Report to the ICMI General Assembly Hamburg July, 2016

Aims

The Mathematics Education Research Group of Australasia (MERGA) was founded in 1976 and became an Affiliate Organisation of ICMI in 2011. The aims of the association are to promote quality mathematics education at all levels, particularly in Australasia, through:

- promoting quality research in mathematics education;
- disseminating information on recent mathematics education research and teaching developments;
- seeking to influence decision makers at all levels to take into account research findings in mathematics education;
- providing means for members to communicate with each other on matters concerning mathematics education; and
- maintaining liaison with other organisations with interests in mathematics education or educational research.

Membership

Membership of MERGA has remained relatively consistent in the past four years, with approximately 240 members. Most MERGA members reside in Australia (70%) or New Zealand (13%), but the number of members from other countries is steadily increasing. Currently, MERGA has international members in Asia, Europe, North and South America, and the Pacific islands.

MERGA has a strong affiliate relationship with the Australian Association of Mathematics Teachers (AAMT) and the Australian Mathematical Sciences Institute (AMSI). AAMT has a clear mission of supporting classroom practices, while AMSI promotes the mathematics discipline especially via engagement with industry. MERGA offers a strong nexus between the two.

MERGA is represented on the Advisory Boards of most national mathematics initiatives including: the National Committee for Mathematical Sciences; Reference Group for 'Building an evidence base for national best practice in mathematics education'; Reference Group for the national 'Mathematics by Inquiry' project; and Steering Committee for the Decadal Plan for the Mathematical Sciences

 $[https://www.science.org.au/files/userfiles/support/reports-and-plans/2016/mathematics-decade-plan-2016-vision-for-2025.pdf\].$

Conferences

MERGA has held an annual conference since 1977. Research papers are fully peer reviewed and published in the conference Proceedings in a digital form. The full text of all conference papers published since 1993 is available from the MERGA website at http://www.merga.net.au/node/37.

To maximize attendance opportunities for Australasian academics, the annual conference is traditionally held in the first week of July (Singapore, 2012; Melbourne, 2013; Sydney, 2014; Sunshine Coast, 2015; Adelaide, 2016) which corresponds to a between semesters break at most Australasian universities. In 2012, the MERGA conference was held outside Australia and New Zealand for the first time, at the National Institute for Education in Singapore. Singapore is the home of MERGA's third largest group of members, acknowledging MERGA's increasing reach and influence in the south-east Asian region. Planning is underway for MERGA40 to be held in 2017 at Monash University, where MERGA was hosted for the fist time in 1977. Auckland, New Zealand will host MERGA in 2018.

Research Awards

MERGA has four awards to recognize outstanding contributions to research. The MERGA Career Research Medal is awarded to a long-term and active MERGA member who has made a sustained and distinguished contribution to research in mathematics education in Australasia and internationally. Recent winners include Gilah Leder, Kaye

Stacey, Glenda Anthony and Bob Perry. The MERGA Research Award is for an individual or a team that has made an outstanding contribution to mathematics education research in the previous 3 years. The Early Career Award recognises the best research paper and presentation at a MERGA conference from a new researcher, while the Practical Implications Award acknowledges research most relevant for classroom practice. More information regarding the MERGA Awards can be located at http://merga.net.au/node/28.

Inaugural MERGA member, Alan Bishop, was awarded ICMI's 2015 Felix Klein Medal, to be presented during ICME-13. The award citation is available at http://www.mathunion.org/icmi/activities/awards/the-felix-klein-medal-for-2015/.

Publications

MERGA produces two peer reviewed research journals, the *Mathematics Education Research Journal (MERJ)* and *Mathematics Teacher Education and Development (MTED)*. In 2010 MERGA reached agreement with Springer to publish *MERJ*, and the first issue produced under this arrangement was published in July 2011. The *MERJ* Editorial Board is scheduled to meet during ICME-13. The Editorial Board for MERJ is listed at following URL-

http://www.springer.com/education+%26+language/mathematics+education/journal/13394/PSE?detailsPage=editorialBoard and the editorial board for MTED is available here - http://www.merga.net.au/publications/mted.php

Every four years MERGA publishes an edited book titled *Review of Research in Mathematics Education in Australasia*. The eighth edition of this review critiques the most current Australasian research in mathematics education in the four years from 2012-2015. The book will be launched at the 2016 MERGA conference in Adelaide and an international launch is scheduled during ICME-13.

Development

One of the most worthwhile initiatives of the past 12 months involved MERGA's participation in a consortium formed by Australia's mathematics community to host ICME-14 in 2020. The development of the proposal required sensitive political and organisational collaboration, strong visionary statements and the development of a research program that was both respectful of the ICMI traditions and highlighted the specialised contribution of mathematics and mathematics education researchers of our region.

The following professional societies, national mathematical sciences groups, government authorities and education groups also supported Australia's bid for ICME-14.

- Mathematical Association of New South Wales (MANSW)
- Australian Society for Operations Research (ASOR)
- Combinatorial Mathematics Society of Australasia (CMSA)
- Australian and New Zealand Industrial and Applied Mathematics (ANZIAM)
- Science & Technology Australia (STA)
- Australian Mathematics Trust (AMT)
- Australian Council of Heads of Mathematical Sciences (ACHMS)
- Chief Scientist for Australia
- New South Wales Minister for Education
- Australian Council of Deans of Science (ACDS)
- Australian Curriculum, Assessment and Reporting Authority (ACARA)
- Australian Institute for Teaching and School Leadership (AITSL)
- Australian Council of Deans of Education (ACDE)
- Universities Australia
- Research colleagues from New Zealand and south-east Asia.

Although unsuccessful, the mathematics community in Australasia forged much stronger links as a result of the extremely time-consuming bid process.

Tom Lowrie MERGA President

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