

Extending Mathematical Understanding

Mathematics Intervention Specialist Teacher Courses 2010

Is your school looking for ways to support students who are experiencing difficulty in learning mathematics in the early years of schooling and beyond?

Do you see benefits in having one or more teachers at your school with expertise and leadership in this important area?

The Mathematics Teaching and Learning Centre and the School of Education at Australian Catholic University offers a practical, research-based, six-day program focusing on identifying and assisting these students through an intervention program and classroom support.

FREE INFORMATION SESSION
for Principals, Teachers and Coordinators will be held at ACU (Melbourne Campus), 115 Victoria Pde, Fitzroy on Friday 21st August, 1.30pm – 3.30pm

The Extending Mathematical Understanding Specialist Teacher course is based on the research, classroom experience and professional development leadership of Dr Ann Gervasoni in the *Extending Mathematical Understanding* (EMU) Program, the work of the Early Numeracy Research Project team, and the extensive classroom and professional development leadership of Ann Downton.



Course Outline and Requirements

- The Specialist teacher course involves field-based learning and a six-day spaced learning program
- The field-based learning component involves teachers planning and implementing an EMU Program (5 x 30 minute sessions per week) throughout the specialist teacher course, for a total of 25 hours.
- The six day program involves workshops, data analysis and reviewing video excerpts or simulating 'behind-the-screen' sessions. Professional interaction, critical reflection, associated discussion and professional reading are important aspects of the program.
- Participants must have a **minimum** qualification of BEd degree or equivalent, with **at least one year classroom teaching experience**.
- Experience with the Early Numeracy Interview is essential. For those not familiar with the interview, a compulsory additional day will be available in late 2009 (see below), and may be repeated in early 2010.

Program Content Includes

- understanding the distinctive nature of learning mathematics for low-attaining students;
- using data from the Early Numeracy Interview to identify students who are low-attaining and to prioritise children for placement in an intervention program;
- diagnosing individual learning needs;
- ongoing monitoring and assessment of mathematical learning;
- planning and implementing an EMU program;
- understanding the nature of Number growth point barriers and the nature of learning required to move beyond these barriers;
- strategies for accelerating the learning of underperforming students in counting, place value, addition, subtraction, multiplication and division;
- the role of children's confidence and attitude in learning mathematics;
- the role of metacognition and reflection in learning;
- the role of families and communities in enhancing mathematical learning.



Strategies for Providing Specialised Assistance Discussed Throughout the Course

- small group withdrawal program implemented by a specialist teacher;
- individual withdrawal program implemented by a specialist teacher;
- classroom program supplemented by an individual mathematics learning plan developed by a specialist teacher and the classroom teacher.

It is expected that schools will provide the necessary support for the coordinators to fully utilise this professional learning opportunity.

Components of a Typical EMU Session

Typically, each EMU session is structured to include 10 minutes of group activities focusing on counting and place value, 15 minutes of rich learning activities focusing on problem-solving in addition and subtraction, multiplication and division contexts, and 5 minutes individual and group reflection about the key mathematical ideas that were noticed during the session. A home task is also provided.

Cost

\$1870.00 per person. This is inclusive of GST and includes registration fee, morning tea, lunch and extensive notes and resources. All fees are non-refundable for cancellations.

Where

Programs will be conducted in the following locations in 2010 (subject to interest): Melbourne, Ballarat, Warragul and Perth, with presenters including Ann Gervasoni, Ann Downton, Carole Alexander, Kelly Watson and Linda Parish. (Dates of programs will be available from Rose Knight – see below).

NB. For teachers not familiar with conducting of the Early Numeracy Interview a compulsory Professional Learning Day will be held on Friday 13th November from 9.00am to 3.30pm. This day will also involve some input on how to assign growth points to students' responses to the interview (Registration Fee \$220 including GST).

For further details and to register for either session please contact Rose Knight on (03) 9953 3277 or rose.knight@acu.edu.au.

