

LearningYou developed an action learning project for Kenmore South State School to build teacher capacity in creating and delivering manageable differentiated numeracy lessons.

The Challenge

Growth in student improvement in numeracy, as reflected in Naplan numeracy results in Yrs 3, 5 & 7 during 2012 – 2013, was below expectations and did not mirror the growth in literacy results during the same period. In the previous three years the school had successfully improved literacy through a whole school approach and it was anticipated that a similar focus on numeracy was required.

It was agreed that to ensure long term sustainable improvement in student outcomes it was essential that professional learning be aligned to teaching programmes, or "just in time", and specifically related to the teacher's current students.

How we helped?

LearningYou helped the school develop and implement **The Explicit Teaching of Numeracy Action Learning Project** in response to an extensive needs analysis which included the review of Naplan data through a strategy and misconception lens and feedback from teachers via surveys, observations, and interviews.

Key focus areas included:

- Exposure of students to non-routine problems through problem solving in mathematics.
- Pre-assessment of students to inform planning for differentiated tasks and to uncover student misconceptions.

 Cross year level knowledge and understanding of the mathematics curriculum to provide teachers with a "big picture" view of the development of mathematical understanding.

Value delivered

The project delivered a framework, based on the Japanese lesson study, by which teachers were able to:

- Administer and analyse diagnostic tasks to their students to identify levels of mathematical understanding within their class
- Plan manageable differentiated activities in response to diagnostic tasks. This was supported by half day professional development workshops focussing on the mathematical concepts
- Observe a modelled differentiated lesson, prepared and presented in response to the analysis of the diagnostic task, and incorporating key concepts from the professional developments
- Engage in professional discussions regarding their observations and set professional learning goals in response to their reflections.
- Prepare and deliver differentiated lessons which were observed and on which feedback was provided.

LearningYou enabled teachers to make direct connection between student data, their own professional learning and classroom practice. The professional dialogue resulting from the observation of students during the modelled lessons was a powerful catalyst for change of practice and has opened the door for continued collaboration and sharing of best practice.