

Christina Harwood, Lorraine Williamson, and Graham Wilson

## Zeroing in on quality teaching

### **Reducing disparities by building teachers' capacities and capabilities with respect to integrative approaches to curriculum delivery**

*He aha te mea nui?*

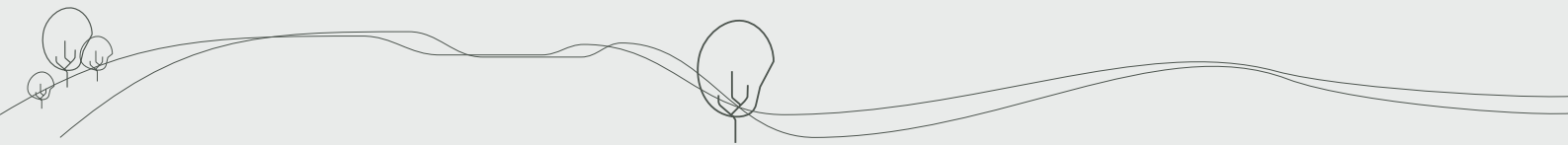
*He tangata, he tangata*

*(What is the most important thing?*

*It is people, it is people.)*

This project, a collaborative venture between two primary schools and Massey University, followed a year of intensive professional development in 2004 that had two aims: to improve learning outcomes for all students in the two schools, with a particular focus on the achievement of Māori students; and to develop communities of practice within and between the two schools to enable a proactive and sustained focus on improving learning. The involvement of teachers in the research project provided a means of checking progress, and provided forums to identify problems and ways to solve them, all central activities of the implementation of change (Hopkins, Ainscow, & West, 1994).

The staff of the two schools explored the theory and practice of curriculum integration, described by Beane (1997) as "a curriculum design that is concerned with enhancing the possibilities for personal and social integration ... [organising] curriculum around significant problems and issues, collaboratively identified by educators and young people, without regard for subject boundaries" (pp. x–xi). Teachers worked from the premise that the use of integrative designs and alternative pedagogical approaches had the potential to improve student engagement in learning and reduce the incidence of behavioural issues, thus enhancing student learning outcomes. They also believed that by providing specific opportunities for students to share or display their work, parents/whānau would become more involved with their children's learning at school.





## Objectives of the research

The overall aim of the research project was to identify the shifts that occurred after this period of curriculum and pedagogical innovation. The project used a mixed method, case study approach to learn about and describe any changes in:

- individual teacher practice and the practice of professional learning communities within and between the schools;
- the key factors influencing student engagement in learning;
- the extent and nature of community involvement and participation in student learning; and
- the relationship, if any, between the changes made by teachers with the development and use of integrative designs and alternative pedagogical approaches, and learning outcomes for students.

## Research design and methodology

A mixed method, case study approach was used. Case study can answer the question “What is going on?” (Bouma, 1996, p. 89), can “appreciate and understand an innovation from the inside”, and can “convey this understanding to others” (McKernan, 1996, pp. 80–81). The intention was to be able to describe what was going on with respect to teacher practice, student engagement, community involvement, and learning outcomes for students.

### Participants

A total of 15 teachers took part in the initial interviews, and 15 took part in the autophotography and photo elicitation interviews (although two of these teachers joined the project at midyear). Teachers from each school identified a potential group of 20 students (mainly from Years 4, 6, and 8) whom they judged to be underachieving or at risk of underachieving (that is, capable of achieving higher results than school assessment results indicated). The final group consisted of 16 students. A second group of 18 middle- to high-achieving students took part in the autophotography activities, to ensure that the participant students were not easy for other students to identify and label. Attempts to involve parents/whānau (to explore both their experiences and thinking in relation to the changes teachers were making, and their view of and involvement in the learning of their children at school) were only partially successful.

## Findings

The full report provides summaries of each school after a year of intensive professional development. The findings reveal a number of similarities and differences between the two schools. Both schools had implemented changes

in how they designed curriculum and learning and teaching experiences for their students, and both schools wanted to understand the effects of the innovations on student engagement, community involvement, and student learning.

The development and use of integrative approaches to curriculum design and delivery was at different stages in the two schools and the depth and focus of the responses from teachers and students in each differed. Hopkins et al. (1994) describe the process of change as non-linear, occurring over time, and comprising the three overlapping phases of initiation, implementation, and institutionalisation. The findings relating to one school, at the stage of initiating and implementing change, showed a focus on the managerial and organisational aspects of the change process. The findings from the other school, which was implementing and institutionalising change, indicated a stronger focus on teacher practice and student achievement.

Despite the differences between the two schools, the qualitative evidence reported some similar trends from both. Teachers developed shared understandings about the nature of curriculum and its design and implementation in practice. They reported enhanced levels of collaborative work as they planned units of work together and engaged in school-wide professional development initiatives. Increasingly, they focused their thinking on constructing their practice in ways that would enhance student achievement. Thus, the practice of professional learning communities developed in each school.

The integrative approaches the teachers developed were intended to organise learning around the personal and social issues, problems, and concerns identified in and developed from the lives of students. Teachers planned units using student questions as the basis for decision making about the contexts, content, and directions for learning, although they did this differently in each school. Teachers planned to incorporate the teaching of explicit skills, to enable students to understand and use their own knowledge of how to proceed with learning. Students, especially in one school, articulated their knowledge about what worked for them as learners and the skills they were improving as they engaged in the integrated learning experiences.

Teachers in both schools reported holding higher expectations about students. They came to believe that students were capable of doing more than the previous teaching and learning approaches had allowed them to demonstrate. As students investigated topics that were real and important to them, their improved motivation and engagement positively influenced teachers’ expectations and encouraged teachers to strengthen their explicit teaching of learning and thinking skills.

Both schools identified the need to improve the participation of parents/whānau in the learning of their children at

school. While one school made only limited improvements, the other used an integrative curriculum design framework to build regular opportunities for students to share their work and learning with their families. The open days held at the school during each term provided opportunities for parents/whānau to build their knowledge and understanding about the learning of their children at school. Increasingly, these points of contact provided the school with greater opportunities to seek feedback and input for future directions from parents/whānau.

Teachers in both schools reported improved student learning outcomes, using informal indicators related to levels of engagement, motivation, and learning behaviours and skills. The indicators describing improved outcomes were interim at best. The absence of “hard” data remains an issue for both schools.

The collaborative nature of this project meant that the two schools were able to learn from each other’s growing understandings about integrative approaches to teaching and learning. Dissemination of the findings will allow others in the wider educational community to benefit as well, “in that the information given allows readers to decide whether the case is similar to theirs” (Stake, 1985, cited in McKernan, 1996, p. 74).

## Limitations

The research co-ordinator had limited research experience and was not a full-time researcher. The full report discusses difficulties associated with specific aspects of the research methodologies.

Conducting the research in the space of one school year presented challenges. It was not possible to gather data about teacher practice before the innovations were implemented; neither was it possible to gather adequate data about the practice of the teachers in their classrooms. Teachers needed professional development on research methodologies, and more time to practice observing and providing feedback to each other.

The absence of robust student achievement data is also a limitation. A central objective of the research was to identify possible links with curriculum innovation and changed teaching and learning practices. The practical experience and professional judgement of the teachers were important, but insufficient to support definitive conclusions. Moreover, the findings describe *what* students learned because of their involvement in integrative teaching and learning experiences, not *how much* they learned.

Despite these limitations, the case studies gave each school a picture of the changes they were making. The schools identified areas where they needed to improve, and the research methodologies provided different ways to gather, analyse, and use this information. The schools reported that involvement in the research project had benefits for

the teachers, students, and parents/whānau. The research activities were a form of professional development for teachers, as they learnt to inquire systematically into their individual and collective practice. Joint analysis of data enabled teachers (and students) to understand the cultures of their own schools, and form evidence-based recommendations for future actions.

Student participation was an important part of this project. Integrated curriculum designs, such as those described by Beane (1997), indicate the need to develop democratic forms of curriculum that are collaborative or socially integrated. Involving students as research participants and data analysts, and encouraging them to present recommendations to teachers, ensured that their “voices” were fully incorporated into the research process.

Parents/whānau from one school in particular expressed appreciation at being involved in discussion forums that presented project findings. They also reported that they had learnt more about what teachers were trying to achieve, and felt better able to support the learning of their children as a result.

## Recommendations

1. The opportunities for professional learning for teachers and researchers provided by involvement in collaborative inquiry into the issues and challenges of improving student learning outcomes are underutilised at present. While teachers can individually and collectively enquire into and reflect on practice, the assistance of an independent researcher increases the likelihood of their understanding complex and sometimes hidden factors that might otherwise go unrecognised. Funding under the Teaching and Learning Research Initiative (TLRI) should continue to support school-based, student-focused research.
2. The TLRI should review its funding parameters. Funding a project for one school year only limits the scope of possible research initiatives and activities. The schools involved in this project would have liked to continue the research activities into 2006, to be able to implement emerging understandings.
3. Further research and development are required to develop assessment tools and processes for teachers to assess social learning, personal learning, and academic learning. Currently, many of the approaches employed by schools to assess learning use rational, standards-based achievement tests or tools (for example, STAR) that test limited domains of learning only. As New Zealand moves towards the dispositions and skills described as key competencies in the New Zealand Curriculum Project, we need to develop alternative assessment tools and practices to show what students think, know, and can do with knowledge and learning in real world terms. These tools and practices need to



be widely understood and accepted by teachers, students, and the members of the community.

- This research attempted to describe the links created between teaching and learning when teachers implement integrative curriculum and pedagogical designs. Although the activities of teaching and the uptake of learning are related, we need to examine how the design of learning experiences and teachers' practice influence the experiences of learners. Further research is also required to establish the effectiveness of integrative curriculum designs. This is important in New Zealand, as the new national curriculum will increasingly encourage schools to design and implement learning programmes designed to meet the learning needs of the students in their communities. Integrative designs may inform the design of such school-based curricula.

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## Research co-ordinator



**Christina Harwood** was formerly the director of the Centre for Educational

Development, Massey University College of Education. Her key research and development interests are in-service teacher education and how implementing curriculum change impacts on learning outcomes for students.

## Co-researchers and contributing authors



**Lorraine Williamson** is the principal of Opunake Primary School. Her leadership is

focused on improving outcomes for students (Māori students in particular) through effective teaching practice. She believes school leadership involves supporting teachers to define and implement effective teaching practices through quality professional development and professional dialogue. Her current interests in this area are developing and implementing integrative curriculum designs and associated pedagogies.



**Graham Wilson** is currently the principal of Merrilands School in New Plymouth. He was the principal of Eltham School when

the research project Zeroing In on Quality Teaching began. He was interested to be part of a research-based project that aimed to understand how pedagogical innovations and curriculum integration affected student learning. He is looking forward to using all he has learnt from this project in the ongoing developments in his current school.

## Co-researchers

Participant teachers, students, and their whānau from Eltham and Opunake Primary Schools.