

### School Based Research Project 2017 Interim Report Knox Grammar School

#### Project overview

This project grew out of a need to develop confluence between professional learning, curriculum and teacher and student performance. It addresses the research question: *Will the implementation of a professional learning model focused on enriching pedagogical content knowledge, and grounded in the discerning use of quantitative and qualitative data to inform targeted teaching practice, lead to measurable improvements in teacher and student performance, self-efficacy and wellbeing?*

The project focuses on improving student and teacher performance through a collaborative and collegial whole school approach. In response to this, the school has formed learning and research teams in each secondary school department and a Knox Preparatory Year 4 team, focusing on active inquiry and continuous improvement.

A unique aspect of this project is that it investigates whether a focus on enriching pedagogical subject knowledge in learning and research teams will make a discernible and measurable difference in the quality of teaching. Evidence indicates that the highest performing schools in the world improve teaching and learning by focusing on enriching subject-specific pedagogy (Darling-Hammond, 2014; OECD, 2013).



#### The research team

The research team is led by Karen Yager, Deputy Headmaster 7-12 and Head of Student and Teaching Excellence K-12. The team is supported by critical friends Professor Geoff Masters (Australian Council for Educational Research), and Emeritus Professor Linda Darling-Hammond (Graduate School of Education, Stanford University). In 2017 Professor John Fischetti (University of Newcastle) will join the team as a critical friend.



#### Project design

This project utilises an action research methodology. Data are being collected from a number of sources and triangulated to ensure validity and reliability. Both qualitative and quantitative evidence is being used to assess student achievement, student and teacher wellbeing, and self-efficacy. Baseline and value-adding data is collected using Allwell educational measurement testing at the end of each year. The research team also gathers data using a validated scale at the beginning and end of each year to identify and quantify student and teacher self-efficacy.

The scope of the project was originally limited to the Year 4 team in Knox Preparatory School and a single department in the Senior School. Given the potential for this project to positively impact on student and teacher performance, it was scaled up to include the entire Senior School (beginning in 2016), and all staff at Knox Preparatory School and Wahroonga Preparatory School in 2017.

#### Progress to date

The first step in the project was to familiarise the action research team and Heads of Departments with the AITSL Performance and Development Framework (AITSL, 2012). During Term 1 of 2016, Knox Grammar School focused on immersing teachers in data mining at a granular level, and introduced the concept of targeted teaching. An analytics team was formed to support the research project's objectives. The school now has the capacity to accurately measure the growth of each student over the course of a year, and strategically target specific areas for improvement, such as writing.

At the beginning of Term 1 of 2016, all teachers developed performance and development plans with targeted goals connected to the National Professional Standards for



## Aiming for student and teacher excellence

Teachers. In Term 2 of 2016, the school formed Learning and Research teams in each department and a Year 4 Learning and Research team at Knox Preparatory School. Currently, there are 17 Learning and Research teams working collegially to enrich practice by accessing current research, conducting student perception surveys, sharing ideas and strategies, and observing and celebrating excellence. To ensure the success of the project, these teams are provided with dedicated time to meet and work together.

As a result of this project, Knox Grammar School has witnessed the strengthening and enriching of a collaborative culture grounded in research and focused on improvement. In 2016, with the implementation of the project, teachers began to provide BOSTES (now NESAs) endorsed professional learning workshops connected to the identified targets for improvement. In Term 3 of 2016, the school held the *Aiming for Excellence Conference*, focusing on how to achieve student and teaching excellence. These workshops and the conference were well attended and valued by participants.

The project and the ongoing provision of current research papers to all teachers have fuelled teachers' interest in attaining accreditation at higher levels. To date 32 teachers have expressed interest in pursuing further professional learning to become Experienced Teachers or Highly Accomplished teachers.



In Term 4 of 2016, the action research team conducted a teleconference with Professor Geoff Masters to further investigate and refine the research question, and discuss effective ways to evaluate the research. The project members and Heads of Departments also spent a day focusing on the implementation of the project in 2017. The aim of this was to share what had worked to date as well as what could be improved.

This information will inform the first 2017 Staff Development Day which focuses on setting data informed strategic targets and determining how the impact of the new approach to professional learning will be measured.

In summary, results of the project to date have affirmed its scope and possibilities. This has inspired the school to pursue the objectives and outcomes with renewed vigour in 2017.



### Where to next?

In 2017 the research project will be scaled up to encompass all of Knox Preparatory School and Wahroonga Preparatory School staff. In line with this, Knox Grammar School will appoint a Director of Professional Learning to support team leaders at these schools.

Teacher goals will continue to be worked towards. Student perception surveys will be conducted at the beginning and end of each term to inform teaching and learning, and ascertain student engagement and self-efficacy.

### References

- AITSL. (August, 2012). Australian Teacher Performance and Development Framework. Education Services Australia.
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- OECD. (2013). *TALIS 2013 Results: An international perspective on teaching and learning*. TALIS, OECD Publishing.

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