



Media release

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Eight education research projects receive TLRI funding

Eight projects worth \$1.7million have been selected for funding in the Teaching and Learning Research Initiative (TLRI) 2014 funding round.

The TLRI aims to build knowledge about teaching and learning that will lead to significantly improved outcomes for learners. Expressions of interest for the 2014 funding round closed in May and shortlisted applicants then submitted a full proposal. The fund is open to the early childhood, school and post-school sectors.

The TLRI is a government fund. New Zealand Council for Educational Research (NZCER) coordinates the fund and its associated research programme on behalf of the Ministry of Education.

Projects are divided into two different types, with different time periods and funding levels.

The projects selected for funding are:

Nurturing and encouraging young children's identity, language and culture in the early years

Principal Investigator: Keryn Davis

Partnerships: Core Education; Mapusaga Aoga Amata; North Beach Community Childcare Centre

This focuses on understanding how young children express their working theories about identity, language and culture. The project will also explore how adults nurture and encourage this learning, and how this in turn impacts on participation in early childhood education communities. The project examines ways teachers can support diversity, and participation, through pedagogy and programme design that is highly responsive to all learners.

Funding allocation: \$199,990 over 2 years

Te Whatu Kete Mātauranga: Weaving Māori and Pasifika infant and toddler theory and practice in early childhood education

Principal Investigators: Lesley Rameka

Partnerships: Victoria University of Wellington; three Te Wānanga o Aotearoa Early Learning Centres; three EFKS A'oga Amata

This project will create new knowledge about teaching and learning by exploring Māori and Pasifika understandings of care and education for infants and toddlers. The aim is to support culturally-embedded infant and toddler provision in Māori and Pasifika early childhood services, and also to provide culturally relevant theory and practice for all early childhood teachers and services.

Funding allocation: \$200,000 over 2 years

Talking about text: Changing patterns of discourse in low-decile secondary classrooms

Principal Investigators: Aaron Wilson

Partnerships: Woolf Fisher Research Centre, University of Auckland; Tamaki College; Aorere College

This design-based research project will identify and change patterns of talk about texts in secondary school English, health/physical education, and science classrooms with a high proportion of Māori and Pasifika learners. It will identify the factors that hinder and facilitate students' and teachers' participation in classroom and computer-mediated discussions about texts. A team of teacher-researchers will collaborate to design, trial and evaluate interventions.

Funding allocation: \$199,187 over 2 years

Creating Active Citizens? Interpreting, implementing and assessing 'personal social action' in NCEA Social Studies

Principal Investigators: Bronwyn Wood

Partnerships: Victoria University of Wellington; Massey University Institute of Education; Nayland College; Bishop Viard College; Horowhenua College; Palmerston North Girls' High

Since 2013, one internally assessed social studies achievement standard at each NCEA level requires students to take personal social action. These new standards have the potential to support transformative citizenship education but previous research suggests that taking social action can be viewed as 'risky' and that school-based social actions stick to safe versions of active citizenship. This project aims to help teachers and students interpret and implement the new social action achievement standards in critical and transformative ways.

Funding allocation: \$200,000 over 2 years

Exploring student thinking and problem solving in iPad-supported learning environments

Principal Investigators: Gary Falloon

Partnerships: University of Waikato; Leamington Primary School

The researcher has developed a purpose-built digital data tool to provide unique insights into how students learn with and through iPads for literacy tasks. The project will explore how teachers might use devices such as iPads and apps for thinking and problem-solving capability development, and it will identify specific teaching and curriculum designs and strategies for enhancing these capabilities. Three different learning areas in a primary school provide the context for the study.

Funding allocation: \$129,975 over 2 years

Enhancing teaching and learning of primary mathematics through the use of apps

Principal Investigators: Nigel Calder and Carol Murphy

Partnerships: University of Waikato; Tahatai Coast Primary School; Te Akau Ki Papamoa Primary School

The focus of the project is on teaching and learning primary mathematics through the use of apps with mobile digital devices. It seeks to advance and investigate the use of apps in primary mathematics classrooms, and their influence on students' mathematical learning. The team will co-construct a framework to evaluate and inform teaching decisions about the use of apps to enhance students' conceptual understanding. The framework will then support teacher professional learning and development in mathematics pedagogy.

Funding allocation: \$199,822 over 2 years

The impact of children's everyday learning on teaching and learning in classrooms and across schools

Principal Investigators: John O'Neill and Roseanna Bourke

Partnerships: Victoria University of Wellington; Institute of Education, Massey University; Central Normal School; Te Kura o Tākaro

In the first year, the team will gather rich data to understand how a diverse group of Year 5 students learn in everyday activities and settings outside school. In year two, the team will support the students' Year 6 teachers to trial teaching methods that draw on students' informal learning strengths. In year three, those teachers will mentor colleagues in other schools to replicate the experience. The project will provide robust knowledge of how and how far teachers' pedagogical practices change as they incorporate students' informal learning into classroom relations, activities, teaching and assessments.

Funding allocation: \$444,537 over 3 years

Re-engineering an engineering course: How flipped classrooms afford transformative teaching, learning, and workplace competency.

Principal Investigators: Mira Peter and Elaine Khoo

Partnerships: University of Waikato: Wilf Malcolm Institute of Educational Research; Faculty of Science and Engineering

This project builds on and extends the team's research on threshold concepts. It explores how an extended flipped classroom model can enhance student learning of threshold concepts in a mandatory first year electronic engineering class. The team will follow students into the workplace to explore how their mastery of threshold concepts and their learning about what it means to think and act as electronic engineers translates into their workplace competency. The project will address major gaps in New Zealand tertiary education research to demonstrate how an ICT-supported flipped classroom model affords in-class and workplace learning of transferable learner-practitioner 21st century competencies.

Funding allocation: \$199,850 over 2 years

Note: the TLRI is funded by the government, not NZCER. For information about the TLRI or any of the projects, contact:

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