

# Building roads, bridges and literacy



*Learning at school was never like this! Frontline leaders James Sarah, Todd Maihi and Eric Beazley develop their problem-solving skills on the TeamWorks programme in Auckland.*

The Learning Wave

Rather than ignore the impact that low literacy levels have on workplace productivity, TeamWorks is an example of how to successfully embed literacy learning into a leadership programme for frontline leaders. Peter Allen explains.

**D**o you like big challenges? Then try this one for size. Imagine you're running a large national organisation with over 2400 employees and sales in excess of \$700 million. Your core business is building and maintaining physical infrastructure—the tunnels, roads and bridges that connect New Zealand communities and keep our economy moving.

When you put it like that, the business sounds pretty straightforward. Except that nothing is that simple these days. Operating modern equipment is a specialised task and the costs of getting it wrong can be massive. Modern safety procedures require understanding and buy-in from all team members if you want to avoid some unpleasant outcomes. Productivity must be measured too if you want to be sure your organisation is achieving an acceptable return on its inputs. All these factors require a decent level of language, literacy and numeracy (LLN) skills at all levels of the workforce.

This is where the real challenge lies. New Zealand's education system has excelled in many areas, but is still producing learners who have not been able to grasp key foundation skills. Often there are multiple causes for this; however, the fact remains that many leaving the school system don't have full coverage of 'the basics'. In common with many industries, the infrastructure sector has its fair share of people who didn't do so well at school.

Sometimes these will be the blokes you see operating the road-building equipment when you slow down at a temporary roadworks sign. Language, literacy and numeracy were never much of a priority in this role, but there's no avoiding their importance now. So how on earth do you inject the required skills into a diverse adult workforce, and raise standards across the board? This was the scale of the task confronting Downer EDI Works (Works) in 2007. It was clear that the solution was not going to be a quick fix.

### TeamWorks: the big picture

To tackle such a daunting mission, the management team at Works started a conversation with their strategic learning partner, The Learning Wave. Together Works and The Learning Wave had initiated and run a number of staff development programmes in the previous five years, and both partners were keen to develop a LLN programme specifically for frontline workers.

While scoping the project, it became clear that the unprecedented magnitude of the task was actually an opportunity. There would be a strong case for involving other stakeholders who could contribute their own resources. Building a partnership with Government and industry bodies would enable the company to access external funding and expertise, rather than relying purely on internal resources. The Learning Wave had a vital role to play here in ensuring all the parties' goals were aligned, as well as putting the package together.

The programme that emerged was TeamWorks. In outline, it involved selecting 800 frontline workers who were already leading Works teams on worksites across the country. Works and The Learning Wave would lead the partnership that delivered the programme, with vital support from the Tertiary Education Commission, Department of Labour and Infratraining, the industry training body for the infrastructure sector.

Now all that was required was a suitable learning programme.

### Tailor-made or off the shelf?

The partnership looked into buying a generic literacy package—and rejected it. While this would have been a convenient option, it would have been a poor fit with the realities of the Works culture and workplace. To ensure engagement with the programme, it's vital that adult learners feel what they're learning is directly relevant to their jobs. On top of that, Works' employees tend to feel uncomfortable in conventional classroom situations.

That left a custom-made learning programme as the preferred option. The crucial decision was taken to embed LLN skills within a leadership programme for site leaders plus those with the potential to develop into the role. This would have the dual advantage of avoiding a 'remedial reading for slow learners' stigma while demonstrating the relevance of LLN skills to the daily lives of workers.

Working in teams, often with a strong interest in sport outside work, the employees intuitively understood the value of teamwork and training. So the role of TeamWorks was to embed literacy, language and numeracy skills within the context of 'becoming a better leader'.

### Getting down to the nitty gritty

The Learning Wave called on the skills of their adult literacy experts to design a learning programme that would impart the necessary skills in a non-threatening manner. The first step was to create a set

of customised learning materials. These included posters, visual aids and workbooks specific to the issues facing Works and its employees. A unique takeaway—a set of juggling balls—helped ensure key messages were absorbed in a memorable way.

Rolling out the programme was a major challenge in itself. It was vital to reach participants in their home areas to maximise attendance and course completion. Since Works operates a widely dispersed network of branches and teams up and down the length of New Zealand, the decision was taken to bring the programme to the people.

In all, 533 training days were held in 30 locations during 2007. Eleven specially trained facilitators were engaged by The Learning Wave and deployed across the country to lead the sessions. The actual programme was topped and tailed by two two-day workshop sessions, with six to eight weeks of on-the-job learning in between.

An extra dimension was added with the chance to earn credits for the Level 2 National Certificate in Civil Infrastructure (General Introductory Skills). For employees who may have left school with no formal qualifications, this was a priceless opportunity to move forward in their chosen field and receive recognition.

### Measuring the results

The success of TeamWorks can be measured in a number of areas, with specific focus on improvements in leadership abilities, as well as LLN skills. The Department of Labour, a strategic partner in TeamWorks, was particularly interested in evaluating the success of the TeamWorks approach to improving literacy skills, as it was investigating a range of approaches to feed into Government policies on upskilling the New Zealand workforce.

On the fundamental measure of improved literacy, TeamWorks participants achieved an 18.4 percent increase in scaled reading scores and a 19.4 percent increase in writing scores. (For a more detailed analysis of results, see the sidebar on page 20.)

Making TeamWorks part of the NZQA framework meant that participants could turn their coursework into a nationally recognised qualification. At last count, 300 TeamWorks participants have gone on to complete the National Certificate in Civil Infrastructure.

TeamWorks has also won recognition from both the Infrastructure and the Training and Development industries—winning the 2008 Rooding NZ People Excellence Award and the 2008 New Zealand Association for Training and Development [NZATD] awards for instructional design and performance improvement. TeamWorks was also a regional finalist in the 2008 Human Resources Institute of New Zealand HR Initiative of the Year.

Anecdotal feedback has also confirmed the change in practices at the coalface. As part of the debriefing process, The Learning Wave asked its facilitators to gather feedback from participants after they'd completed the course. Their words are eloquent.



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### What difference did TeamWorks make?

The Department of Labour commissioned a rigorous report by John Bensemann, PhD. It's worth quoting some lengthy extracts to provide an indication of the outcomes achieved by TeamWorks:

"With the Go! assessments, there was an 18.4 percent gain in their scaled reading scores and a 19.4 percent increase in their writing scores. These gains meant that about a quarter of the group went up an IALS/ALL level in their reading. The mean shift in achievement for reading, as measured by Cohen's d\* is 0.5, and in writing it is 0.46. We can reject the separate hypotheses that this course had no impact on the reading and writing skills of this group at better than a 1 percent level using standard t tests\*\*. Consistent with the changes reported above, their confidence in speaking to workmates and in large groups increased."

\*Cohen's d is an effect size used to indicate the standardised difference between two means. \*\*The t test assesses whether the means of two groups are statistically different from each other.

"As a leadership programme, there is strong evidence that the participants have learnt many new skills and taken on different attitudes to their work that are already having considerable impact on how they work and organise their crews. Many have reported that they have changed how they allocate tasks and interact with their fellow workers. Underpinning these management changes are their improved communication skills that involve better listening, giving clear instructions, taking in feedback and giving space for workers to make their own contributions. As a result of these changes, many have reported more effective interactions with crew members, feeling less stress, better personal self-management and greater self-confidence."

"There is also evidence from their supervisors that paperwork practices have improved as a result of teaching to everyday documents in the course and understanding specific requirements of the documentation as well as their overall importance and role in the company's operations."

A Whangarei foreman says he is better able to assess his workers. "I might find I have a guy in the wrong position, so I say, 'well he'll be better suited in this position', and I swap things around. Doing this has moved my whole process along quicker and I have a happier team and I get better results. We meet our margins better now that we've got the guys in the right positions. I think this programme has benefited me quite a lot, thanks for that."

A Christchurch team leader says he's a believer that the more people know, the more they'll be dedicated to the business and the more effort they'll put in. "It's people taking ownership. They're not just here to pick up their pay every fortnight, they're here as an important part of the team and the business that makes the whole thing go."

But the good news doesn't end there. Many participants have related how TeamWorks has transformed their ability to communicate within family situations and take more control of situations in their daily lives. Let the last word go to one of the workers, a frontline leader in Rotorua, who experienced TeamWorks at first hand.

"In my whanau I am called to lead family on the right path. TeamWorks has made me a better person—I can focus on situations better, I know I can consider options before jumping in. It made me think about communicating better, made me feel a better person."

When you look at it like that, it's clear that improving foundational skills can play a huge part in transforming the capabilities of our society. Roads, bridges and tunnels are just the beginning. **et**



Peter Allen is a director of The Learning Wave Ltd in Auckland. For more information on TeamWorks and other workplace literacy and business learning initiatives, see [www.thelearningwave.com](http://www.thelearningwave.com)



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