of adult numeracy for the Adult Literacy and Lifeskills survey (ALLs), and since 2007 as Chair of the Numeracy Expert Group for OECD's new study of adult skills, the Programme for International Assessment of Adult Competencies (PIAAC).

PME 37 Plenary Speakers continued....



João Filipe Matos

Full Professor; President of the Assembly of the Institute of Education, University of Lisbon.

Number of PME's attended: 24

Year and place of first PME: PME 10, London, UK, 1986

My main research interest is grounded on the work I did in the past 20 years understanding practice (both in mathematics education and in the use of technology in learning) using frameworks that take situated learning and activity theory as its basis. More recently I got responsibilities in teacher education of the staff in my university in the domain of e-learning and I interpret this as a major opportunity for teachers' professional development.

My talk at PME37 discusses the ways we approach phenomena in our research practices and the methods and techniques we use to understand mathematics teaching and learning. Discussing the politics of representation of mathematics education phenomena, and the ways we produce evidence in research and elaborate theories (e.g. in learning mathematics), relates to the theme of the conference if we look at the rationale for decisions on research methodologies adopted as dynamic and evolving in researchers' trajectories.



Kristina Reiss

Professor of Mathematics Education, School of Education, Technische Universität München, Germany.

Number of PME's attended: 10

Year and place of first PME: PME 8, Sydney, Australia, 1984

My research focuses on mathematical competencies and their development during education at the school and the university level. I am particularly interested in students' ways of learning mathematical argumentation and proof. My studies address cognitive processes on the one hand and evaluate corresponding interventions on the other hand. Most of my research takes place in an interdisciplinary context. I am convinced that mathematics education, educational psychology, and developmental psychology as well as general education may contribute to a pattern which enables us to better understand students' views on mathematics.

Teachers prominently influence how mathematics classrooms are arranged and how students succeed in their learning. Therefore, the development of courses and teaching materials for mathematics teacher education is another main topic of my interests. Having my roots in mathematics, I seek to implement undergraduate courses for teacher students in linear algebra, algebra, and number theory, which transfer mathematics education research results and practices into university mathematics classes.

Mathematics Learning Across the Life Span

PME 37 Plenary Panel Session

with Convenor Peter Liljedahl, Simon Fraser University, Vancouver Canada.



Peter Liljedahl (convenor)

Number of PMEs attended: 8; Kiel will be my 9th PME

Year and place of first PME: PME 25, Utrecht, The Netherlands, 2001

Peter Liljedahl is an Associate Professor of Mathematics Education in the Faculty of Education, an associate member in the Department of Mathematics, and co-director of the David Wheeler Institute for Research in Mathematics Education at Simon Fraser University in Vancouver, Canada. His research interests are creativity, insight and discovery in mathematics teaching and learning; the role of the affective domain on the teaching and learning of mathematics; the professional growth of mathematics teachers; mathematical problem solving; and numeracy.



Gaye Williams (panel member)

Number of PMEs attended: 12; Kiel will be my 13th PME

Year and place of first PME: PME 25, Utrecht, The Netherlands, 2001

Gaye Williams is a Senior Lecturer in Mathematics at Deakin University in Victoria, Australia. She commenced her research career after more than 25 years of teaching secondary mathematics. This has impacted on what she attends to in classroom research and, she believes, enriched her perspectives.

Her teaching and research foci converge around the nature of students' creative engagement in the learning of mathematics and influences upon this. Of particular interest are processes associated with the creative development of new knowledge and influences of students' psychological characteristics on these processes.

The conference focus of Mathematics Learning Across the Life Span, for Gaye, brings to mind how engaging research conversations are not constrained by position in the lifespan. She reflects on the many researchers across the lifespan with whom she has conversed about different facets of processes associated with researching, and on the many research topics that engage us. PME has contributed greatly to her access to such discussions.

And more PME 37 Panel Speakers



Andualem T. Gebrechmichael (panel member)

Number of PMEs attended: 2; Kiel will be my third PME

Year and place of first PME: PME 34, Belo Horizonte, Brazil, 2010

I work at the University of Agder, Faculty of Engineering and Science in Norway. As a growing researcher in mathematics education, I am a developing interest in many areas of research in mathematics education. My particular research interest is on the relevance of mathematics, mathematical identity and beliefs in mathematics education. I am interested in exploring mathematics related beliefs about the relevance of mathematics in sociocultural contexts. I believe that we develop a shifting mathematical identity and form beliefs while learning mathematics across our life span in the sociocultural contexts we are situated.



Heidi Krzywacki (panel member)

Number of PMEs attended: 5

Year and place of first PME: PME 31, Seoul, South Korea, 2007

I work as a university lecturer in mathematics education at the Department of Teacher Education in University of Helsinki, Finland.

Since the panel discussion is on a theme 'Education of Young Mathematics Education Researchers' and the idea is to provide various perspectives to the theme, my contribution is mostly based on my experience as a early career academic who has also experience in organizing international joint researcher education in science and mathematics education. My recent research has been on teacher education and school assessment from (mathematics) teacher's perspective.



Marcelo C. Borba (panel member)

Number of PMEs attended: 15

Year and place of first PME: PME 13, Paris, France, 1989

Marcelo C. Borba is a professor of the graduate program in mathematics education and of the mathematics department of UNESP (State University of Sao Paulo), Rio Claro, Brazil, where he chairs the research group GPIMEM. He researches the use of digital technology in mathematics education, online distance education, modeling as a pedagogical approach and qualitative research methodology. He served at an Education committee in the main research funding agency of Brazil (CNPq) from 2008 through 2011. He is a member of the editorial board of *Educational Studies in Mathematics*. He wrote several books, book chapters and refereed papers published in Portuguese and in English. He is the editor of a collection of books in Brazil for the last twelve years, which includes 25 books to date. He has been vice-president of PME from 2007-2009.



PME 37 AGM Agenda (Draft)

AGM to be held on the 1st of August 2013, 15:30-17:30

1. Opening of the meeting
2. Adoption of the Agenda
3. Adoption of the minutes of the 2012 AGM held in Taipei, Taiwan
4. Elections:
 - a. President
 - b. Four new members of the PME International Committee
5. Portfolio Reports: Brief reports will be given by the President's Portfolio Group (PPG), the Vice President Portfolio Group (VPG), and the Secretary Portfolio Group (SPG)
6. Treasurer Report (Operating Budget, Skemp Fund, Reserve Fund, Cost of Meetings)
7. Proposed Change of Skemp Fund rules
8. Other Items
9. Brief Report on Future Conferences
 - a. PME 38 – Vancouver, Canada, 2014
 - b. PME 39 in 2015 and PME 40 in 2016



PME 38 / PME-NA 36 Annual Conference

Vancouver, Canada | July 15-20, 2014



PME 37 MEETINGS

NEWCOMERS MEETING.....

Are you new to PME? Is this your first PME conference?
Would you like to meet people visiting PME for the first time?
Or are you an experienced PME member and want to assist first timers?

Then make a note in your conference schedule for the Newcomers Meeting.

Vice President of IGPME, Tim Rowland, will introduce you to some of the background and traditions of the International Group for the Psychology of Mathematics Education (IGPME) and PME conferences. You will meet other scientists visiting their first PME conference as well as some more experienced PME members. Knowing at least some faces will help you to "find your way" through the conference and establish new contacts within the PME community.



**Newcomers Meeting: Monday, July 29th
12:10-12:50**

*Location will be announced on
the Conference message board at the venue*

POLICY MEETING.....

The PME policy meeting is intended for an open discussion of all issues regarding PME policies, as well as organization of PME conferences and other topics that are relevant for members. The basic idea is to provide an opportunity to discuss ideas and topics within the membership, without making the AGM longer than intended.

The policy meeting is an informal, open forum for all those issues that do not necessarily have to be discussed at the AGM at the current time. It is moderated by the Vice President of IGPME (Tim Rowland). Usually many people from the International Committee (IC) are there to provide interesting information on the current policies and status of IGPME.

If you are interested in developing IGPME as a research community or if you have an idea how to improve PME: Come to the Policy Meeting and join the discussion!

Tim Rowland (Vice President of IGPME),
Stefan Ufer (Secretary of IGPME)

**Policy Meeting: Tuesday, July, 30th,
14:00-14:40**

*Location will be announced on
the Conference message board at the venue*

Dandelion photo credit:

Petr Kratochvil: <http://www.publicdomainpictures.net/view-image.php?image=247&picture=dandelion>

Zahra Gooya honored for her 20-year contribution in mathematics education

at the 2nd Mathematics Education Seminar in Shahid Bahonar University of Kerman, Iran

submitted by Abolfazl Rafiepour, Shahid Bahonar University of Kerman,

With more than 400 people attending the Second Mathematics Education Seminar in Shahid Bahonar University of Kerman, Iran, Professor Zahra Gooya was honored for her 20 years of contribution in mathematics education in Iran.

Dr. Gooya established the first Master and PhD programs in mathematics education in Iran. Currently three PhD students have graduated with Dr. Gooya as their supervisor and three others are under her supervision.

In collaboration with other scholars Dr. Gooya has written five national mathematics textbooks for secondary schools.

She is editor of the “Roshd Mathematics Education Journal” which introduces mathematics education concepts and papers to teachers of mathematics. This journal is published quarterly and the the Ministry of Education has printed 100,000 issues from each volume for distribution nation-wide in Iran.

Dr. Gooya was an IC member for PME and is currently a member of the IC for ICMI (International Commission on Mathematical Instruction).

Past and Current presidents of ICMI (Bill Barton & Ferdinando Arzarello) and Chair of the PISA Expert Group in Mathematics (Kaye Stacey) sent messages to the seminar in honor of Dr. Gooya's



Professor Zahra Gooya

The international community of mathematics education has been fortunate to have, from Iran, the services of such an active, professional, and deep-thinking researcher. Professor Gooya has served on the International Program Committee of PME and is a current member of the ICMI Executive. This month she participated in her first Executive meeting in Berlin where she has been part of decisions that affect mathematics education and its development throughout the globe. This is significant service to the international community. We are also aware of Professor Gooya's leading role within her own country. We completely depend on people of Professor Gooya's caliber and energy: the international body is only as strong as its constituent states. We congratulate Professor Gooya on her extended, dedicated service to the community.

Bill Barton & Ferdinando Arzarello, Past and Current president of ICMI

I first met Professor Gooya at PME, just as she was finishing her PhD, and we had an instant connection through our mutual interest in problem solving.

Professor Gooya has taken a number of influential international positions, and has given a voice in those international bodies to a part of the world (going beyond Iran) that can easily be overlooked. Mathematics education is a very practical discipline: it is good to do research but it is also important that it is used to make learning deeper and more useful, to improve the life chances of all our students. Congratulations to Professor Gooya on making a fine contribution to this in Iran.

Kaye Stacey, Chair of PISA Expert Group in Mathematics

MACIMISE Graduate

Mathematics and Culture in Micronesia: Integrating Societal Experience

submitted by A.J. Sandy Dawson, University of Hawai'i

Pacific Resources for Education and Learning (PREL) received National Science Foundation (NSF) funding in 2009 to implement Project MACIMISE (Mathematics and Culture in Micronesia: Integrating Societal Experiences, pronounced as if spelled as *maximize*), a collaborative effort between PREL and the College of Education, University of Hawai'i at Mānoa (UHM), with PREL as the lead organization.

The settings for the project are the United States Affiliated Pacific Islands (USAPI) in the northern Pacific, from Hawai'i west to the Republic of the Marshall Islands (RMI) and across the Federated States of Micronesia (FSM)—which includes the states of Kosrae, Pohnpei, Chuuk, and Yap—the territory of Guam, the Commonwealth of the Northern Mariana Islands (CNMI), farther west to the Republic of Palau, as well as south of the equator to American Samoa. A. J. (Sandy) Dawson, a former PME Vice-President and long time member, directs the project.

MACIMISE is funded to complete three primary goals: (1) to develop elementary school mathematics curricula sensitive to indigenous mathematical thought and experience, (2) to recapture and honor the mathematics developed and practiced in the Micronesian communities, and (3) to build local capacity by offering advanced degree opportunities to the indigenous mathematics educators who transform what they find in their local cultural practices into grade 1, 4, and 7 mathematics curriculum units.

As of July 2013, culture-based mathematics units have been developed for each of the island nations. The 24 developed units will be available to local

education departments and ministries. In addition, five to six units will be selected for further testing during the project's 5th and final year, beginning September 2013.

At the outset of the project, twenty-one degree seeking Macimisers (as the group prefers to call themselves) were selected to carry out the research into indigenous practices on their home islands that became the basis for the culturally based mathematics units they developed. Ten of the twenty-two are pursuing doctorate degrees at the UHM, while eleven were enrolled in masters programs.

Though the doctorate candidates are another year away from completing their studies, the masters' candidates received their degrees at the spring commencement exercises at the University of Hawai'i--Mānoa. Nine of the eleven successful MACIMISEers are shown in the picture below at a post graduation gathering. PREL and the Curriculum Studies Department of the UHM's College of Education extend its heartfelt congratulations to the 2013 MACIMISE graduates.



10, 9, 8, 7....

the countdown is on -

see you in Kiel, Germany for PME 37

submitted by the Local Organizing Committee of PME 37

The PME 37 in Germany is rapidly approaching and here in Kiel, the preparations are running at full speed. To us, it is an honor to host this important mathematics education conference and we are highly motivated to make PME 37 a valuable and wonderful experience for the participating colleagues from all over the world.

We can proudly announce that over 600 participants have registered so far. At the conference, a variety of presentations will take place. Altogether 4 Research Forums, 2 Working Sessions, 8 Discussion Groups, 166 Research Reports, 217 Short Oral Communications and 79 Poster Presentations will give rise to various scientific discussions and give participants opportunities to broaden their horizons. Moreover, the conference venue is ready, along with the opening reception and cultural event, the excursions and the conference dinner are in the preparation process, food and drinks will be ordered soon..., you will surely enjoy the setting in which the scientific program is presented.

Please take care of your hotel reservations. Since many people are coming to this conference, some hotels may be fully booked soon. Moreover, our pre-bookings for hotel rooms are time-limited and we are not allowed to extend them. For travel information, please visit our conference website www.pme2013.de. We will provide updated information with last minute advice about two weeks before the conference.



Aiso is the conference chair, our head of all decisions and he has got every detail, however important, unimportant, big or small, in his mind.

Anke is our Conftool expert. She keeps track of the registration process, coordinates the proceedings and she stands by Aiso's side in leading the conference preparations.

Beate replies to email requests, manages the credit card payments and organizes the special service for the PME

Honorary Member and the plenary speakers. Moreover, she steps in when Anke and Aiso need support.

Heidrun keeps an eye on all organizational aspects of the conference preparations, starting with the conference venue with its different locations, including graphic challenges like badges, signs, banners, etc., right up to the communication with cooperation partners.



Aiso Heinze



Anke Lindmeier



Beate von der Heydt



Heidrun Petersen

the countdown to PME 37 is on - continued....

Meike Grüßing, **Stefanie** Rach, **Birte** Niebuhr, and **Anne** Kielmann are very involved in the social program and the catering, i.e. choosing and organizing the food, drinks and music for the cultural event, the opening reception, the conference dinner, and the lunch and coffee breaks (photos are in order left to right).

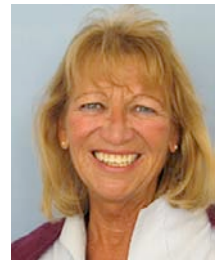


Carolin Loch and **Ulrike** Siebert work together with Heidrun. They work on all aspects of the excursions to make them a lasting memory for you.

Christoph Duchhardt, **Tim** Heemsoth, and **Insa** Schnittjer. Thanks to these three our website is always up to date. In particular, they are responsible for the detailed travel and hotel information.



Anne-Katrin Jordan and **Gitta** Vosschage-Meier. Their job is to hire, train and coordinate the 35 conference helpers which will ensure that no conference participant gets lost, no question remains unanswered and everyone is welcomed with a smile.



Lars Tietje. As financial officer of the hosting institute IPN Kiel, he is the official holder of the PME 37 account and responsible for the correct and economical administration of the money.

Our whole team is grateful for the support that we have received from the International Program Committee for PME 37, from the colleagues from the International Committee of PME and from the PME Administrative Manager.

On behalf of the PME 37 Local Organizing Committee, we wish you all a pleasant journey to Germany. We are looking forward to welcoming you to Kiel, and we hope you will have a wonderful time over here.

Kath Hart Tribute - corrections

PME member Kath Hart passed away in April 2013. In our March/April 2013 PME Newsletter we published a tribute to Kath with contributions from PME members. It has come to our attention that this tribute contained an error and an oversight that need correction. As Kath was one who strove to be sure “to get it right” we

apologize for the errors and provide the corrections below. Readers may also find a revised March/April 2013 PME Newsletter available through ISSUU and the PME website.

Corrections:

Kath Hart earned a Doctor of Education under the supervision of Dr. Frank Lester from Indiana University in Bloomington, Indiana (she did not attend the University of Illinois as previously published in the March/April 2013 issue).

Kath also earned a Doctor of Philosophy under the supervision of David Johnson from Kings College, University of London (this fact was overlooked in the March/April 2013 issue).



STEM

2014 | Science | Technology | Engineering | Mathematics | in Education Conference

STEM Education and Our Planet: Making Connections Across Contexts

The International Conference of STEM in Education is an opportunity for educators and researchers from schools, universities, colleges, businesses, industries, and other private and public agencies to share and discuss their innovative practices and research initiatives that may advance STEM education.

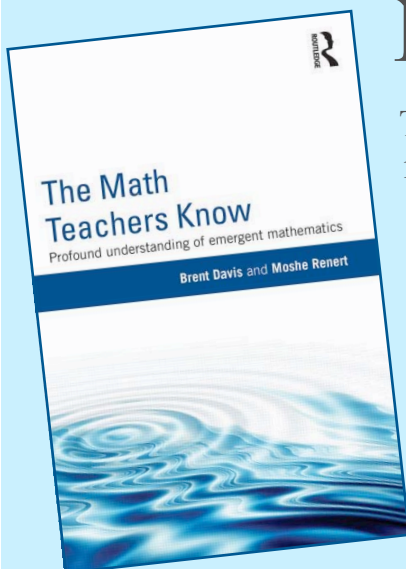
Location

The University of British Columbia
Vancouver | Canada

Dates

Conference Dates: July 12-15, 2014
Call for Papers: September 1, 2013
Deadline for Submission: December 1, 2013

educ.ubc.ca/STEM2014



NEW BOOK

The Math Teachers Know: Profound understanding of emergent mathematics

Brent Davis and Moshe Renert

What sorts of mathematics competencies must teachers have in order to teach the discipline well? This book offers a novel take on the question. Most research is focused on explicit knowledge—that is, on the sorts of insights that might be specified, catalogued, taught, and tested. In contrast, this book focuses on the tacit dimensions of teachers’ mathematics knowledge that precede and enable their competencies with formal mathematics. It highlights the complexity of this knowledge and offers strategies to uncover it, analyze it, and re-synthesize it in ways that will make it more available for teaching. Emerging from 10 years of collaborative inquiry with practicing teachers, it is simultaneously informed by the most recent research and anchored to the realities of teachers’ lives in classrooms.

<http://www.routledge.com/books/details/9780415858441/>