

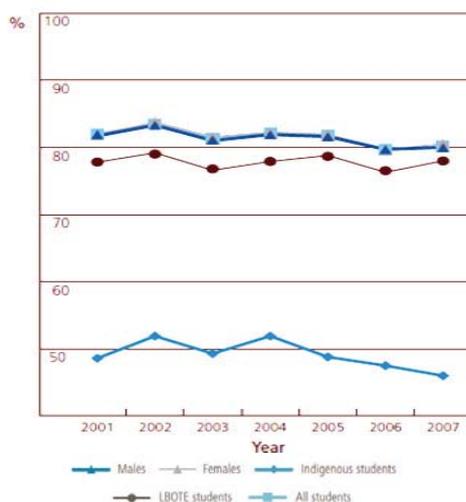
## Purpose

This document summarises the findings of a recent doctoral research study into the impact of *Quality Learning* on improving school performance. It also points to other studies that support the application of this approach to effect continuous school improvement.

## The Need for School Improvement

Our schools are being subjected to ever-increasing pressure from a diverse range of stakeholders, demanding that they adapt to the needs and expectations of a changing society.

Although Australian schools currently rank among the world's leading nations in terms of academic performance, close examination of the data reveal that there has been little improvement over the last decade. Also, that a higher proportion of our students are falling behind.



Percentage of Year 7 students achieving the national numeracy benchmark (2001-2007) (DEST 2007)

Other indicators of concern relating to the performance of our schools include:

- increasing numbers of disengaged students
- poor retention rates
- the declining morale of educators
- growing parent dissatisfaction
- research into the brain and learning that renders many current pedagogical practices obsolete.



Correlation Chart of (typical high school) student example perceptions of their learning experience at school: 26% say they are learning 'not much' or 'nothing' and 44% say they 'didn't like it' or 'hated it' for English (green), Mathematics (yellow), Science (blue) and Social Studies (green) (QLA 2009)

Each year our government invests millions of dollars to improve the school education system. Schools are inundated with strategies intended to improve school performance. The literature reveals that few are evaluated for their effectiveness.

## Research Rationale & Objectives

From 1997 to 2004, 138 Victorian State schools took part in the *Quality in Schools* program, an initiative of the Australian Quality Council in partnership with the Victorian Education Department.

The program was designed to develop educator and administrator capacity in the thinking, strategies and methods of *Quality Improvement* as it applies to the school and its classrooms. This approach to improvement is known as *Quality Learning*.

Whilst there is much evidence that proves individual school success, the systemic impact of the approach had not been evaluated.

The aim of the research was to determine the impact of deployment of the *Quality Learning* approach on school performance, specifically with respect to student learning outcomes.

## What is Quality Improvement?

The *Quality Improvement* approach is based upon principles and methods of improvement, derived from industry. With its origins in the work of W. Edwards Deming, Quality principles and methods have evolved over the last five decades and have been contributed to, and reinforced, by many of the great researchers and strategic thinkers of our time. The approach is proven in industry to bring about sustainable and continuous performance improvement.

The *Quality Improvement* approach brings about improvement by focusing attention on four key areas:

### Systems

Understand your systems

### People

Remove barriers

## Quality Learning

### Knowledge

Reflect and plan to improve

### Variation

Measure progress

**Systems** - seeking clarity of purpose, establishing visions of excellence, focusing on clients, understanding processes and interrelationships.

**People** - removing barriers to intrinsic motivation, encouraging leadership at all levels, teamwork and cooperation.

**Knowledge** - using improvement tools and methods, planning for improvement, the importance of theory to guide improvement efforts.

**Variation** - using data to drive improvement, understanding system and process variation.

In a school setting, a *Quality Learning* approach provides strategies and methods to ensure a high degree of learning is achieved by all students.

The whole school community is engaged in the continuous improvement of learning.

A key feature of improving the quality of learning is to provide strategies and methods that enable and intrinsically motivate students to take responsibility for their learning.

Students are actively involved in the learning process. There is shared focus on learning how to learn as they:

- are aware of what they need to know, understand and be able to do, as well as the purpose of their learning
- set goals and agree the quality standards used to self-evaluate and track the progress of their learning
- participate in classroom planning and decision-making processes, providing constant feedback to teachers as to the impact of teaching strategies on their learning.

## Research Methodology

The following methods were used to collect the research data:

- Primary data were collected using a self-assessment methodology involving one or more participants nominated by the school. They were asked to identify current school and classroom practices and activities from a range of descriptors. Each descriptor represented a different level of deployment of the *Quality Learning* approach and carried a numerical score, allowing for quantification of deployment.
- Secondary data relating to key performance indicators were obtained from each school. These data were extracted from departmental reports provide information on student learning outcomes, parent and staff opinion.
- Qualitative data were also collected relating to perceptions of the challenges to school improvement. Data relating to school size, team and leadership changes were collected to assess their impact on the success of the approach.

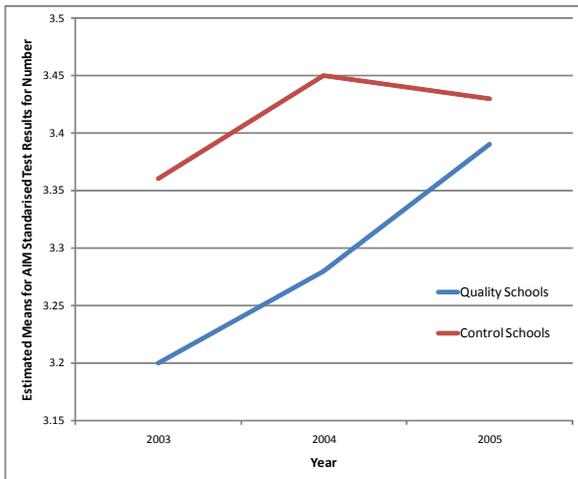
Data were collected from twenty-two schools that participated in the program, as well as from a matched set of control schools. *Like* school data, were also used. *Like* school data represent the averages achieved by Victorian schools of a similar demographic.

A range of statistical analyses were used to test the relationships existing between deployment of the approach and school performance and improvement.

## Findings

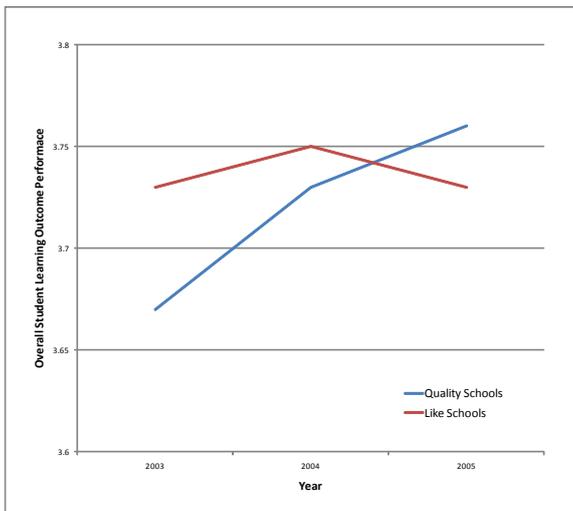
The study found that the schools that participated in the program showed:

- Increased understanding and application of the *Quality Improvement* approach (statistical significance established).
- A greater observed rate of improvement compared to the control schools and *Like* school averages - see chart below.



Interaction Chart showing rate of improvement in Achievement Improvement Monitor (AIM) Test Number by *Quality* (blue) and *Control* (red) schools (2003-2005)

- A greater overall rate of improvement for student learning outcomes compared to *Like* schools (statistical significance established) - see chart below.



Interaction Chart showing rate of overall improvement in Student Achievement performance by *Quality* (blue) and *Like* (red) schools (2003-2005)

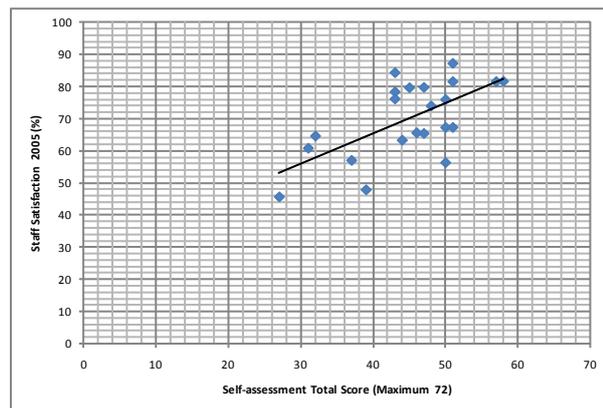
- Greater strengths in: the use of data, planning, understanding process and system variation, stakeholder and change management, and leadership (statistical significance established).

With respect to the challenges associated with improvement efforts, schools that participated in the program, reported a lack of resources and time as the main barriers to improvement efforts.

Control schools, in contrast, blamed those in their schools for their lack of success (namely, student ability and staff resistance to change).

The study also concluded that:

- Deployment of the *Quality Learning* approach increased staff satisfaction (statistical significance established) - see plot below.



Scatter Plot showing positive correlation between depth of deployment of the *Quality Learning* approach and Staff Satisfaction

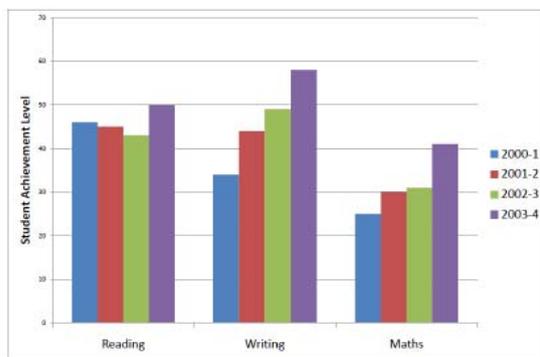
- Deployment of the *Quality Learning* approach improved primary student outcomes for reading, writing and number (statistical significance established).
- The program appeared resilient to challenges usually associated with the failure or stalling of change interventions; school size, the passing of time, and changes to the number of trained team members.

## Other studies examining the impact of Quality Learning

1. In 2005, the Re-inventing Schools Coalition (RISC) in the USA commissioned the University of Maine to analyse the impact of applying their *Quality Schools Model* on student achievement.

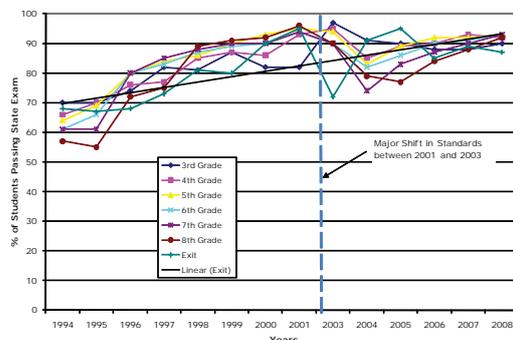
The model, based on the same philosophy as *Quality Learning*, focuses effort on leadership, shared vision, standards-based design and continuous improvement.

The study of over 200 Alaskan schools, found that deployment of the approach 'positively and significantly correlated' with student achievement. Higher levels of achievement were found in those districts reporting greater deployment of the model over time - see chart below.



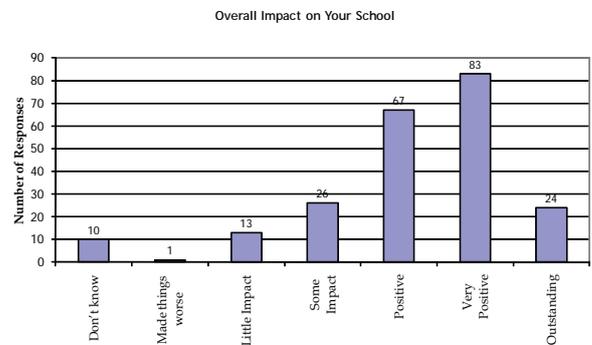
Column Chart showing improvement in performance in Student Achievement by RISC schools (2000-2004)

2. Leander Independent School District (LISD) in Texas, is the fastest-growing school district in the USA (8,000 students in 1992 to 26,000 in 2009). The district has been applying the *Quality Learning* approach since 1994 across all of its 27 schools. District data show that significant and continuous improvement has been achieved every year since 1994 - see chart below.



Run Chart showing rate of improvement in Student Mathematics Scores for LISD (1994-2008)

3. A survey into the perceptions of participants as to the impact of the *Quality in Schools* program in Victoria and South Australia was conducted by Quality Learning Australia in 2005. The survey was designed to explore the nature and impact of the program and the extent to which benefits had been sustained. More than two thirds of participating schools responded to a series of questions derived from the objectives of the program. Significantly positive responses were reported with respect to the impact of the program on school leadership, students taking increased responsibility for their learning, development of a culture of continuous improvement, continuing to apply what was learned, and the overall impact of the program - see chart below.



Column Chart showing perceptions of the overall impact on the school of participating in the Quality in Schools Program (1997-2003)

## Conclusion

There is mounting evidence to support application of the *Quality Learning* approach to improve the performance of school education systems.

The approach, derived from industry, is relevant and effective, and provides the school education system with a philosophy, methods and tools to continuously improve performance to the benefit of all stakeholders.

## References

A bibliography is available from the author at [jane.kovacs@qla.com.au](mailto:jane.kovacs@qla.com.au).