

Educational Review Office  
**Comments on Problem-Based Learning**

Birkdale Intermediate School

December 2006

The focus of the review was the impact of problem-based learning initiatives on student learning. The review affirmed good practice in this area.

'A strong educational research bases underpins the operation of the school and local and international external review is sought to evaluate the impact of educational programmes on students' learning.'

'Students communicate well and benefit from the nurturing environment teachers provide. They show high levels of interest and sustained on-task behaviour in classrooms.'

'Children understand the school's approach to information processing and research skills embodied in the Problem Based Learning (PBL) approach developed by staff. Students report that this process allows them to think about issues in a deeper and more logical way.'

'Teachers work actively to implement the agreed school vision and practices. They are reflective and respond well to professional development and direction. Teachers are focused on the ongoing improvement of students engagement with learning.'

'Trustees are well informed about student achievement and work in partnership with staff. They encourage innovation in management and curriculum and support teachers well with curriculum and professional development funding.'

### **Student Progress and Achievement**

'Teachers have responded to suggestions in the 2003 ERO report that they plan for and assess the progress and thinking skills of students. These skills are assessed well in science and social studies. Science and social studies plans focus on a specific critical thinking skill for each Quest so that a range of thinking skills is assessed during the year. Rubrics for assessment are based on New Zealand Curriculum levels, using assessment exemplars and the assessment resource banks to moderate expectations and ensure students are achieving at the level expected of students at their year level nationally. Rubrics contain clear criteria and are made transparent to students at the beginning of a Quest. In four Quests this year the consolidated data indicates that 64% of Year 7 and 77% of Year 8 students achieved at or above expectations overall.'

'These results for PBL learning may indicative of the increasing sophistication with which children are able to use the model as they move from Year 7 to Year 8. Teachers' evaluations contain analysis of the range of achievement for each Quest and what they need to do to further improve student achievement in thinking and process skills.'

### **Areas of good performance**

PBL integrated Learning Model

'The PBL approach to learning has a strong research base, has been developed by teachers and addresses identified barriers to learning specific to the school. These factors

include a lack of engagement of boys in learning, the need for relevant real world contexts for learning, and activities that promote independent and higher order thinking skills. These issues have been successfully addressed through consistent implementation of PBL and its associated teaching strategies.'

#### Teacher, Students and Parent Understanding of PBL

'Teachers, students and parents have a clear understanding of the positive implications of children's learning that PBL offers. They also know the structure of each unit or Quest. This allows parents to support their children's learning after communication from the school about upcoming Quests. Students can articulate the steps and components of PBL and the impact it has on their learning.'

#### Support for Teachers

'A professional mentoring role is undertaken by a Deputy Principal to promote high levels of teacher performance. Feedback to teachers about their implementation of PBL is rigorous and records ongoing improvement in individual teacher practice. This support is highly valued by teachers, the majority of whom are high performing. They report being more confident and proficient in implementing the approach as a result of the professional support and resourcing they receive.'

#### Engagement in Learning

'Classrooms reflect high levels of student engagement and interest in learning. Students are able to make personal associations with Quest contexts and report this as a positive impact on their attitude to learning. Wall displays reflect student learning and thinking. PBL is well documented in examples of student work.'

#### Integration of Information Communication Technologies

'Comprehensive Quest resourcing is developed by and provided for teachers and students. Careful collation of multimedia resources is stored on CD ROMs for use in classrooms. Content includes video clips, research and resources that support students to investigate and solve problems.'

#### Programme Planning and Assessment

'Planning and assessment systems are well developed and consistently applied by teachers across the school. Robust and reliable assessment data are collected as a result. Teachers further evaluate the success of each Quest and recommendations are implemented in the next unit of work, further strengthening the planning of future topics or problems. Children are made aware of the criteria by use of rubrics that detail elements of their work that will be appraised. This enables them to take an active part in assessing their work.'

#### Reading Strategies to Enhance and Reinforce Learning

'Teachers have integrated a reading approach called the Three Level Guide into reading and PBL programmes. Children use the approach to process information and collect facts, then delve deeper into the text, and finally to make personal reflections in order to use an effective strategic reading approach across the curriculum. The programme is particularly successful in engaging boys and helping them to enjoy exploring different types of text.'

## Technology Curriculum Delivery

'Students benefit from technology programmes that are tailored to their needs, are progressively more complex and have close links with regular class programmes. The features of PBL are successfully woven into technology sessions. The technology teaching team have developed specific curriculum planning templates and resource books to guide children's thinking, creativity, and responses to problems. These resources promote the use of graphic organisers and thinking skills.'

## Self and External Review

'Teachers evaluate the success of PBL for their own students and school wide. This enables them to modify programmes in order to improve them. In addition, discussions as part of the teacher appraisal programme allows teachers to identify areas of good performance and areas for further development in their own teaching.'

'The school is nationally and internationally recognised as a leader in PBL and commissions external review of its approach by recognised leaders in the field who are asked to serve as critical friends for the school's programmes. This review is rigorous and supports the school's vision of ongoing improvement.'