

# The effect of two interventions on high ability underachievers

## School Based Research Project 2017 Interim Report Inaburra School

### Project overview

This project examines the effects of using bibliotherapy and differentiation techniques to support the learning needs of students identified as high ability underachievers at Inaburra School. It addresses the question: *Would bibliotherapy and/or differentiation techniques be sufficient to reverse underachievement in high ability students?*

Bibliotherapy is the technique that systematically matches reading materials to the needs of each learner. It has been proven to help with student achievement and development (Johnson, Wan, Templeton, Graham, & Sattler, 2000, cited in Cook, Earles-Vollrath, & Ganz, 2006). With regards to differentiation techniques, a number of models have been developed to assist educators to meet the needs of gifted students. For this project, the Maker Model (Maker, 1982) was selected to differentiate the curriculum.

This project will be the first in Australia that studies the use of the Achievement-Oriented Model (AOM) (Siegle & McCoach, 2005) and bibliotherapy with high ability underachievers. The AOM explains why high ability students underachieve. According to this model, high achieving students find school useful (goal valuation), the environment supportive (environmental perceptions), and perceive themselves to have ability to perform academic tasks (self-efficacy). Fostering these factors leads to motivated students who self-regulate and are engaged in their learning (Siegle & McCoach, 2005). The importance of these factors to successful learning is also well supported by Hattie's (2009) meta-synthesis.

It is anticipated that this project will provide guidance for further work with similar students. This may be by embedding the interventions into the school curriculum for use with other identified high ability underachievers. The results may also inform other schools who experience similar challenges.

### The research team

The research project is led by Lye Chan Long, Director of Research and Enrichment, and Adrienne Erwin, ICT Learning Leader. The team is supported by critical friends Professor Del Siegle (University of Connecticut), Assistant Professor Jennifer Richotte (University of Northern Colorado), and Ruth Phillips (University of Wollongong).



(From the left: Lye Chan Long, Adrienne Erwin, Del Siegle)

### Project design

The project was designed to look for indicators of improvement in motivation and achievement scores of identified high ability underachievers after a 10-week intervention program. The research team chose to work with a number of Year 9 and Year 7 students who were identified as high ability underachievers.

Students would be exposed to both interventions — bibliotherapy and differentiation — and asked to choose one for use in their class activities, lessons and tasks. In addition, the research team would show them how to blog about their feelings and results as a way to gather data and information for the project. Data about students' motivation and attitudes to school and learning would be collected through a pre and post survey.

### Progress to date

In line with the project design, in Term 1 of 2016, fourteen Year 9 students were allocated time to learn about bibliotherapy and the Maker Model. Students then chose the one intervention they preferred to use. Following in-house training focusing on how to blog, students wrote to express what they felt and had learned over the term. They met in a group with a project member for 10-20 minutes every fortnight during their elective lessons, to provide an account of their progress or difficulties.

In Term 3 of 2016, fifteen Year 7 students participated in the second phase of the project completing the same process. As some Year 9 students had found it difficult to use the interventions early on, project members decided to visit Year 7 students in their lessons, helping them to apply the interventions more effectively.

Preliminary results indicated that the interventions appeared more effective for Year 7 students. The research team speculated that this may be because students

