

About the Contributors

Jill M. Aldridge is a Senior Lecturer at the Science Mathematics Education Centre at Curtin University of Technology, Perth, Australia. Her research is in the field of teaching and learning. Currently, her focus is on the integration of ICT into classrooms and whether this leads to more individualised and outcomes-focused learning environments.

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Hui-Li Chang earned her doctorate degree in Mathematics Education at The University of Houston, USA. She was a Post-Doctoral Research Fellow at the USA Department of Education, Center for Research on Education, Diversity and Excellence (CREDE) where she directed the “Effective Teaching and Learning for Language Minority Students in Mathematics” project. She was also a principal researcher on the “Pre-service Teacher Education for Diversity Research Synthesis Project”. Dr. Chang is currently teaching graduate research courses at National-Louis University in Illinois.

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Darrell L. Fisher is Professor of Science Education and Deputy Director of the Science and Mathematics Education Centre at Curtin University of Technology, Australia. His major research interests include classroom and school environments, and curriculum issues related to science, particularly curriculum evaluation. He has published and presented on these topics throughout the world. He is a Fellow of the Australian College of Education and the Regional Editor for Asia and Australia of *Learning Environments Research: An International Journal*. He is a world leader in learning environment research and co-author of the book published by World Scientific, *Technology-rich Learning Environments: A Future Perspective*.

Barry J. Fraser is Professor and Director of the Science and Mathematics Education Centre at Curtin University of Technology, Australia. He is co-editor of the 72-chapter *International Handbook of Science Education* published by Kluwer, and Editor-in-Chief of the Kluwer journal *Learning Environments Research: An International Journal*. He is a fellow of the American Association for the Advancement of Science, International Academy of Education, Academy of Social Science in Australia and Australian College of Education. He is the 2003 recipient of the Outstanding Contributions to Science Education through Research Award from the National Association for Research in

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Sonomi Hirata is presently in the Faculty of Human Development at Hakuoh University in Japan. Prior to that, she held a position at the Department of Human Science at Waseda University in Tokyo. She received her BSc and MSc in Human Science, and a PhD from Waseda University. She has taught courses in teacher-training; educational psychology and in general subjects in psychology. Her work has been published in journals such as *Learning Environments*, an International journal, the *Japanese Journal of Counseling Psychology*, and the *Japanese Journal of Criminal Psychology* as well as in proceedings of several international conferences. Her research interests include examining the relation between classroom climate and student behaviour, and constructing psychological measurements for learning environment design.

Avi Hofstein holds a PhD in science education (chemistry) from the Weizmann Institute of Science in Israel. He is a Professor and Head of both the Chemistry Group and the *Science for All* programs in the Science Teaching Department at the Weizmann Institute of Science, Israel. He has been involved in all facets of the curricular process in chemistry namely development, implementation, and evaluation. He has conducted research in many areas of science education (e.g. learning environment, learning difficulties in science learning, professional development and laboratory work). In recent years, he has been involved in the development of leadership amongst chemistry teachers in Israel in order to promote reform in the way chemistry is taught in high schools in Israel.

Shwu-yong L. Huang is an Associate Professor at the Center for Teacher Education, National Taiwan University, and was formerly the Director of the Center at National Tsing Hua University. Prior to her return to Taiwan in 1999, she taught at the University of Houston, USA, and served as the principal of a Chinese school and as President of the Chinese American Educational Research and Development Association in the USA. Her research interests focus on school and classroom learning environments and on teacher education. She has received research awards in Taiwan and abroad. Currently, as a co-principal

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Rekha B. Koul has taught high school students for a short time, followed by teaching at undergraduate level and has finally conducted over twelve years of research/extension activities aimed at women as main beneficiaries at the Agricultural University Kashmir, India. She obtained her Doctor of Science Education from Curtin University of

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Leonidas Kyriakides is Assistant Professor in Educational Research and Evaluation at the University of Cyprus. His field of research and scholarship concerns the evaluation of educational effectiveness whether of teachers, schools or educational systems. Specifically his research interests are on the development of generic and differentiated model of educational effectiveness, the evaluation of pupil progress and the application of effectiveness research to the improvement of educational practice. He is the author of more than 35 research papers in international journals, five books and 18 chapters in books. His most recent book (with Campbell, Muijs and Robinson) is *Assessing Teacher Effectiveness: Towards a Differentiated Mode*, published by RoutledgeFalmer in 2004.

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Minna Lakkala has a background in general psychology and computer science. She has an extensive experience of teachers' training in the educational use of ICT. Her main research interest at present is teachers' pedagogical expertise in relation to collaborative inquiry learning. Lakkala has participated in large national and international research projects concerning the use of ICT at schools. She has participated in the development of educational ICT, and ICT-related user training as a consultant and educator from the beginning of the 1980s. Currently she is pursuing her doctoral studies at the Centre for Research on Networked Learning and Knowledge Building in the Department of Psychology at the University of Helsinki, Finland.

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Stephen Quinton is employed by the Division of Humanities at Curtin University, Australia as an Academic Researcher in the design and delivery of multi-modal learning environments. He is actively involved in several research projects that focus on the effective application of convergent technologies to educational practice. His current research activities include the development of a database managed learning objects framework as applied to the design of online learning environments and the adaptation of learning styles and multiple intelligences theory to the provision of customised learning solutions. The practical outcome will be to demonstrate how individualised learning strategies can be delivered in an online teaching environment.

Tony Rickards is a Senior Lecturer in science, mathematics and technology education at the Science and Mathematics Education Centre,

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Bruce G. Waldrip is Associate Professor of Science Education at the University of Southern Queensland, Toowoomba, Australia. His research agenda has been varied yet focused on student learning. Past and present research include an investigation into students' reactions to assessment strategies; factors that effect students' perceptions of their classroom environment; implementation of a school and teacher change research project for both primary and secondary science teachers; students' worldviews; a study of cultural factors affecting students' learning; and Student understanding of concepts. He currently lectures on science education and research methodology.

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Bevis G. Yaxley is currently Director of the Institute for Inclusive Learning Communities, at the University of Tasmania, Australia. He has been an Adjunct Associate Professor, at the Key Centre for Science & Mathematics Education in Curtin University of Technology and Principal Science Education Officer, Department of Education, Tasmania. He was given the Outstanding Educator Award of the Tasmanian Chapter, Australian College of Educators (2004). He has conducted research and published papers in curriculum development, educational leadership, teaching and the role of ICT in education and has had extensive experience in supervising students undertaking higher research degrees. He specialises in philosophic inquiry in education, with a particular emphasis on narrative studies.