



# Education Horizon

## Research grant scheme

### Approved proposals – 2018

#### Grant category: Early childhood education and care

Lead Researcher	Project Title	Project summary	Sponsor organisation	Funding awarded
Professor Amy Cutter-Mackenzie	Mapping scientific concepts through nature play in early childhood education: Achieving excellence in STEM through evidence-based pedagogies.	This project aims to determine how young children's (4-5 years) learning of scientific concepts can be supported through nature play. The increase of children attending kindergarten/preschool continues to rise markedly with 339,243 Australian children enrolled. Coupled with this increase is the rapid surge of nature play pedagogies in kindergartens. However, the effectiveness of nature play is untested, making this the first study in the world to explicitly research nature play in early childhood education. This is significant because nature play is a core feature and tradition of early childhood education practice and pedagogy. This project will forge new knowledge about nature play pedagogies and how they can support children's scientific learning in early childhood education. Such research supports both the Queensland Department of Education STEM Strategy (2016) and the National STEM Education Strategy (2016-2026) where "it recognises the importance of a focus on STEM in the early years" (p.5).	Southern Cross University	\$88,725
Dr Maryanne Theobald	Empowering global learners - A teacher-as-researcher approach.	As members of a global society, young learners are increasingly culturally and linguistically diverse. Teachers are valuing the importance of learners' intercultural capabilities as foundational for lifelong belonging and participation. While recognised in the Australian Curriculum, little is known about how teachers support rich social and linguistic diversity in educational settings. This project partners with teachers, as researchers, to generate a research-oriented, and practice-focused, program that builds their research capabilities, and supports young learners' intercultural classroom experiences. Teacher-researchers will engage in video-stimulated participatory	Queensland University of Technology	\$69,254

		<p>action research in their classrooms. The project will identify pedagogies for a classroom culture of communication and respect, elements underpinning a global perspective. The project will develop two professional learning modules: (1) being a teacher-researcher; and (2) a framework of inclusive pedagogy to empower learners as global citizens. The professional learning design provides a prototype with potential for upscaling to support teachers across Queensland.</p>		
Professor Karen Thorpe	<p>The when, what, and how of observing and assessing practice in Early Childhood Education and Care (ECEC): Towards an observational framework for Queensland's Authorised Officers.</p>	<p>The Department of Education holds responsibility for quality assessment and rating of licensed ECEC services in Queensland. Authorised Officers (AOs) are tasked to undertake this work. However, inconsistency in the amount, nature and recording of AO observations has been identified. We seek to improve observation value, consistency and fidelity by asking: (1) When should AOs observe practices; (2) What aspects of practice should AOs observe; and (3) How can we best support AOs' practice?</p>	The University of Queensland	\$88,000
Professor Suzanne Carrington	<p>Understanding school improvement in Queensland: Developing a program theory.</p>	<p>School improvement is a focus for governments to enhance student learning and achievement outcomes. School improvement is complex and there is minimal context-specific information about mechanisms facilitating or constraining improvement. This will be the first program theory for school improvement in Queensland. Program theory provides the basis for an instrument to document school improvement, contributing to system capacity building. Existing department data and new data from two schools with different improvement histories will be used to develop the theory. While the School Improvement Unit (SIU) has a model and there are international models available, this project offers an innovative and unique approach to theory development and refinement through: (1) a realist approach to program theory design, which aims to capture the multiple context, mechanism, and outcome chains related to school improvement; and (2) a co-design approach capitalising on academic research alongside the knowledge of SIU researchers, frontline education leaders and educators' experiences.</p>	Queensland University of Technology	\$52,361

## Grant category: Schooling

Professor Beryl Exley	Makerspaces for teachers as writers: A dialogic approach to teacher learning that impacts P-10 students' writing outcomes.	The project situates teachers as writers - "TAW" - as an essential foundation for writing teachers. It will document the affordances and challenges of an approach to teacher learning that includes face-to-face and online makerspaces amalgamated with teachers' own pedagogic knowledge, knowledge of themselves as practitioners and knowledge of their students. It will also document the impact of the "TAW" makerspaces on P-10 students' literary writing outcomes. The project's significance will be in the higher yield in P-10 students' literary writing outcomes.	Griffith University	\$47,614
Professor Michele Haynes	Factors that impact on long term achievement and retention for students with autism spectrum disorder in Queensland Government schools: Evidence from Administrative data.	This project will utilise longitudinal administrative data to profile the trajectories of academic achievement for children with autism spectrum disorder (ASD). It aligns with the Department of Education's strategy to ensure that all students with a disability reach their potential. Specifically, it aims to: (1) identify distinct groups with different academic achievement trajectories for two cohorts of children with ASD: Year 1 cohorts enrolled in 2006 (to Year 12) and 2012 (to Year 6); (2) determine associations of individual and school level factors, including location (major city, regional, rural, remote), with the different groups of achievement trajectories; (3) determine differences in profiles between the two cohorts and association with policy change. The findings will provide evidence on which groups of children have achieved well and other groups that have experienced decline and when, with the potential to inform policy decisions on the allocation of resources for support where it is most needed.	Australian Catholic University	\$84,540

Associate Professor Margaret Kettle	Using students' home languages to promote learning in high stakes secondary education: Pedagogical guidelines for teachers in culturally and linguistically diversifying regional and rural areas.	This project addresses three considerations for education in rural Queensland: (1) growing enrolments of Language Background Other Than English (LBOTE) students from increased permanent skilled and humanitarian settlement (ABS, 2018; The State of Queensland, 2017); (2) commitment to standards-based curriculum and assessment, and vocational and higher education-readiness for students; and (3) pedagogical capacity-building in inclusive, evidence-based strategies that utilise students' existing language resources to promote English as an Additional Language (EAL) learning. Building on previous research, the project involves a case study of a rural high school where teachers seek research informed, practice-oriented strategies to support content learning for EAL students. Following collaborative, iterative design principles, researchers, teachers, students and parents will develop and evaluate guidelines for planning and delivering curriculum content that integrates home and academic strengths. Guidelines will be disseminated as face-to-face and online resources for professional development, providing the foundation for policy recommendations and upscaled future research	Queensland University of Technology	\$34,910
Dr Louise McCuaig	Healthy Transition Navigators: fostering students' learning and wellbeing to promote positive post-secondary transitions into higher education learning environments.	This project aims to create collaborative school-tertiary partnerships to enhance senior students' engagement with 'meta-level' learning, e-administration and wellbeing skills that promote positive transitions into higher education contexts. The significance of this project lies in its innovative, contextual response to the limited empirical research informing secondary-tertiary transition policy and practice. Further, this project explicitly supports the Department of Education's strategic plans to address the inter-related learning and wellbeing needs of Queensland students at a time of significant assessment renewal.	The University of Queensland	\$46,077
Mr Troy Meston	Deadly Gaming!!	This intervention aims to close achievement gaps and develop 21st century skills in Indigenous students at the schools in the research study. The intervention will develop and implement a whole child curriculum, drawing on technology and aspects of Indigenous culture in an innovative way. This research functions as a critical case study considering testing at the state level and nationwide in urban, regional and remote Indigenous contexts.	Griffith University	\$88,600

Dr Wojtek Tomaszewski	Impact of life-threatening illness on education outcomes in Queensland children – A population-based study to identify risk factors and pathways to intervention.	<p>Every year, approximately 3,000 Queensland children are admitted to Paediatric Intensive Care Units because of life-threatening critical illness. Since most of these children (97%) survive, over 20,000 will be in Queensland schools at any given time. Survivors of critical illness are more likely to suffer from long-term cognitive, functional, and behavioural difficulties, yet there is lack of processes, follow-up, support systems, and early intervention strategies to meet the needs of this high risk group in Australian schools. Using a unique multi-centre state-wide data linkage combining medical records, health, and educational data, this project will comprehensively evaluate long-term trajectories of educational outcomes of children who suffered critical illness. The project will generate new knowledge about the characteristics of critical illness survivors in Queensland schools. Furthermore, it will create future research translation pathways, including development of diagnostic tools and interventions involving hospitals, schools, and families to ameliorate educational disadvantage driven by illness.</p>	The University of Queensland	\$72,539
-----------------------	---	--	------------------------------	----------



## Grant category: Open

Associate Professor Susan Irvine	Distributed leadership in family day care: Challenge, change and opportunities.	Family day care (FDC) in Australia has been impacted by significant policy changes with positive and negative effect. While the National Quality Framework is seen to support professional practice, recent changes may have led to scheme closures and reduced parental choice. In a dynamic policy context, effective leadership and management is critical to support the delivery of quality education and care. Yet there are few studies of leadership in FDC. Leveraging our previous workforce research, and applying a distributed leadership perspective, this project investigates the central role of coordination units in supporting strategic and operational scheme leadership, while enabling educator autonomy and quality home-based education and care. The outcome will be a 360 degree view of distributed leadership in FDC, and dissemination of leadership approaches and strategies to support schemes to evaluate and strengthen their work with educators.	Queensland University of Technology	\$148,069
Professor Paula Brough	Engaging teachers across the career span: Improving the retention and engagement of teachers through mentoring in schools.	This project assesses how mentoring practices enhance the wellbeing, retention, and engagement of teachers. Our previous research indicates that 36% of Queensland teachers currently intend to leave the profession, with 28% of beginning teachers wanting to leave after their first semester. Analyses from our 2016 Education Horizon project identified that a supportive school environment where teachers shared mentoring roles was essential. The aim of the current project is to extend this research by more rigorously evaluating the benefits of teachers and associate leaders who adopt mentoring roles and the benefits of these practices for schools. This project will have substantial benefits by producing recommendations to enhance mentoring practices within schools, and improving policies for the retention, wellbeing, and engagement for both new and experienced teachers.	Griffith University	\$146,163