



**ACU National**

Australian Catholic University

Brisbane Sydney Canberra Ballarat Melbourne

# Extending Mathematical Understanding

## *Mathematics Intervention Specialist Teacher Courses 2009*

**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 Trescowthick 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.**



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 two years teaching experience.
- Experience with the Early Numeracy Interview is essential. For those not familiar with the interview, a compulsory training day will be available in late 2008 (see over), and will be repeated early in 2009.



## **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 specialist teachers to fully utilise this training 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**

\$1760 per person. This is inclusive of GST and includes registration fee, morning tea, lunch and notes, and a range of resources. All fees are non-refundable for cancellations.

## **Where**

Programs will be conducted in the following locations in 2009 (subject to interest): Melbourne, Ballarat, Warragul, and Perth, with presenters including Ann Gervasoni, Ann Downton, Carole Alexander and Kelly Watson. (Dates of programs are available from Rose Knight—see below).



**A FREE INFORMATION SESSION** for Principals, Teachers and Coordinators will be held at AGU (Melbourne Campus), 115 Victoria Pde, Fitzroy on Friday 29th August, 1.30pm – 3.30pm.

For teachers not familiar with conducting the Early Numeracy Interview, a compulsory Professional Development Day will be held on Wednesday 5th November from 9.00 am to 3.30 pm (also repeated early in 2009). This day will also involve some input on how to assign growth points to students' responses to the interview. (Registration Fee \$195, including GST).

For further details or to register for the Free Information Session, the Interview Training Day or one of the 6-Day Programs, please contact Rose Knight on (03) 9953 3277 or [rose.knight@acu.edu.au](mailto:rose.knight@acu.edu.au).