



AUSTRALIAN EDUCATION DIGEST

Maths Education Special

1 April 2010

- [THE AUSTRALIAN CURRICULUM: \(5 items\)](#)
- [THE GROUP OF EIGHT REVIEW: \(6 items\)](#)
- [RESEARCH: \(5 items\)](#)
- [RESOURCES: \(5 items\)](#)
- [AWARDS & PRIZES: \(2 items\)](#)
- [CONFERENCES & EVENTS: \(6 items\)](#)
- [ACSSO EMAIL NEWSLETTERS](#)

MATHEMATICS IN THE AUSTRALIAN CURRICULUM

Consultation on the draft Australian Curriculum

Australian Curriculum, Assessment and Reporting Authority

The draft Australian Curriculum for English, mathematics, science and history (K-10) will be available for consultation from 1 March 2010 to the end of May 2010. The draft curriculum for these learning areas will be available online through the Australian Curriculum Consultation Portal, and will include content descriptions, achievement standards, content elaborations and some annotated work samples.

Read more at: <http://www.acara.edu.au/consultation.html>

[< top >](#)

Information Sheet: Mathematics

Australian Curriculum, Assessment and Reporting Authority

The following information sheet specifically for mathematics provides information on the key features of the curriculum, the differences and similarities between state/territory curriculums with that of the Australian Curriculum, and what international references have been used to develop the Australian Curriculum.

The draft K–10 Australian Curriculum for mathematics is organised around three content strands and four proficiency strands.

The content strands are Number and algebra, Statistics and probability, and Measurement and geometry. The content in those strands describe 'what' it is students will be taught.

The proficiency strands – Understanding, Fluency, Problem solving and Reasoning – describe the 'how' – the way content is explored or developed through the 'thinking' and 'doing' of mathematics.

The proficiencies have been incorporated into the content descriptions in each of the three content strands.

This approach ensures students' proficiency in mathematical skills is developed throughout the curriculum and becomes increasingly sophisticated over the years of schooling, and that students develop their

capacity for logical thought and actions, such as analysing, proving, evaluating, explaining, inferring, justifying and generalising.

Read more at <http://www.acara.edu.au/verve/resources/Mathematics.pdf>

For more detail, go to: <http://www.australiancurriculum.edu.au/Documents/Mathematics%20curriculum.pdf>

[< top >](#)

Problem solving in the Australian mathematics curriculum: what have we learnt from other countries?

Judy Anderson, Curriculum Leadership, 5 February 2010

Problem solving is recognised as an important life skill involving a range of processes including analysing, interpreting, reasoning, predicting, evaluating and reflecting. It is either an over-arching goal or a fundamental component of the school mathematics curriculum in many countries.

However, developing successful problem solvers is a complex task requiring a range of skills and dispositions (Stacey, 2005). Students need deep mathematical knowledge and general reasoning ability as well as heuristic strategies for solving non-routine problems. It is also necessary to have helpful beliefs and personal attributes for organising and directing their efforts. Coupled with this, students require good communication skills and the ability to work in cooperative groups.

As Australia continues the process of developing a national curriculum, it is important to learn from other countries about the best approach for including problem solving in the curriculum and for supporting implementation by teachers.

Read entire article: <http://cmslive.curriculum.edu.au/leader/default.asp?id=30305&issueID=12031>

Judy Anderson is Associate Professor, Mathematics Education at the University of Sydney. This article is an abridged version of a paper presented at the Australian Curriculum Studies Association's 2009 Biennial Conference.

[< top >](#)

New maths curriculum a feeble tool calculated to bore

Burkhard Polster & Marty Ross, the Age – National Times, 4 March 2010

As maths lecturers deeply dissatisfied with the state of Australian education, we were keen to see what would emerge. Keen, but pessimistic. We were concerned about the almost total lack of involvement of mathematicians in the writing process and unimpressed by the background documents, which displayed a disturbing ignorance of mathematical culture.

Our doubts have unfortunately been confirmed. We are convinced that implementing such a curriculum will do little to improve the woeful state of Australian mathematics education.

The substance of the draft, which covers prep to year 10, is in the year-by-year syllabus, with an "elaboration" of each point: the syllabus point indicates "what" is to be taught; the elaboration suggests "how" it is to be taught. The syllabus itself is divided into three streams: number and algebra, statistics and probability, and measurement and geometry.

These artificial divisions, while necessary, have led to an unnecessary dissolution of the syllabus; every part of every stream is addressed in every year. The few concepts in the statistics syllabus, for example, are continually drip-fed over 11 years. There is simply no reason for "data" to be collected and analysed over and over again.

Read entire article: <http://www.theage.com.au/opinion/society-and-culture/new-maths-curriculum-a-feeble-tool-calculated-to-bore-20100303-pivw.html>

Burkard Polster and Marty Ross write the Maths Masters column for Education Age online at theage.com.au/education. Their work can also be found at www.qedcat.com

[< top >](#)

Could do better...?

Heath Gilmore, Sydney Morning Herald, 8 March 2010

THE slimming down of mathematics in the draft to allow more time for students to study at a deeper level has been praised by academics and teachers.

NSW maths teachers had expressed concerns that the Monash University academic Peter Sullivan was leading a team that would lower standards in their draft curriculum. "I was aware of those concerns," Professor Sullivan said. "NSW has the best mathematics programs already. "I wanted a synthesis of the best ideas around the country."

Cathy Attard, a mathematics education lecturer at the University of Western Sydney, said the draft curriculum was an improvement in many aspects, on the current NSW K-6 syllabus.

She said the greatest achievement was the inclusion of proficiency strands focusing on students' ability to understand mathematical concepts, their fluency, problem-solving skills and reasoning. "In order to successfully implement the changes ... it is critical that teachers are provided with support in terms of professional development."

Read entire article: <http://www.smh.com.au/national/education/could-do-better-the-verdict-on-curriculum-20100307-pgm9.html>

[< top >](#)

THE GROUP OF EIGHT REVIEW

Group of Eight releases maths review report

Go8 Media release, 10 March 2010

The Group of Eight's (Go8) Review of Education in Mathematics, Data Science and Quantitative Disciplines, released today, found that the state of mathematical sciences in Australia has deteriorated to a dangerous level and will require universities to provide additional maths enabling courses and to improve co-operation between education and maths faculties in future.

The Review, chaired by former University of Sydney Vice-Chancellor, Professor Gavin Brown, was commissioned by the Go8 Vice-Chancellors in 2009 because of serious concerns about the number and quality of students entering university courses requiring strong quantitative skills.

The Review highlights some startling statistics:

- From 2001 to 2007 the number of students enrolled in a mathematics major in Australian universities declined by approximately 15%.
- The number of students taking Advanced Maths at high school also dropped by 27% between 1995 and 2007.
- Demand for mathematics and statistics graduates is predicted to grow by 3.5% per year till 2013.

Download Report: <http://www.go8.edu.au/storage/go8statements/2010/Go8MathsReview.pdf>

Read entire release: <http://www.go8.edu.au/storage/go8statements/2010/Go8MathsReview.pdf>

[< top >](#)

Group of Eight Review's sum of all fears: maths is in serious decline

Lucy Hood, the Advertiser, 10 March 2010

THE number of students studying maths and science is falling to dangerous levels, prompting warnings of a critical shortage in skilled workers.

The Group of Eight Review, carried out by eight of the nation's leading universities has delivered an alarming picture of maths and science in Australian schools.

The review reveals students are losing interest in maths and science in primary school, leading to a decline in the number of Year 12 advanced maths students going on to degrees in key skills shortage areas such as engineering, statistics and economics.

Professor Peter Dowd, from the University of Adelaide's engineering, computer and mathematical sciences faculty, said that Australia was producing not enough engineers to keep up with major defence and mining projects.

"We are in danger of failing," Professor Brown said. "We are tending to graduate less engineers per head of population yet we have got the work sitting here on our doorstep."

The review calls for primary school teachers to be given extra resources to make maths and science "fun" and "exciting" for students and to stop referring to advanced maths as "advanced" or "specialist", because it creates the perception that only "smart kids" can cope with the subject.

Read entire article: <http://www.news.com.au/national/group-of-eight-reviews-sum-of-all-fears-maths-is-in-serious-decline/story-e6frfkvr-1225838924327>

[< top >](#)

Call to set maths whiz targets

Andrew Trounson, the Australian, 11 March 2010

AUSTRALIA needs to make boosting maths a national priority and follow Britain in setting national targets for increasing the number of school students studying the subject at higher levels, the country's maths professors warned yesterday.

The Australian Council of Heads of Mathematical Sciences is aiming to produce a white paper on the exodus from advanced maths to submit to the government ahead of next year's federal budget.

"What is needed now is a call to government to put in place a set of measures, not just isolated measures, to deal with the problems in mathematics and statistics," Geoff Prince, director of the Australian Mathematical Sciences Institute, told The Australian.

Professor Prince said initiatives to discount HECS fees for maths graduates entering teaching were not enough. And he complained that the Howard government's move in 2007 to lift university funding for maths had not delivered significant benefits because the money had too often been absorbed into general university revenue.

A report on Tuesday by the country's research-intensive universities warned of a crisis in the area, finding too few students were studying maths at university. This was creating shortages of qualified teachers at schools and so turning kids off the subject.

Read entire article: <http://www.theaustralian.com.au/news/nation/call-to-set-maths-whiz-targets/story-e6frg6nf-1225839329552>

[< top >](#)

Declining numeracy is shaping our future

Guy Healy, the Australian, 17 March 2010

AUSTRALIA was heading back to the Lucky Country days when it did not have to innovate and could rely on earnings from the soil, one of the country's leading statisticians has warned.

In the wake of last week's Group of Eight report on the maths crisis, Australian Research Council Federation fellow Peter Hall said he feared Australia was "going backwards" on maths education and the disciplines it supported.

"In 1964 Donald Horne wrote that Australia showed less enterprise than almost any other prosperous industrial society," said Professor Hall, an adviser for the maths report. "The concern of my colleagues and I is that we are actually heading back there to some extent."

The Go8 report found students were turned off maths as they progressed through school and many schools did not have the resources to offer the advanced maths necessary for engineering at the university level.

Professor Hall said he and his colleagues had been especially worried by the lack of response to the report by federal and state governments.

Professor Hall said the "massive drift" away from senior mathematics in high school had to be arrested if universities were to produce anything approaching the required number of graduates in quantitative disciplines.

Read entire article: <http://www.theaustralian.com.au/higher-education/declining-numeracy-is-shaping-our-future/story-e6frgcjx-1225841552704>

[< top >](#)

Numbers game we can win

Mary O'Kane, 17 March 2010

AS the Group of Eight's review of education in mathematics, data science and quantitative disciplines points out, there has been a decline in the quality and quantity of students completing mathematics at the high school and university levels.

This isn't just an academic issue. It has important implications for Australia's bottom line. At very least this decline will compound existing shortages in disciplines that are heavily maths-focused such as statistics, information and communications technology and engineering. This, in turn, may have a bad effect on important economic sectors such as telecommunications, transport and mining.

It isn't all doom and gloom, however. A lot of activities are going on in NSW and other states, especially through the national curriculum, to reverse these trends. NSW has a rigorous mathematics curriculum. For 15 years it has embedded numeracy in all key learning areas. Numeracy concepts therefore may be taught in context of a science or history lesson.

Read entire article: <http://www.theaustralian.com.au/higher-education/opinion-analysis/numbers-game-we-can-win/story-e6frgcko-1225841532455>

Mary O'Kane is NSW chief scientist and scientific engineer. She was the inaugural chairwoman of the Group of Eight.

[< top >](#)

The numbers don't add up in maths class

Nalini Joshi, 24 March 2010

DEMAND for mathematics and statistics graduates is predicted to grow in Australia by 3.5 per cent annually until 2013. But two weeks ago the Group of Eight universities published a review that revealed a 27 per cent decline between 1995 and 2007 in the number of high school students taking advanced maths, and a 15 per cent decline during 2001-07 in the number of students majoring in maths at university.

Maths is critical to modern life. The report is a warning that Australian policy-makers can ignore only at the peril of our future.

President Barack Obama announced a national STEM (science, technology, engineering, and mathematics) initiative last November to reverse similar declines in the US. Earlier legislation established a program called "10,000 Teachers, 10 Million Minds" to improve the education of maths and science teachers and to provide scholarships to students in STEM fields who commit to becoming maths and science teachers in the US.

In this international context, it is disappointing to see misguided responses from opinion leaders in Australia.

Read complete article: <http://www.theaustralian.com.au/higher-education/opinion-analysis/the-numbers-dont-add-up-in-maths-class/story-e6frgcko-1225844444839>

University of Sydney professor Nalini Joshi is president of the Australian Mathematical Society and was part of the reference group on the Go8 Review of Education in Mathematics, Data Science and Quantitative Disciplines.

[< top >](#)

RESEARCH

Few Gender Differences in Math Abilities, Worldwide Study Finds

Science Daily, 6 January 2010

Girls around the world are not worse at math than boys, even though boys are more confident in their math abilities, and girls from countries where gender equity is more prevalent are more likely to perform better on mathematics assessment tests, according to a new analysis of international research.

"Stereotypes about female inferiority in mathematics are a distinct contrast to the actual scientific data," said Nicole Else-Quest, PhD, a psychology professor at Villanova University, and lead author of the meta-analysis. "These results show that girls will perform at the same level as the boys when they are given the right educational tools and have visible female role models excelling in mathematics."

The finding that girls around the world appear to have less confidence in their mathematical abilities could help explain why young girls are less likely than boys to pursue careers in science, technology, engineering and mathematics.

Read entire article: <http://www.sciencedaily.com/releases/2010/01/100105112303.htm>

[< top >](#)

In reality, simulation is key to math education: Stanford Uni mathematician:

"The textbook is perhaps the worst possible medium for teaching mathematics"

Louis Bergeron, Stanford Report, 18 February 2010

"We are at a moment in history where mathematics education, at least at the middle school level, could change completely and dramatically," according to Keith Devlin, a Stanford mathematician with an interest in how the subject is taught.

For the past five years, Devlin has been part of a pioneering effort to create a massively multiplayer online game, something to rival "World of Warcraft," but tailored as a tool for mathematics education. "World of Warcraft" is a wildly successful role-playing game that currently has more than 15 million players.

Devlin thinks the role-playing approach has tremendous potential, but based on his experience, he said, it may take a national initiative to make it happen. He explained his views, and exhorted his peers to work to promote such a project, on Feb. 19 at the American Association for the Advancement of Science annual meeting in San Diego.

Devlin collaborated with a group from private industry to develop a prototype of such a video game to help teach middle school students math by fully immersing them in a simulated three-dimensional environment.

Only after playing the game and getting experience in using mathematical principles to get ahead would the kids get exposed to equations and mathematical symbols – and be motivated to open their textbooks.

Read entire article: <http://news.stanford.edu/news/2010/february15/devlin-aaas-mathematics-021910.html>

[< top >](#)

Parents Still Major Influence on Child's Decision to Pursue Science/math's Careers

Science Daily, 21 February 2010

Parental influence and access to mathematics courses are likely to guide students to careers in science, technology, engineering, mathematics or medicine (STEMM), according to research from Michigan State University.

The findings of Jon Miller, MSU Hannah Professor of Integrative Studies, and colleagues were presented at a symposium titled "Tomorrow's Scientists and Engineers." at this year's meeting of the American Association for the Advancement of Science.

Miller used data from the Longitudinal Study of American Youth, which kept track of nearly 6,000 students from middle school through college, attempting to determine what led them to or guided them away from STEMM careers.

According to Miller, "The pathway to a STEMM career begins at home." He said this is especially true in families in which children were strongly encouraged to go to college.

Read entire article: <http://www.sciencedaily.com/releases/2010/02/100220204814.htm>

[< top >](#)

"Making Mathematics Count"

Professor Adrian Smith's Inquiry into post-14 maths education – 2004 (UK)

The Post-14 Mathematics Inquiry has identified three key issues of major concern:

- the shortage of specialist mathematics teachers, particularly in England and Wales;
- the failure of the current curriculum, assessment and qualifications framework in England, Wales and Northern Ireland to meet the needs of many learners and to satisfy the requirements and expectations of employers and higher education institutions;
- the lack of resources, infrastructure and a sustained continuing professional development culture to support and nurture all teachers of mathematics.

The Inquiry regards it as vital that society fully recognises the importance of mathematics: its importance for its own sake, as an intellectual discipline; for the knowledge economy; for science, technology and engineering; for the workplace; and for the individual citizen. All this underlines the importance of ensuring a sufficient supply of young people with appropriate mathematical skills.

Access and download the final report: <http://www.mathsinquiry.org.uk/report/MathsInquiryFinalReport.pdf>
See also: proceedings of Royal Society Conference "Making Mathematics Count – Two Years On" held March 2006: <http://www.acme-uk.org/downloaddoc.asp?id=30>

[< top >](#)

Independent Review of Mathematics Teaching in early years settings & primary schools

Peter Williams, 2008 (UK)

This final report sets out the review's findings, supported by evidence, regarding educational best practice to enable young learners in primary schools and early years settings to acquire an understanding and appreciation of mathematics and of its importance to their lives.

The importance of a young child's ability both to read and communicate fluently, and to count, calculate and work confidently with mathematical ideas, cannot be overstated.

...Nevertheless, issues regarding the teaching and learning of mathematics remain, and the United Kingdom is still one of the few advanced nations where it is socially acceptable – fashionable, even – to profess an inability to cope with the subject.

A parent expressing such sentiments can hardly be conducive to a learning environment at home in which mathematics is seen by children as an essential and rewarding part of their everyday lives. The review has therefore considered carefully the role of parents and families and their influence on the young learner.

Yet it is a central conclusion of this review that the teacher, even more than the parent, determines learning outcomes in mathematics, the more so given that the way in which mathematics is taught has undergone considerable change since most parents' own schooling. The prime focus of the review has therefore been the teacher.

Download the Report: <http://publications.teachernet.gov.uk/eOrderingDownload/Williams%20Mathematics.pdf>

[< top >](#)

RESOURCES

The Australian Mathematical Sciences Institute (AMSI)

The Australian Mathematical Sciences Institute (AMSI) is a national, collaborative venture supporting the mathematical sciences.

AMSI was established in 2002 with initial funding from its member institutions and the Victorian Government's Science, Technology and Innovation Infrastructure grants program. AMSI's mission is to promote and strengthen understanding and use of the mathematical sciences in Australia's culture, science and economy.

There are three main programs: Science; Education; and Business, Industry and Government. Each program has an expert Advisory Committee that provides advice to the board.

Elements of AMSI's Schools Program includes:

ICE-EM Mathematics, a comprehensive mathematics education program for upper primary to year 10, developed by the International Centre of Excellence for Education in Mathematics (ICE-EM), the education division of AMSI.

AMSI has received Australian Government funding for a national collaborative project targeting school mathematics education – referred to as The Improving Mathematics Education in Schools (**TIMES**) project.

In collaboration with CSIRO, AMSI runs **Maths by Email** - an email newsletter aimed at primary and secondary students, their parents and teachers, packed with news, activities, puzzles, web links and more - and **Mathematicians in Schools** - a free national program supporting long-term, professional partnerships between practising mathematicians and teachers across Australia.

Further information: <http://www.amsi.org.au/index.php/ice-em>

[< top >](#)

Australian Association of Mathematics Teachers Inc. (AAMT)

The Australian Association of Mathematics Teachers is the nation's premier organisation of mathematics educators.

AAMT aims to:

- Support and enhance the work of teachers
- Promote the learning of mathematics
- Represent and promote interests in relation to mathematics education

Specific programs include:

Make It Count: a four-year project to develop an evidence base of practices that improve Indigenous students' learning in mathematics and numeracy. Go to: <http://makeitcount.aamt.edu.au/>

You Can Do Maths: encourages all young people and their families to appreciate the important role mathematics plays in many careers and everyday life. Go to: <http://www.youcandomaths.com.au/>

Find out more about AAMT at: <http://www.aamt.edu.au/>

[< top >](#)

Australian Mathematical Society

The Australian Mathematical Society (AustMS) is the national society of the mathematics profession in Australia.

Founded in 1956, our mission is the promotion and extension of mathematical knowledge and its applications. We represent all professional mathematicians in Australia, both pure and applied.

The special interests of applied mathematicians are represented by a division of AustMS, ANZIAM (Australia and New Zealand Industrial and Applied Mathematics).

The Society also has a number of affiliates.

The Society:

1. Promotes mathematics in the community (through programs such as the "Sticking with Mathematics" media campaign)
2. Represents the interests of the profession to government
3. Produces publications and submissions
4. Holds conferences and seminars
5. Provides awards in recognition of outstanding contributions to the mathematical sciences

Find out more: <http://www.austms.org.au/>

[< top >](#)

Smartkiddies

There are many online providers of educational resources relating specifically to Australian mathematics education.

Taking into account cost, content, structure, curricular relevance and ease of use, as well as feedback from students, parents and teachers, we think a good point of reference is Smartkiddies.

Smartkiddies Mathematics was originally developed in 2001 when a group of Australian school teachers decided to develop software to help their classes with mathematics. What began in 2001 with 21 lessons has now been adapted to be used in over 20 countries around the world. The program now has over 2000 video lessons, interactive games, worksheets and assessments covering all aspects of the syllabus.

Smartkiddies offers a sequential learning program with videos, number challenge games, worksheets, assessments for reporting and exams, all part of a complete learning program. It is far less expensive for parents than other programs, and is free to schools. Their aim is to make mathematics affordable and accessible for all schools and families.

Most importantly children like using Smartkiddies. They receive instant feedback, rewards and certificates for achievement, while parents and teachers receive information on progress.

Read more at <http://www.smartkiddies.com.au/>

[< top >](#)

National Centre for Excellence in Teaching Mathematics (NCETM)

The UK-based NCETM aims to support and encourage mathematics-specific continuing professional development, for all teachers of mathematics across all phases.

On the NCETM portal you will find a wealth of resources and tools to help you realise your own – and your learners' – potential.

To exploit the full range of what is on offer, register on the portal now (<https://www.ncetm.org.uk/join>) and enjoy your professional development journey....

Further information: <https://www.ncetm.org.uk/>

[< top >](#)

AWARDS & PRIZES

Australian Problem Solving Mathematical Olympiads (APSMO)

Online school registration extended to 30 April 2010

The APSMO Mathematical Olympiads have been operating in Primary Schools since 1987 and in High Schools since 2003. The organisation's original name was "Mathematical Olympiads for Primary Schools (MOPS)"

Any registered school from Australia and New Zealand can participate in the Olympiads. The Olympiads are open to all registered schools that have classes in the appropriate Division groups:

- Division J : Up to 12 years of age and in school Year 6 (NZ Year 7) or below
- Division S : Up to 14 years of age and in school Year 8 (NZ Year 9) or below

Full details at: http://www.apsmo.info/apsmo/APSMO_Home.php

[< top >](#)

National Mathematics Talent Quest

The National Mathematics Talent Quest (NMTQ) – run by the Australian Association of Mathematics Teachers (AAMT) - brings together the winners of state and territory competitions which recognise students' work on extended mathematical projects. The state and territory competition are in turn run by AAMT's State and Territory member organisations.

In addition to excellence in mathematics, winners excel in terms of creativity, presentation and communication. Judging occurs in October each year and responsibility for this rotates around the various states and territories.

Tens of thousands of students from Pre-school to Year 12 take part in these quests annually.

Entries may be on any mathematical topic and be presented in formats such as posters, written items (report, story, play, poem, diary, booklet etc.), video, computer based or physical models.

Further details: <http://www.aamt.edu.au/AAMT-in-action/Annual-activities/NMTQ/about>

[< top >](#)

CONFERENCES & EVENTS

National Mathematics Day

21 May 2010

National Mathematics Day is a chance for teachers to share and promote good mathematics teaching and learning -- with each other, with students, with colleagues and with the wider community.

Further information will be made available by the Australian Association of Mathematics Teachers – <http://www.aamt.edu.au/AAMT-in-action/Annual-activities/National-Maths-Day>

[< top >](#)

2010 Victorian Mathematics and Statistics Students' Conference

2 July, Dept of Mathematics and Statistics, University of Melbourne, Parkville, VIC

The aims of the 2010 Victorian Mathematics and Statistics Students' Conference (2010vmssc) are to:

- stimulate communication between mathematics and statistics graduate students from different Victorian universities;
- provide a forum in which students may share experiences of graduate study;
- provide Victorian graduate students an opportunity to gain an understanding of the research being conducted across the state;
- provide honours and masters students with the opportunities to explore PhD research options and gain personal perspective from PhD students from across Victoria.

This conference is aimed primarily at Victorian postgraduates in mathematics and statistics, across the state. It is run by students, for students. This means that any student can use this conference as an opportunity to practice giving a talk, which they may present at an AustMS meeting.

We are particularly interested in having at least one representative from every institution's mathematics/statistics department on the committee. The hope is that the conference is inclusive of all mathematics and statistics graduate students from across Victoria; this is not supposed to be just a Melbourne University thing.

There is no fee for registration. To register: <http://www.2010vmssc.ms.unimelb.edu.au/>

[< top >](#)

Teaching Mathematics: Make it count

ACER Research Conference 2010

15-17 August, Crown Conference Centre, Melbourne, VIC

What does research tell us about effective mathematics teaching and learning?

Research Conference 2010 will focus on mathematics teaching. It will draw together research-based knowledge about effective teaching and learning of mathematics. It will consider approaches to teaching that develop the mathematical proficiency of students and that catch and hold their interest in mathematics from the early years through to post-compulsory education.

This major event will be relevant to those directly involved in mathematics education as well as those concerned more broadly with the place of mathematics in education.

Further information & registration: http://www.acer.edu.au/research_conferences/

[< top >](#)

International Conference of Mathematicians: (ICM 2010)

19-27 August, Hyderabad, India

India has a long history of engagement with mathematics. Ancient India had made impressive progress in Algebra. The place value system with the use of zero for representing numbers is an Indian invention. Mathematicians working in Kerala (in the South West of India) had anticipated many ideas that lie at the base of Calculus, some two centuries before Newton. And in the more recent past – in the twentieth century, Ramanujan and Harish-Chandra blazed new trails in mathematics....

So the Indian mathematical community is delighted at the opportunity we have been given to host the International Congress of Mathematicians in this country. We look forward to a very exciting congress which would help us widen our mathematical horizon.

We are happy to welcome our colleagues from around the world to the Congress. We hope that you will also be able to savour some of the touristic delights our country offers.

Further information: <http://www.icm2010.org.in/>

[< top >](#)

Australian Mathematical Society 54th Meeting

27-30 September, University of Queensland (St Lucia), Brisbane, QLD

This conference event will cover all aspects of mathematics – for program details, registration etc visit the website: <http://www.smp.uq.edu.au/austms2010/>

[< top >](#)

Towards excellence in mathematics education

International Conference on Mathematics Education Research (ICMER 2010)

15-16 December, Malacca, Malaysia

ICMER 2010 is organised by Laboratory of Innovation in Mathematics Education from the Institute for Mathematical Research, University Putra Malaysia. The aim of the conference is to open up a discussion platform for the analysis, development, exchange and critique of ideas on recent practices and research in mathematics education

Website: <http://einspem.upm.edu.my/icmer2010>

[< top >](#)

ACSSO EMAIL NEWSLETTERS

- Australian Education Digest : <http://www.acsso.org.au/australian-education-digest/> (weekly)
- International News Roundup : <http://www.acsso.org.au/roundup/> (monthly)
- Values Education : <http://www.valuesineducation.org.au/news.htm> (monthly)
- Languages Education : <http://www.languageseducation.com/news.htm> (monthly)
- Ensemble - Music Education : <http://www.ensemble.org.au/news.htm> (monthly)
- Family School Partners : <http://www.familyschool.org.au/news/> (monthly)
- Public Education Voice : <http://www.acsso.org.au/public-education-voice> (quarterly)

Do you know of an event or resource that schools should know about? Email us at letters@acsso.org.au. Details of products, services, events, resources or points of view are provided for information only; publication does not imply endorsement or recommendation. No warranty is provided nor liability accepted by ACSSO, its members or employees.

To unsubscribe from Australian Education Digest click here: <mailto:webmaster@acsso.org.au?subject=unsubscribeAED>

To unsubscribe from all ACSSO mailings click here: <mailto:webmaster@acsso.org.au?subject=unsubscribeALL>