

New South Wales

Australian Catholic University

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Approved Project Title **Young student's generalisation in arithmetic and algebra: patterns and mathematical structure.**

2009 : \$ 60,000

2010 : \$ 40,000

2011 : \$ 40,000

Primary RFCD 3302 CURRICULUM STUDIES

Administering Organisation Australian Catholic University

Project Summary

The ability to generalise is at the heart of the development of most computer based mathematical models, models utilised to assist us in addressing our National Research Priorities. The sharp fall of scientists and mathematicians is a national concern. These issues begin at an early age. Presently, increasingly more young students are making minimal progress on numeracy measures and consequently failing to engage in higher levels of mathematics. The basis for this problem is experiential. This research promotes in-depth understanding of how young students generalise mathematics in the early years, thus allowing them access to the powerful ideas of algebra, leading to improved outcomes in mathematics.