

ABOUT THE CONTRIBUTORS

EDITORS

Lei Mee Thien is a Research and Development Specialist in SEAMEO Regional Centre for Education in Science and Mathematics (RECSAM), Penang, Malaysia. From an initial interest in school effectiveness research, she has extended her research area to educational assessment, teacher quality and comparative studies as well as multivariate and multilevel analysis. She has conducted training on Assessment for Learning, and Test Item Development and Validation to educators in the Southeast Asian region. She is currently involved in a regional study on assessment of transversal competencies in the Asia-Pacific, a cross-national study on mathematics teacher quality, and secondary data analysis using International Large Scale Assessment dataset such as PISA. She is the member of the Network on Education Quality Monitoring in the Asia-Pacific (NEQMAP), UNESCO Bangkok. Her publications include refereed journal articles and book chapters.

Nordin Abd Razak is currently an Associate Professor in School of Educational Studies, Universiti Sains Malaysia. His area of research interest are in measurement, scale development and validation, multivariate and multilevel analysis, large scale assessment secondary data analysis such as TIMSS and PISA as well as investigating organisational behaviour from the socio-psychology perspective. His current researches include investigating the development of teacher professional identity using the latent growth model and cross-cultural adaption among international students who are studying in Malaysian higher education institutions. He is the member of the Malaysian Psychometric Association and has been appointed as member of Research Committee for TIMSS and PISA by the Ministry of Education, Malaysia. He is regularly engaged as a speaker for data analysis methods at ministry and higher education level.

John P. Keeves is formerly an Adjunct Professor of Education at the Flinders University of South Australia and is currently an Adjunct Professor at the University of Adelaide. He was Director of the Australian Council for Educational Research (1977–1984), research fellow at Australian National University and Stockholm University, and secondary school mathematics and science teacher in Australia and England (1947–1962). He was involved in the IEA studies since the 1960s, serving as a national research coordinator for the First International Mathematics Study (FIMS), Steering Committee member of the First International Science Study (FISS), and project council chair for the Second International Science Study (SISS).

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He was Chair of the IEA Technical Executive Group (1982–1989). He is author or editor of many IEA-related publications.

I Gusti Ngurah Darmawan is a Senior Lecturer and the Associate Head (International) within the School of Education at the University of Adelaide. His research interests are wide and varied. From a strong initial interest in ICT, Mathematics and Science Education, he has extended his field of inquiry in these areas to cross-national and comparative perspectives, and consequently developing a strong interest in educational research methodology and measurement. He has been recently involved in the South Australian hub of the National Centre in Science, Information and Communication Technology and Mathematics Education for Rural and Regional Australia (SiMERR-SA) research project. He has also been working with educationalists from Cambodia, Philippines, Malaysia, Thailand, and Indonesia to provide support for their educational reforms through research, training and consultancies.

CONTRIBUTORS

Azian T. S. ABDULLAH has over 30 years of experience in the field of science education and curriculum development. She is currently the Director of the Educational Policy Planning and Research Division, in the Ministry of Education, Malaysia. Prior to this, she was the Deputy Director of Policy, Science, and Technology at the Curriculum Development Division from 2012–2014 and at the Educational Policy Planning and Research Division from 2014–2015. She was one of the facilitators in the Government Transformation Plan (GTP) 2.0 lab and was involved in the formulation of the Malaysian Education Blueprint 2013–2025. She has presented many papers at national and international conferences, seminars and workshops on science and technology education.

Rusliza ABDULLAH is an Assistant Director in the Educational Policy Planning and Research Division (EPRD), Ministry of Education (MOE), Malaysia. After graduating from the University of Texas at Arlington, USA in 1991 and receiving a Diploma in 1995, she had been teaching English for 14 years in several schools before joining EPRD. She is now a team member of PISA International Research Unit, in charge of administering the study of PISA in Malaysia. She has been involved in MOE educational researches and actively presented academic papers at international conference.

Qian CHEN is currently an Associate Professor at Sichuan Normal University. She obtained her B.Sc. and M.Sc. from Southwest Normal University, and Ph.D. from the University of Hong Kong. Chen has broad research interests, including international comparative studies in mathematics education and mathematics assessment. She

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Precharn DECHSRI was a former Senior Special Advisor and Vice President of The Institute for The Promotion of Teaching Science and Technology (IPST), Central institute of Thailand. He is the resource person for developing Thai mathematics and science curriculum and particularly for the chemistry curriculum since 1980. He was the national research coordinator in TIMSS, TEDS-M of IEA and Governing Board projects. He is also the national project manager of PISA-OECD study since 2000. He has been an Executive committee of the International Association of Educational Assessment (IAEA) since 2011. His experience on science assessment has benefited educators both within the country and at international level.

Harry FIRMAN is a Senior Lecturer of science education and former Dean of the Faculty of Mathematics and Science Education in Indonesia University of Education. His research interests include science learning assessment and STEM based science education. He was involved in a study of Indonesian students' performance on PISA study under the Indonesia's National Educational Assessment Center in 2006–2007. He is also involved in an international collaborative research on classroom-level impact assessment of Japan's mathematics and science education cooperation as well as the development of STEM-based science teaching in Indonesia. He is a visiting professor in Hiroshima University in 2006 and a visiting research scholar in Shizuoka University in 2014.

Esther Sui Chu HO is the Director of the Centre for International Student Assessment in Hong Kong, Project Manager of HKPISA-2000, 2003, 2006, 2009, 2012, 2015; and the consultant of Macau-PISA-2003; China-PISA 2006 Trial Study and Shanghai-PISA 2009 Main Study. She is also the Fulbright Scholar at Pennsylvania State University (2004) and Johns Hopkins University (2010), and Research Associate of the Education and Development Project in South China. She is also the Teaching Consultant of the World Bank in the District Primary Educational Programme, India. Her research interests include parental involvement in children's education, home school community collaboration, school effectiveness and school reform, decentralisation and school-based management, research methodology, and multilevel analysis in educational research.

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Petra LIETZ is a Principal Research Fellow within the Educational Research and Monitoring division at the Australian Council for Educational Research (ACER). Prior to joining ACER, Petra has taught secondary data analysis, statistics, and research design at Central Queensland University, Australia as well as Jacobs University Bremen, Germany. She has also been a consultant for the Organisation for Economic Cooperation and Development (OECD) and the International Association for the Evaluation of Educational Achievement (IEA). Her publications range from articles on questionnaire design and sampling to results of multivariate and multilevel analyses with a focus on factors related to student achievement in various subject areas. In addition, Petra has contributed chapters on descriptive and inferential statistics in methods books for the social sciences and is currently Editor-in-Chief of the *Australian Journal of Education*.

Muhammad Zaini MOHD ZAIN started his career in 1986 and has 30 years of experience in Science and Mathematics education. He obtained his M. Sc. in Educational Management from Universiti Utara Malaysia and Ph.D. in Cardiff University, United Kingdom. He is currently the Head of the PISA International Research Unit in Educational Planning and Research Division, Ministry of Education, Malaysia. He is also the PISA National Project Manager (NPM) for Malaysia since 2013. He has been actively involved in educational research. He has had numerous international engagements with UNHCR, APEC, IEA and OECD since 2005.

Sheela NAIR is currently attached to the Educational Planning and Research Division (EPRD), Ministry of Education Malaysia. She holds a Ph.D in Education from the International Islamic University Malaysia where she also studied for her masters in Educational Management. She spent 18 years as a classroom practitioner upon completing her first degree in History, Anthropology, and Sociology. She is

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Anindita (Dita) NUGROHO is a Research Consultant in education policy analysis and program evaluation in low- and middle-income countries. Her recent projects have focused on the Asia Pacific region, including a survey of teacher absenteeism and a review of the political economy of education policy making, both in Indonesia, as well as supporting UNICEF's out-of-school children initiative in East Asia and Pacific. Dita has been a researcher at the Australian Council for Educational Research, a graduate school fellow at the New York State Education Department and a teaching assistant at Columbia University's Teachers College. She holds an MA in the economics of education and an MPP in development policy.

Azadeh SHAF AEI is a PhD Research Fellow at the School of Educational Studies, Universiti Sains Malaysia (USM). She has obtained her Master in Applied Linguistics from USM. She is a recipient of the USM Global Fellowship and currently working on her PhD research project where she investigates the antecedents and outcomes of international students' cross-cultural adaptation in Malaysian public universities. She has worked as an English language teacher for more 10 years. Her research interests include cross-cultural adaptation among international students, education mobility, higher education internationalisation, multivariate and multilevel analysis, and large-scale assessment secondary data analysis (PISA).

Sharifah Norul Akmar SYED ZAMRI is currently the Head and Associate Professor at the Department of Mathematics and Science Education, University of Malaya (UM). Her area of expertise is in mathematics education particularly in higher order thinking skills and mathematics literacy. She has been selected as Quality Monitor for PISA 2015 in Malaysia. Sharifah has given presentations at conferences held in the region as well as in various parts of the world. She is also the editor of several books on mathematics education and authored a number of book chapters.

Mollie TOBIN is a Research Fellow within the Educational Research and Monitoring division at the Australian Council for Educational Research (ACER). Mollie has experience in large-scale survey project coordination, questionnaire development, and program evaluation. Mollie also has expertise in research focusing on the intersection of large scale assessments and education policy-making in low and middle income countries and recently in Asia-Pacific countries, through a recent study in collaboration with UNESCO-Bangkok. Her area of interest is in international comparative research in education. Prior to joining ACER, Mollie worked in bilingual education in Madrid and secondary education in California.