

MEET THE AUTHORS

Helle Alrø is Professor at Aalborg University, Department of Communication. She has a special interest in dialogic learning processes in educational as well as organizational contexts. Her recent research is concerned with conflict and conflict management as a means for learning. She has published books and articles on interpersonal communication in helping relationships, i.e. on communication in the mathematics classroom. Most of the latter work has been carried out in collaboration with Ole Skovsmose.

Miriam Amit is a Professor of Mathematics Education and Head of the Department of Science and Technology Education in the Ben-Gurion University of the Negev. She completed her Bachelors and Masters degrees in the Technion – the Israeli Institute of Technology, and her PhD in the Department of Mathematics and Computer Sciences in Ben-Gurion University. For 12 years, she was the Chief Superintendent of Mathematics Education for the State of Israel, in charge of K-12 curriculum design and implementation, teacher development and national assessment. In the latter field she also worked as a consultant for major international research institutions. Among her interests are: social and cultural aspects of mathematics education, which include ethno-mathematics and gender; alternative assessment methods and its connection to problem solving, learning and instruction; and last but not least, the cultivation and promotion of excellence among mathematically promising students. To further this final goal, Professor Amit founded the "Kidumatica Youth Club", which since its founding 8 years ago has brought excellence to thousands of children.

Kristín Bjarnadóttir studied physics and mathematics at the University of Iceland and completed her M.Sc. degree in mathematics at the University of Oregon, U.S., in 1983. She defended a Ph.D. thesis, *Mathematical Education in Iceland in Historical Context - Socio-Economic Demands and Influences*, at Roskilde University, Denmark, in February 2006. Her supervisor was Prof. Mogens Niss. Kristín Bjarnadóttir has taught mathematics and physics at lower and upper secondary schools in Iceland. Currently she is Associate professor at Iceland University of Education.

Iben Maj Christiansen works in the School of Education and Development, Faculty of Education, University of KwaZulu-Natal, Pietermaritzburg in South Africa. Before that, she was an Associate Professor in Mathematics and Science Education at Aalborg University in Denmark. There, she also served as director of the Centre for Educational Development of University Science, which offered staff development and coordinated action research projects at seven higher education institutions. Iben is involved in research on tacit knowledge in mathematics education and teacher training, in particular in relation to the teaching and learning of calculus for teachers, and developmental work in higher education in South Africa. She is the mother of twin boys, aged 5.

Ubiratan D'Ambrosio is the founder of the ethnomathematical movement. He is the 2005 recipient of the Felix Klein Medal of Mathematics Education, granted by the International Commission of Mathematics Instruction(ICMI), the highest honor in the mathematics education community. His educational background includes a doctorate in Mathematics, Universidade de São Paulo (1963). He is now an Emeritus Professor of the State University of Campinas/UNICAMP, São Paulo, Brazil and Fellow of the AAAS: American Association for the Advancement of Science with the citation "For imaginative and effective leadership in Latin American Mathematics Education and in efforts towards international cooperation."(1983). He also received the "Kenneth O. May Medal in the History of Mathematics", granted by the International Commission on History of Mathematics (2001). His current activities include: Professor at the PUCSP/Pontifícia Universidade Católica de São Paulo, and guest professor at the USP/Universidade de São Paulo and the UNESP/Universidade Estadual Paulista.; and President, Brazilian Society of History of Mathematics/SBHMat.

Michael N. Fried is a lecturer in the Program for Science and Technology Education at Ben Gurion University of the Negev. His undergraduate degree in the liberal arts is from St. John's College in Annapolis MD (the "great books" school). He received his M.Sc. in applied mathematics from SUNY at Stony Brook and his Ph.D. in the history of mathematics from the Cohn Institute of History and Philosophy of Science at Tel Aviv University. His research interests are eclectic and include mathematics teacher education, sociocultural issues, semiotics, history of mathematics, and history and philosophy of education. He is author with Sabetai Unguru of Apollonius of Perga's Conica: Text, Context, Subtext.

Merrilyn Goos is an Associate Professor in the School of Education at The University of Queensland, Australia, where she co-ordinates pre-service and postgraduate courses in mathematics education. Her research has been guided by sociocultural theories of learning in investigating classroom interactions and mathematical thinking, analysing pedagogical issues in introducing educational technologies into mathematics teaching and learning, and studying how communities of practice are established and maintained in secondary mathematics classrooms and teacher education contexts. In 2002-2003 she led a national numeracy research project commissioned by the Australian Government Department of Education, Science and Training that investigated home, school and community partnerships in children's numeracy education. This project integrated multiple disciplinary and methodological perspectives in collecting and analysing survey, interview and case study data from all Australian states and territories.

Brian Greer came to mathematics education with a background in mathematics and psychology, leading to an interest in the relationship between cognitive psychology and mathematics education. After some 30 years in the School of Psychology in Belfast, Ireland, he took a position in mathematics education at San Diego State University, which he left in 2003 to work as an independent scholar in Portland, Oregon. Topics that he has focused on include multiplicative structures, probabilistic thinking, and word problems. More recently, particularly under the influence of Swapna Mukhopadhyay, with whom he collaborates intensively, he characterizes mathematics and mathematics education as human activities that are historically, culturally, socially, and politically situated.

Eric Gutstein is Associate Professor of Curriculum and Instruction at University of Illinois-Chicago. His interests include teaching mathematics for social justice, Freirean approaches to teaching and learning, and urban education. He has taught middle and high school mathematics. Rico is a founding member of Teachers for Social Justice (Chicago) and is active in social movements. He is the author of *Reading and Writing the World with Mathematics: Toward a Pedagogy for Social Justice* (Routledge, 2006) and an editor of *Rethinking Mathematics: Teaching Social Justice by the Numbers* (Rethinking Schools, 2005).

Ravin Gustafson, a freelance editor for many years, has been a middle school teacher for the past 4 years. She began as a language arts teacher and has recently transitioned to a dual role: teaching a self-contained classroom of 7th graders and teaching 7th and 8th grade mathematics. Ravin has a lifetime connection to Native America.

Lesley Jolly is an anthropologist lecturing in Behavioural Studies at The University of Queensland, Australia. She has carried out research in cultures as diverse as those of indigenous Australian societies in both remote and urban Australia, engineering and high technology workplaces, suburban community groups and elementary classrooms. The issues she has addressed have included cultural constructions of public and private interaction, gender in engineering, technology in the classroom and in non-professional communities. In 2002-2003 she took part in the national numeracy research project commissioned by the Australian Government Department of Education, Science and Training that investigated home, school and community partnerships in children's numeracy education which is drawn on in this paper.

Libby Knott is an Associate Professor in the Department of Mathematical Sciences at the University of Montana. She has a PhD in mathematics education from Oregon State University and degrees from Wesleyan University and Colorado State University. She has taught at Lewis and Clark College (Portland, OR), SUNY College at Cortland, The University of California, Santa Barbara, Oregon State University and has been on the mathematics faculty at The University of Montana since 1996. Interests include all aspects of undergraduate mathematics teaching and learning. She is an author of the 9 – 12 Navigating through Geometry book in the NCTM Navigations series. Current research interests include the role of discourse mathematics teaching and learning. She is also involved in the preparation and professional development of middle and high school math teachers in the state of Montana.

Tom Lowrie is Professor and Head of the School of Education at Charles Sturt University, Australia. His research interests are influenced by the way in which students' use spatial reasoning and visual imagery to solve mathematics problems in contexts that are authentically based and in learning situations that are very different to that of traditional classrooms. He is a co-author of *Mathematics for children: Challenging children to think mathematically* and has published extensively in mathematics education and related disciplines from both psychological and sociology perspectives.

Swapna Mukhopadhyay came to mathematics education with a background in physics and anthropology, together with experience in teaching in an innovative alternative school in her native Calcutta. She is now an Associate Professor at the Graduate School of Education at Portland State University. She regards mathematics as cultural construction, particularly through the lens of ethnomathematics, the mathematical knowledge construction and use of social groups, including children learning mathematics at school and people acting in their everyday lives. She

promotes a vision of mathematics education as providing people with tools for critiquing and acting upon issues important in their lives.

Mohammed Abu-Naja received his Ph.D. in mathematics education from Ben-Gurion University of the Negev. He is a lecturer and pedagogical instructor for prospective high school mathematics teachers at Kaye Teachers' Academic College, a lecturer at Achva College, and instructor in a program for student excellence under the auspices of the Technion and Hebrew University. He also worked as a high school teacher and department chairman for 14 years. His M.Sc. concerned the influence of mathematical recreations on attitude and achievement among 10th graders in the Bedouin sector, while his doctoral work concerned how Bedouin students use graphing calculators to learn central concepts in the mathematics curriculum. His research interests include: the use of graphing calculators in mathematics teaching and learning, the development of mathematical thinking, teaching geometry to pre-service teachers.

Tod Shockey is an Assistant professor of Mathematics Education at the University of Maine. Prior to work in higher education he was a secondary level mathematics teacher. His research interest is focused in ethnomathematics.

Ole Skovsmose has a special interest in critical mathematics education. Recently he has published investigations of mathematics in action, students' foreground, globalisation and ghettoising. He is Professor at Aalborg University, Department of Education, Learning and Philosophy. He is member of the editorial boards of Mathematics Education Library (Springer) and Critical Essays in Education (Sense Publisher). He has participated in conferences and given lectures about mathematics education in many different countries. His most recent book is entitled **Travelling Through Education: Uncertainty, Mathematics, Responsibility**, Sense Publishers, The Netherlands. This book can be downloaded in PDF for free at www.sensepublishers.com.

“Travelling Through Education: Uncertainty, Mathematics, Responsibility is a personal notebook from a conceptual travel. But, in a different sense, it also represents a report on traveling. The main part of the manuscript was written in Brazil, Denmark and England, whilst notes have also been inspired by visits to other countries. So, the book not only represents conceptual travel, it also reflects seasons of real traveling. In Part 1, the book comments on the critical position of mathematics education, and also indicates some concerns of critical mathematics education. Part 2 comments on mathematics in action, and considers the discussion of mathematics as an applied discipline in the contexts of technology, management, engineering, economics, etc. In Part 3, the book comments on mathematics and science in general. These comments are then generalised into a discussion of ‘reason’ and of the ‘apparatus of reason’. Finally, Part 4 returns to the discussion of mathematics education, and comments on notions that could become ‘sensitive’ to the critical position of mathematics education. Ole Skovsmose is also traveling between different academic fields. He

touches upon mathematics and mathematics education, the philosophy of mathematics, technology and science, as well as sociological issues, glancing over issues such as globalisation, ghettoising, learning society, and risk society. Traveling with the author, the reader will become aware of connections between many of these different issues. ”

Bharath Sriraman is an Associate Professor of Mathematics at the University of Montana, with eclectic research interests. Bharath, a native of India, lives in Montana by way of the merchant marine; Alaska (B.S in mathematics, University of Alaska-Fairbanks) and Illinois (M.S & PhD in mathematics and mathematics education, Northern Illinois University). He is interested in Cognitive Science; Innovation and Talent Development; History and Philosophy of Mathematics; History of Science; and Mathematics Education. He has published over 100 refereed papers, commentaries, book chapters and book reviews in his areas of interest. Bharath maintains an active research interest in Indo-Iranian Studies and the evolution of human societies. He is more or less fluent in 7-9 languages [English, German, Farsi, Hindi, Kannada, Urdu, Tamil, French and others]. Bharath is the Editor of The Montana Mathematics Enthusiast ; Associate Editor of Zentralblatt für Didaktik der Mathematik and serves on the editorial boards of seven other journals. He is the Book Reviews Editor of Mathematical Thinking & Learning: An International Journal and Zentralblatt für Didaktik der Mathematik. His interest in social justice originally stems from familiarity with the writings of Karl Marx, Raja Ram Mohan Roy and Vivekananda. Bharath holds active research ties with researchers working in his domains of interest in Australia, Canada, Cyprus, Denmark, Germany, Greece, Iceland, India and Turkey.

Olof Bjorg Steinhorsdottir is currently an Assistant Professor of mathematics education in the School of Education at University of North Carolina – Chapel Hill. A former mathematics classroom teacher in her native country of Iceland, Olof Bjorg Steinhorsdottir teaches mathematics education courses in the Elementary Education and Culture, Curriculum and Change programs. Her scholarly interests include the teaching and learning of mathematics among students in pre-kindergarten through middle school, specifically students’ understanding of mathematics and how teachers can use that understanding to make instructional decisions. Steinhorsdottir also serves on the planning committee for the First School Initiative of the Frank Porter Graham Child Development Institute, a proposed school for three-year-olds through third graders. Her work addresses the curriculum and instruction to be implemented in the First School and ways to incorporate continual professional development into the format. Steinhorsdottir is active in the mathematics education profession locally, nationally and internationally. In collaboration with educators in the North Carolina Partnership in Mathematics and Science (NCPIMS), she developed and implemented professional development materials for elementary teachers that focus on the

pedagogical and content perspectives of algebraic reasoning. She also serves as the U.S. national coordinator of the International Organization of Women in Mathematics Education (IOWME), an affiliate of the International Commission on Mathematical Instruction (ICMI).

Paola Valero is Associate Professor in the Department of Education, Learning and Philosophy, Aalborg University. Her initial background is in Linguistics and Political Science. Since 1990 she has been doing research in the area of mathematics education, with particular emphasis on the political dimension of mathematics teaching and learning, and of mathematics teacher education. Her research integrates sociological and political analysis of mathematics in different institutional settings, and different aspects of mathematical learning and teaching. She has published several papers in books, journals and conferences proceedings.

Robyn Zevenbegen is Professor of Education at Griffith University in Australia. She has worked across primary, secondary, post-compulsory and VET sectors of mathematics education as well as workplace settings. Her work in mathematics focuses on issues of equity and access, particularly for low SES, rural/remote and Indigenous students. She is concerned with curriculum, pedagogy and assessment as they relate to equity.