

Make it count: Numeracy, mathematics and Aboriginal learners

Through the *Make it count* project the Australian Association of Mathematics Teachers Inc (AAMT) has taken a lead in supporting classroom educators and school leaders to improve the mathematics and numeracy outcomes of Aboriginal learners.

About Make it count

Make it count has been a four-year project (2009 – 2012) funded by the Australian Government through the 'Closing the Gap' initiative. Eight site-specific clusters of schools across Australia have developed evidence based, responsive mathematics pedagogies specific to their context and Aboriginal students' needs. This has been achieved through careful and ongoing consideration of the different components of mathematics and numeracy education, informed by educators' increasing levels of cultural responsiveness. Through this framework, the learning in these schools is now intentional, responsive and increasingly effective in meeting the learning needs of Aboriginal learners.



The legacy of Make it count

As a result of the assets developed by the clusters, *Make it count* is building an extensive suite of resources to support teachers and school communities that wish to strengthen their work in numeracy and mathematics for Aboriginal students.

There is also a cadre of people - principals, Aboriginal educators, teachers, Aboriginal researchers and mathematics education researchers - from the clusters with experience and expertise to support schools.

Some of the foci of these resources include foci:

- Professional learning in mathematics for Aboriginal education assistants and other education assistants to broaden the scope of their in-class support role in mathematics and numeracy (Swan Valley Cluster, WA)
- Learning mathematics in contexts to build mathematical resilience in students (Alberton Cluster, SA)
- Adaption of explicit teaching and scaffolding principles of *Accelerated Literacy* into numeracy practices (Noarlunga Cluster, SA)
- *Getting Ready in Numeracy (GRIN)* – an intervention program designed to strengthen the capacity and confidence of Aboriginal students to do well in mainstream classes (Healesville Cluster, Vic.)
- Structuring whole school mathematics using the *8 Ways of learning* developed through Dr Tyson Yunkaporta to reflect learning processes in Aboriginal societies (Orange Cluster, NSW)
- Transition from home to school that focuses on numeracy and springboards to broader 'school readiness' through the *Monday Maths Mob* initiative (Dharug Cluster, NSW)
- Authentic, rich learning experiences in mathematics across the transition from primary to secondary school (Gladstone Cluster, Qld)
- Leading from the middle strategy: development of middle-line managers in Aboriginal and Torres Strait Islander education and mathematics education (Nerang Cluster, Qld).

There are other professional learning approaches such as teacher mentoring, the practical roles of school leaders and targeting cultural responsiveness training around mathematics and numeracy.

Make it count resources

These resources, aligned with support services from AAMT, will assist schools in improving mathematics outcomes for Aboriginal learners.

Leaders Pack

The Leaders Pack helps principals to lead learning and improvement in mathematics outcomes for Aboriginal students through a whole school approach. It is organised using the AITSL National Professional Standard for Principals and focuses on:

- Leading teaching and learning of mathematics
- Developing self and others as mathematics leaders
- Leading mathematics improvement, innovation and change
- Managing mathematics education within the school
- Engaging and working with the school community.

Teaching and learning resource

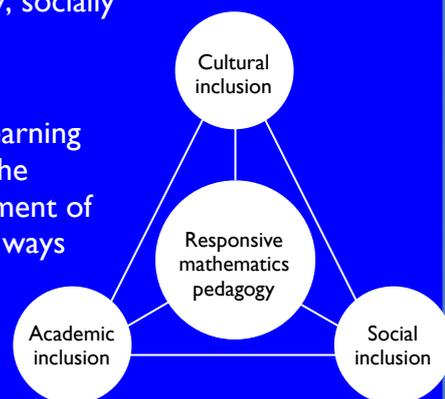
Make it count is developing an online teaching and learning resource based on cluster findings in Professional Knowledge, Professional Practice and Professional Engagement (AITSL National Standards for Teachers) to enable whole school improvement. Items on the resource have been designed by the cluster schools and are backed by careful evaluation. On the resource are:

- Units of learning
- Data tools including pedagogy checklists, survey instruments, questionnaires
- Cluster Findings in action eg teachers teaching, students learning
- Cluster stories including teacher narratives
- Details about each Cluster – their focus, approach and pedagogy, how they did it, their outcomes, what they've learned.

Supporting schools

AAMT is now uniquely placed to support whole school improvement in mathematics and numeracy outcomes of Aboriginal students. The next phase of *Make it count* will do this through:

1. Professional learning for education assistants, teachers, leaders in:
 - a. Responsive mathematics pedagogy that is culturally, socially and academically inclusive
 - b. Mathematics content knowledge.
2. Designing and delivering evidence based professional learning specific to a school and its community that intersects the development of cultural competency with the development of both deep mathematics content knowledge and better ways to teach mathematics and numeracy.
3. Creating professional learning communities to implement coordinated, coherent, evidence driven learning within schools and across schools.
4. Engaging with Aboriginal parents, families and communities and in creating collaborative communities with a focus on student outcomes in mathematics and numeracy.
5. Providing tools and strategies for focussed data collection and analysis and building an evidence base to support change.



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