

Round 3 School Based Research Project Update

Four schools were successful in receiving funding and support from AISNSW at the end of 2016 to undertake a school based research project. This issue of the Brief presents their progress at the half way mark of their two-year project.

School Based Research Projects

Now in its fourth year, the AIS Education Research Council's School Based Research Project Initiative continues to attract a diverse range of high quality research project applications.

Twelve projects have completed to date, with seven currently underway. Together they illustrate the broad range of timely topics of interest to independent schools across New South Wales. Common to all projects is a focus on improving educator practice and student outcomes.

Selected school research teams consist of practising educators and/or school leaders, who are mentored by at least one specialist academic from around the globe. This approach to supporting the research process ensures a robust investigation, and affords professional learning on topics and the fundamentals of undertaking quality research. As a result of this model, practitioner researchers are able to produce high quality, rigorous research that reflects their experience, perspectives and contexts.

In 2016, four schools were successful in being selected for AISNSW funding and support to undertake research in their school contexts.

This Brief summarises their progress to the mid-point of their research endeavours, and outlines what their second year will hold.

Kincoppal-Rose Bay School
Growing minds

Kinross Woleroi School
Collaborative approaches to programming and teaching primary science: Opportunities and impacts

MUSEC School
Schema-based instruction and maths problem solving

RIDBC Thomas Pattison School
The development of an online assessment tool for Auslan

Collaborative approaches to programming and teaching primary science: Opportunities and impacts

Kinross Wolaroi School

Project overview

This project builds on initial research conducted by the school into collaborative programming and teaching during 2016. It examines the impact of a school based science professional learning project on educators' science teaching efficacy and students' knowledge of outcomes in, and perceptions of, science at school.

The project connects primary educators with specialist secondary science educators in a collaborative, team-teaching model. This approach fosters the development of a community of practice for the programming and teaching of science. The aim is to improve primary educator confidence and competency in teaching inquiry based science, and secondary educator pedagogical approaches and cooperative learning strategies.

The research team is seeking to determine if this team-teaching approach positively impacts educator practice and self-efficacy. It also aims to identify what impacts the approach has on primary student knowledge outcomes and experiences of primary science. This project takes a case study approach and involves K-6 students in a phased implementation model.

The research team

The research team is led by Susan Cameron, Director of Staff Development. The team is further supported by their academic mentor Dr Lena Danaia from Charles Sturt University.

Progress to date

The first year of this project involved implementation of the team-teaching model, including scoping and sequencing and collaborative planning, across four year levels. This resulted in changes with respect to how science had been programmed in the past. Action research cycles – an integral aspect of this project – have been influential in guiding changes and informing the implementation cycles as the team-teaching model was, and continues to be, rolled out across classes.

Baseline and on-going data collection and analysis have already begun to show promising results. Where team-teaching is occurring, students' use of scientific meta-language, concepts and complex thinking appears to have increased. Collaborative programming and team-teaching also appear to have positively impacted on primary science educator confidence and content knowledge. Data suggest that secondary educators involved in the project are reflecting on their pedagogical practices and are investigating ways to scaffold their learning into their own teaching.

Where to next?

The next year of the project will see a continued roll-out of the collaborative programming and team-teaching model across Stage levels. Ongoing data collection and analysis, along with action research cycles, will continue to inform the improvement and direction of the project. The team will focus on collaborative programming with a view to making this model sustainable, not only beyond the life of the research project, but beyond the current KLA.



"By teaming-up the primary and secondary teachers we anticipate that the primary teachers will help inform the secondary teachers of different instructional approaches and cooperative learning strategies that they tend to employ within their primary classrooms and which could be used and/or adapted for the secondary school context."

"It certainly makes you refocus on what the important point of the lesson is. What's your main point." (Secondary Science teacher)

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