MINISTRY OF EDUCATION
Te Tāhuhu o te Mātauranga

A SUMMARY OF

Te Kotahitanga:

maintaining, replicating and sustaining change in Phase 3 and 4 schools

2007-2010

by R. Bishop, M. Berryman, J. Wearmouth, M. Peter and S. Clapham
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New Zealand Government

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Contents

Introduction

Te Kotahitanga is a research-based professional development programme to raise Māori educational achievement by supporting teachers and school leaders to become more culturally responsive.

This booklet is a summary of the findings from the report to the Ministry of Education[1] of Phases 3 and 4 of Te Kotahitanga from 2007 to 2010. Most quantitative data pertains to the years 2007 to 2009, whereas the qualitative data was collected during the period 2009 to 2010. During these four years, the Phase 3 schools were in their fourth to seventh year of implementing the project in their schools. Phase 4 schools were in their first to fourth years of the programme.

The key questions investigated were:

1. Did the Phase 3 schools maintain the changes to teaching practices and student outcomes in 2007 to 2010 that they had made during 2004 to 2006? (Data for comparison purposes from this earlier period is to be found in Bishop, Berryman, Cavanagh, and Teddy, 2007).

2. Did the Phase 4 schools replicate the changes in teaching practices and student outcomes during 2007 to 2009 that were made by Phase 3 schools during the period 2004 to 2006?

3. What was the professional development intervention that enabled the changes in teaching practices to occur?

4. How did school leaders maintain the changes in Phase 3 schools and what did we learn about sustainability from their attempts?

[1] R. Bishop, M. Berryman, J. Wearmouth, M. Peter, and S. Clapham. (2011). Te Kotahitanga: Maintaining, replicating and sustaining change in Te Kotahitanga schools. Report for Phase 3 and Phase 4, 2007–2010. Wellington, New Zealand: Ministry of Education (available on the Education Counts website at http://www.educationcounts.govt.nz/publications)

Key findings

The key findings, discussed in more detail in the following chapters, are as follows:

1. **In both phases of the Te Kotahitanga project, teachers have built their knowledge, skills, and capacities through the implementation of the Te Kotahitanga effective teaching profile. Simultaneously, their Māori students have experienced continuous improvement in mathematics and reading in the junior school, and made significant gains in external examinations in the senior school. In both phases, these gains have been maintained.**

2. **The central professional development process of the project was maintained in schools and the additional programme elements that were trialled and adapted have supported the sustainability of the programme.**

3. **Those schools that fully implemented and sustained the programme in an integrated way had the best outcomes for Māori students.**

4. **School leadership is a vital component of effective implementation and sustainability of Te Kotahitanga, and a more systematic intervention based on the GPILSEO model enabled leaders to work towards sustainability.**

For the fully documented findings, refer to the full report, available on the Education Counts website at **http://www.educationcounts.govt.nz/publications**

Te Kotahitanga

The Te Kotahitanga project (the project) is a research and professional development project based on kaupapa Māori theory and has an explicit focus on raising the educational achievement of Māori learners.

chapter 01

Te Kotahitanga **was initially developed from a theoretical base identified by Russell Bishop and was further developed and directed by Russell Bishop and Mere Berryman, and is managed by Te Arani Barrett at the University of Waikato. The project identifies ways that teachers and leaders in English-medium secondary and area schools can develop pedagogy that is culturally responsive and embedded in relationships of mutual trust and respect. Contexts such as these allow Māori to achieve educational success as Māori. Latterly, the project has begun to develop a means of supporting leaders to more effectively support teachers.**

Te Kotahitanga is an iterative research and professional development project in which the findings from one phase are used to improve and develop subsequent phases.

The initial research was carried out by Bishop, Berryman, and Richardson[2] in 2001. They asked Year 9 and 10 Māori students about what did and did not work for them in school (these are referred to as the 'student narratives'). The students identified the quality of their relationships and interactions with their teacher in the classroom as the main influence on their educational achievement. The students explained how teachers could help improve their achievement by changing the way they related to and interacted with the Māori students in their class. This was confirmed by some of their teachers, parents and school principals.

The researchers used this information to develop an effective teaching profile (see Table 1), which emphasises the rejection of deficit explanations about Māori students' performance. The effective teaching profile promotes agentic discursive positioning,[3] the development of caring and learning classroom relationships and interactions, and shifts in classroom practices from a predominantly transmission approach to a more interactive, or discursive, model. These central understandings are then seen in effective teachers' classrooms on a daily basis where they:

- care for the students as culturally located individuals
- have high expectations for students' learning
- are able to manage their classrooms and curriculum so as to promote learning
- are able to engage in a range of discursive learning interactions with students
- know a range of strategies that can facilitate learning interactions
- collaboratively promote, monitor and reflect upon students' learning outcomes so as to modify their instructional practices in ways that lead to improvements in Māori students' achievement, and they share this knowledge with the students.

Together these elements promote a culturally responsive pedagogy of relations.

To support teachers in developing these understandings, the professional development programme provides teachers with professional learning opportunities where they can critically evaluate where they position themselves discursively; that is, how they construct their own images, principles and practices in relation to Māori and other minoritised[4] students in their classrooms and how they understand their own agency to make a difference.

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2 Bishop, Berryman, Tiakiwai, and Richardson, 2003.

3 That is, teachers believe in their capability to make a positive difference to Māori student learning.

4 'Minoritised' is a term used in Shields, Bishop, and Mazawi, 2005, to refer to a people who have been ascribed characteristics of a minority. To be minoritised, one does not need to be in the numerical minority, only to be treated as if one's position and perspective are of less worth; to be silenced or marginalised. Hence, for example, in schools on the Navajo reservation where 95% of the population are Navajo, or in Bedouin schools, we find characteristics of the students similar to those we may find among Māori in mainstream schools, who are in the numerical minority. Also included in this category are the increasing number of migrants into European countries, populations of colour or of poverty, and those with different abilities and sexual orientation.

How the professional development works

The Te Kotahitanga model of professional development is one that creates power-sharing contexts where self-determining individuals work together to both share and construct new knowledge. Evidence is used for both summative and formative purposes, allowing those involved to reflect on outcomes with the express purpose of determining the best steps to take next and setting new goals that will support this to happen. The ongoing evidence generated from the work in schools forms the basis of the professional development programme. Regular scheduled professional development activities provide opportunities for critical reflection on the cycle of observation, feedback, co-construction and shadow coaching undertaken by school-based Te Kotahitanga facilitators.

Te Kotahitanga works across all curriculum subjects. The focus is on changing teacher practice in ways that better support the learning of Māori students. Te Kotahitanga supports teachers to change their practices, expectations and beliefs about Māori learners and to focus on what they as teachers can do to make a difference. The project helps teachers change the way they relate to Māori students, and through the implementation of a culturally responsive pedagogy of relations the classrooms become more inclusive. It is a professional development process that focuses on all the participants contributing to the development of everyone's expertise—it is not one 'expert' telling teachers what to do. It is an approach that recognises the strengths of all. The professional development practices used to develop teacher learning mirror those that teachers are learning to implement in their own classrooms. Both the professional development and the classroom teaching are focused on teacher agency: on what teachers can achieve within their classrooms, rather than on what cannot be achieved.

The professional development component involves an external research and professional development team and in-school professional development facilitators. The professional development cycle starts with a hui whakarewa, or three-day staff induction workshop. Using the Māori student narratives (the students' experiences of what does and does not work for them as Māori students), the teachers critically reflect on how they relate to Māori students. The teachers then learn about the effective teaching profile (see Table 1) and how to implement it in their classrooms.

The initial hui is followed by four inter-related activities carried out in the school each term:

- in-school facilitators observe each participating teacher taking a class
- individual teachers meet with the facilitator to get feedback from the observation and to develop goals (individual feedback meetings)
- groups of teachers from across subjects meet with a facilitator to discuss their own data on student participation and achievement for a class of students they all teach, and to set group goals for improving student achievement (group co-construction meetings)
- facilitators hold shadow-coaching sessions with teachers to help them achieve the goals set in the individual and group meetings.

When needed, facilitators and other leaders hold 'new knowledge' meetings to introduce new approaches or new information into the cycle. This cycle continues to ensure that there are ongoing opportunities for reflection and feedback based on the accurate and objective gathering and mutual sharing of evidence, followed by the setting of new goals with which to redefine the way ahead for raising the achievement of Māori students.

Phases of the Te Kotahitanga research and professional development project

The first phase of the project was conducted in 2001 and 2002 by the Māori Education Research Team at the School of Education, University of Waikato, in partnership with the Poutama Pounamu Education Research and Development Centre based at Tauranga. These researchers and external professional developers (the research and development team) worked with a small number of teachers in four schools (Phase 1).

While the indications were that the project was effective, Phase 1 also showed that working with a small group of teachers within a school turned the teachers into a separate enclave and did not promote collaborative problem-solving. It also showed that the project, as it began to include more schools and teachers, needed to use in-school professional development facilitators to implement the project in their own schools. These facilitators would in turn be supported by the project's external research and development team.

Phase 2, during 2002 and 2003, involved three schools: two secondary schools and one intermediate school. School staff were released from their usual teaching duties and trained as facilitators to implement the project in their schools.

Phase 3 started in 2004 when the project was extended to 12 secondary schools. The professional development continued to apply what the research and development team had learnt to be most effective from the first two phases.

Results from the first three years of Phase 3 show the project has been successful over a wide range of variables, including the primary goal of raising Māori student achievement.[5]

In 2007, a further 21 schools were invited to participate (Phase 4), and the latest phase, Phase 5, started in 2010 with 17 new schools. In total, in 2010 there were 49 secondary schools, 3,264 teachers and approximately 17,000 Māori students participating in Te Kotahitanga.

The participating schools are in the Northland, Auckland, Waikato, Bay of Plenty, Gisborne, Hawkes Bay and Manawatu-Wanganui regions. These regions were selected because of their high numbers of Māori students.

The full report and this summary cover Phases 3 and 4 of the project, for the period from 2007 to 2010, with the data drawn from 33 schools.

[5] For details on the achievements in the first years of Phase 3, see Bishop, Berryman, Cavanagh, and Teddy, 2007; Bishop, Berryman, Powell, and Teddy, 2007; Bishop et al., 2008; and Timperley, Wilson, Barrar, and Fung, 2007.

Table 1: The effective teaching profile

The Te Kotahitanga effective teaching profile consists of two 'essential understandings' which effective teachers of Māori students have, and six dimensions (relationships) of teaching that effective teachers of Māori students demonstrate in their classrooms on a daily basis. These are underpinned by the integral concepts that form the basis of the Te Kotahitanga professional development model.

Essential understandings

The two essential understandings are that, to be effective teachers of Māori students, teachers must understand the need to:

- reject deficit theorising as a way of explaining Māori students' educational achievement levels
- take an agentic position* in their theorising about their practice, and accept professional responsibility for the learning of all students, including Māori students.

Relationships (dimensions) of teaching

The two essential understandings are demonstrated through six main dimensions (relationships) of teaching and learning:

- **manaakitanga:** caring for students as culturally located individuals
- **mana motuhake:** having high expectations for students' learning
- **whakapiringatanga:** managing classrooms so as to promote learning
- **wānanga:** engaging in effective teaching interactions with Māori students as Māori
- **ako:** using a range of strategies that support learning and teaching
- **kotahitanga:** monitoring student achievement data and using the information to modify teaching practice in ways that lead to improvements in Māori student achievement, and sharing this information with students.

Culturally responsive pedagogy of relations

Implementation of the effective teaching profile promotes contexts for learning where:

- power is shared
- 'culture counts', and learners cultural knowledge is valued
- learning is interactive and dialogic**
- there is 'connectedness' of teachers with learners, demonstrated by teachers' commitment to their students and the students' communities
- there is a common vision and agenda for excellence for Māori in education.

* In the context of teaching, taking an agentic position refers to accepting that one can 'make a difference' to student learning and achievement, that one has a professional responsibility to do so, and then acting on that responsibility.

** 'Dialogic' is the term used to describe a relationship that involves dialogue—that is, opportunities are made to learn through conversations between the learner and teacher.

Māori student achievement in Phase 3 schools

As Phase 3 schools consolidated the Te Kotahitanga programme between 2007 and 2009, they maintained the gains in Māori student achievement that they had made in the first three years of the programme.

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There are also indications **that, as the teachers in the Phase 3 schools became more sophisticated in their practice of Te Kotahitanga principles, each new cohort of Māori students in their classrooms achieved better results than the preceding cohorts. The asTTle (Version 4) and NCEA data that support these views are outlined below.**

Years 9 and 10: asTTle results

As there were no published norms for Māori students in asTTle mathematics and reading, Year 9 and 10 Māori students' achievement in each Te Kotahitanga school were compared with (a) national norms for asTTle gain scores for all students and (b) with non-Māori students in the same school. National norms are taken from the asTTle V4 manual 1.1, Chapter 3, Table 3.1 using the mean score per subject by year. The asTTle gain scores are[6] the gain between two test scores; that is, Year 9 score 2007 to Year 10 score 2008.

Overall, Year 9 and 10 students in Phase 3 schools continued to make achievement gains, as measured by their asTTle scores in mathematics and reading for each of 2007, 2008 and 2009.

In comparison with national norms in mathematics achievement, Year 10 Māori students achieved higher asTTle gain scores than the national norm for all students in 2008 and 2009 (see Table 2).

Table 2: Year 10 Māori students' asTTle gain scores in mathematics: comparison with national norms for all students

Year level	Students	Gain score 2007–2008	Gain score 2008–2009	National gain score (all students)
10	Māori	81	75	33

In comparison with national norms in reading achievement, Year 10 Māori students achieved gains scores the same as, or higher than, the national norm for all students in 2008 and 2009 (see Table 3).

Table 3: Year 10 Māori students' asTTle reading gain scores: comparison with national norms for all students

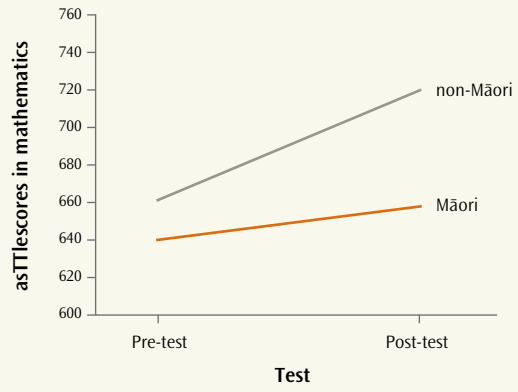
Year level	Students	Gain score 2007-2008	Gain score 2008-2009	National gain score (all students)
10	Māori	94	96	94

Comparisons between Māori and non-Māori students in Te Kotahitanga schools, showed that the achievement gap closed significantly between 2007 and 2009. This closing of the achievement gap is illustrated in Figures 1, 2, and 3, which present pre- and post-test scores in Year 10 mathematics for 2007, 2008 and 2009.

[6] National norms are taken from the asTTle V4 manual 1.1, Chapter 3, Table 3.1 using the mean score per subject by year. The asTTle gain scores are the gain between two test scores; that is, Year 9 score 2007 to Year 10 score 2008.

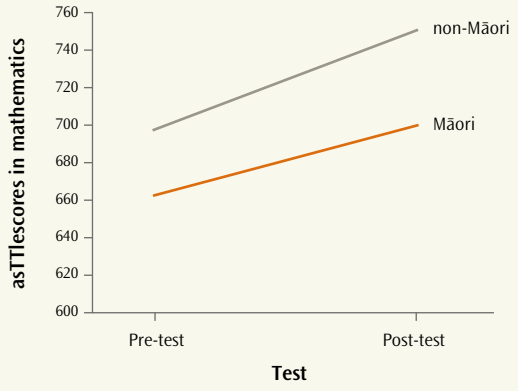
Figures 1, 2 and 3 illustrate the improvement in students' asTTle results in mathematics that a group of teachers from across a number of Te Kotahitanga schools was able to achieve in successive years with different student cohorts.

Figure 1: 2007 asTTle results in mathematics, Year 10 Māori and non-Māori students



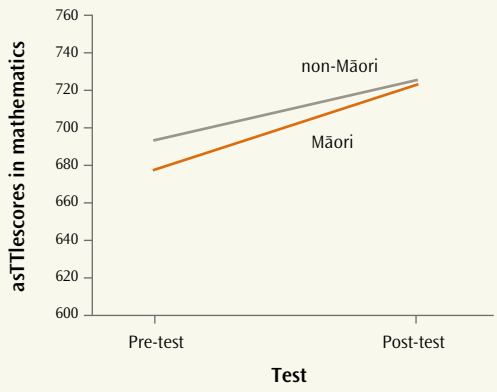
In 2007, improvement in mathematics for Year 10 non-Māori students was significantly greater than for Māori students.

Figure 2: 2008 asTTle results in mathematics, Year 10 Māori and non-Māori students



In 2008, the gains were the same for Māori as for non-Māori students in the Te Kotahitanga schools.

Figure 3: 2009 asTTle results in mathematics, Year 10 Māori and non-Māori students



In 2009, Māori students improved significantly more than non-Māori students in the Te Kotahitanga schools.

Years 11 and 12: NCEA results

The analyses of Te Kotahitanga Year 11 and 12 Māori students' achievement in NCEA levels also show improvement between 2007 and 2009.

In 2007, 2008 and 2009, the achievement of Year 11 Māori students in Phase 3 Te Kotahitanga schools, expressed as a percentage of students achieving NCEA Level 1, was higher than for Māori students averaged across all schools (Table 4). In 2007 and 2009, these differences (in achievement of Māori students in Te Kotahitanga schools compared with the national average for Māori students) were statistically significant.

Table 4: Year 11 Māori students' achievement in NCEA Level 1, 2007–2009

Year	Māori in all schools	Māori in Phase 3 Te Kotahitanga schools
2007	43.90	48.60
2008	44.20	44.40
2009	47.70	50.20

Furthermore, Year 11 Māori students in schools that took part in Te Kotahitanga improved on the NCEA Level 1 results achieved by the Year 11 cohort in 2006 (the first full cohort of Māori students in Te Kotahitanga schools to reach Year 11). This cohort had shown a percentage point gain from 2005 that was double that of the national cohort of Māori students. Thus the achievements from 2007 to 2009 maintained and built on the gains shown by earlier cohorts of students in Te Kotahitanga Phase 3 schools.

In Year 12, the percentage of Māori students in Phase 3 Te Kotahitanga schools gaining NCEA Level 2 qualifications increased each year from 2007 to 2009. In 2007, 45.4% of Māori in Phase 3 schools gained at least NCEA Level 2; in 2008 the proportion was 48.8% and in 2009 it rose to 52.5% (see Figure 4). This compares with national figures for Māori student achievement of 49.3%, 51.8% and 52.8% for 2007, 2008 and 2009 respectively.

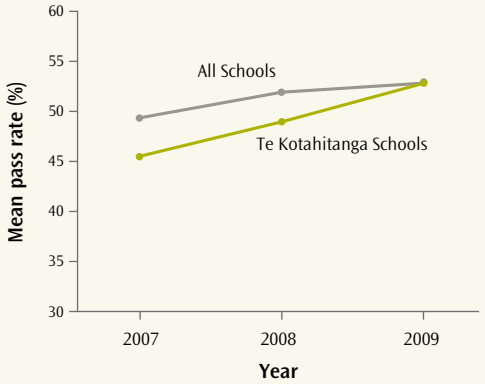
Although the percentage of Te Kotahitanga Phase 3 students achieving NCEA Level 2 in each year for the three-year period was lower than the percentage of Māori for all schools, the rate of gain over the three years was greater in the Phase 3 schools than for Māori in all schools – specifically, an increase of 7.1 percentage points for Māori in Phase 3 Te Kotahitanga schools compared to an increase of 3.5 percentage points for Māori in all schools. That is, in Year 12, the percentage points gain by Māori students in Phase 3 Te Kotahitanga schools achieving NCEA Level 2 between 2007 and 2009 was double that of the national cohort of Māori students.

Table 5: Year 12 Māori students' achievement in NCEA Level 2, 2007–2009

Year	N	Achieved	Te Kotahitanga schools	National cohort
2007	301	45.40	7.10	3.50
2009	361	52.50		

By 2009, the gap in achievement between Year 12 Māori students in Phase 3 Te Kotahitanga schools compared with Māori in all schools, as measured by NCEA results for Level 2, had closed (see Figure 4).

Figure 4: Year 12 Māori students' achievement at NCEA Level 2, 2007–2009



Summary of key results for Phase 3 schools 2007 to 2009

In Phase 3 Schools:

1. there was an improvement between pre-tests and post-tests in asTTle gain scores in mathematics and reading in Years 9 and 10

2. by 2009, Year 9 and 10 Māori students were achieving at least as well, if not better, than non-Māori in asTTle comparisons in Phase 3 schools

3. in 2008 and 2009, Year 10 Māori students achieved the same or higher asTTle gain scores than the national norm for all students in two out of the three assessments, in both mathematics and reading

4. Māori students' achievement in NCEA outcomes improved between 2007 and 2009 in Years 11 and 12

5. between 2007 and 2009, the percentage points gain made by Year 12 Māori students, in terms of NCEA Level 2, was double that of the national cohort of Māori students.

Māori student achievement in Phase 4 schools

Phase 4 schools made similar gains in Māori student achievement to those made earlier in Phase 3 schools. This indicates that Phase 4 schools have been able to replicate the gains made earlier by Phase 3 schools in the first three years of the project's implementation.

chapter 03

Year 9 and 10 asTTle results

In 2007 to 2009, in every analysis of asTTle scores in mathematics and reading in Years 9 and 10, Māori students' achievement improved between pre-tests and post-tests.

Year 10 Māori students achieved higher gain scores than the national norm for all students in asTTle mathematics assessments in both 2008 and 2009 (see Table 6).

Table 6: Year 10 Māori students' asTTle gain scores in mathematics: comparison with national norms for all students

Year level	Students	Gain score 2007-2008	Gain score 2008-2009	National gain score (all students)
10	Māori	90	84	33

Year 10 Māori students achieved a 50% increase in gain scores in asTTle reading assessments between 2008 and 2009. These students achieved almost the same gain scores as the national norm for all students in 2009 (see Table 7).

Table 7: Year 10 Māori students' asTTle gain scores in reading: comparison with national norms for all students

Year level	Students	Gain score 2007-2008	Gain score 2008-2009	National gain score (all students)
10	Māori	61	93	94

Years 11 and 12 NCEA achievement

Phase 4, Year 11 Māori students, NCEA Level 1

For the period from 2007 to 2009, the percentage points gain for Year 11 Māori students in Phase 4 schools who gained NCEA Level 1 was double the gain of the national cohort of Māori in Year 11 – a gain of 8 percentage points and 3.8 percentage points respectively (see Table 8).

Table 8: Year 11 Māori students NCEA Level 1 2007–2009

Year	N	Achieved (%)	Increase in percentage points (%)	
			Te Kotahitanga schools	National cohort
2007	396	38.91	8.00	3.80
2009	484	46.91		

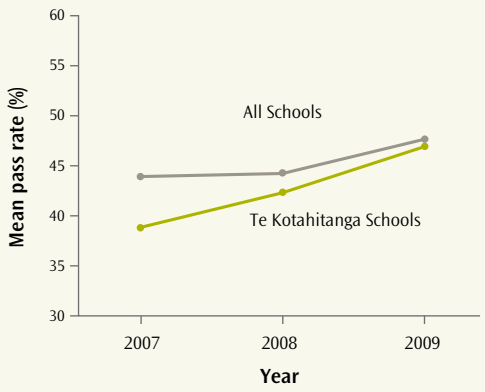
The gap in achievement between Year 11 Māori students in Te Kotahitanga Phase 4 schools and the national cohort of Māori students also closed between 2007 and 2009, as measured by the proportion of students gaining NCEA Level 1. The difference in achievement levels between Māori students in Year 11 in the national cohort, and Māori students in Phase 4 Te Kotahitanga schools had narrowed from a gap of about 5 percentage points in 2007 to less than one percentage point in 2009 (see Table 9 and Figure 5).

The importance of these results is that, whereas in 2007 the NCEA results for Māori students in Phase 4 Te Kotahitanga schools were worse than the national cohort of Māori students, after one year in Te Kotahitanga this difference had reduced and after two years the difference had reduced again and was negligible.

Table 9: Achievement of Year 11 Māori students NCEA Level 1, Phase 4, and national cohort of Māori students

	% NCEA Level 1 achievement in 2007, Year 11	% NCEA Level 1 achievement in 2009, Year 11
National cohort	43.90	47.70
Phase 4 schools	38.91	46.91
Difference in % points	**4.99**	**0.79**

Figure 5: Trends in Māori students' NCEA results, Level 1



Given that NCEA Level 1 is the first in the National Qualifications Framework, a significant increase in the proportion of Māori students gaining this qualification is clearly important for their future life chances.

Phase 4, Year 12 Māori students, NCEA Level 2

In 2009, the first cohort of Year 10 students whose teachers had joined the Te Kotahitanga programme in 2007 reached Year 12. It is, therefore, worthwhile reporting the Year 12 NCEA Level 2 results for 2009 in comparison with 2007.

In Year 12 in Phase 4 schools, the percentage of Māori students gaining at least NCEA Level 2 rose from 46.98% in 2007 to 51.66% in 2009, a percentage point gain of 4.7 points. This compares with a gain of 3.5 percentage points for the national cohort of Māori students over the same period (see Table 10). (All data obtained from the Ministry of Education, August 2010.)

Table 10: Year 12 Māori students' NCEA Level 2, 2007–2009

			Increase in percentage points (%)	
Year	N	Achieved (%)	Te Kotahitanga schools	National cohort
2007	298	46.98	4.70	3.50
2009	381	51.66		

Figure 6: Trends in Year 12 Māori students' NCEA Level 2, 2007–2009

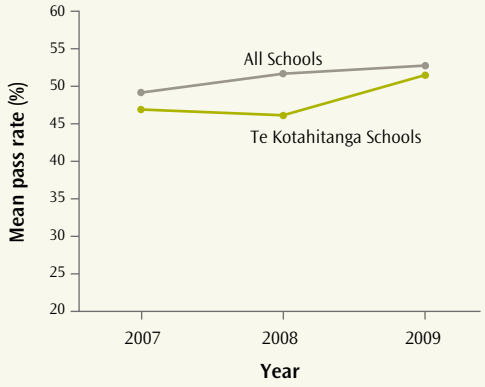


Figure 6 shows how the achievement gap between Māori students in Phase 4 schools and the national cohort of Māori students closed over the period from 2007 to 2009.

Summary of key results for Phase 4 schools 2007 to 2009

1. In every analysis of asTTle gain scores in mathematics and reading in Years 9 and 10 in Phase 4 schools, Māori students' achievement improved between pre-tests and post-tests.

2. Year 10 Māori students in Phase 4 schools achieved higher gain scores than the national norm for all students in asTTle mathematics assessments in 2008 and 2009.

3. By 2009, in asTTle mathematics and reading, the gain scores for Māori in Phase 4 school were equal with those of non-Māori students.

4. Between 2008 and 2009, in terms of national comparisons, Year 10 Māori students in Phase 4 schools achieved a 50% increase in gain scores in asTTle reading assessments and had almost closed the gap to that of the national norm for all students in 2009.

5. Māori students' achievement in Phase 4 schools at NCEA Level 1 in Year 11, and in NCEA Level 2 in Year 12, showed a marked improvement. Year 11 Māori students in Phase 4 schools made twice the percentage point gain of the national cohort of Māori students at Year 11 in NCEA Level 1. Year 12 Māori students in Phase 4 schools also made a greater percentage point gain at NCEA Level 2 than the national cohort of Year 12 students.

One student's story of the Te Kotahitanga class

There are many compelling stories about what Te Kotahitanga has meant to the Māori students who were in the Te Kotahitanga classes. This story is from a Year 13 student at a Phase 3 school.

"I started here in 2005. I was coming here with big expectations but then I sort of got caught up with the wrong crowd. I was in the mainstream [class] and I just felt unwanted from some of the teachers and they really made me feel worthless. Like I was just 'no one' in that class, it sort of pushed me to boundaries that I've never ever sort of gone before. Like I tried…

Then I got really heavily into my drugs. Yeah really heavily into that . . . I got really bad in my drinking alcohol and stuff like that. I was bringing that all into school and stuff which was making me do real bad but I only did work for one teacher…

That was my English teacher because she made me feel like I had something… that I was worth something, that made me want to work all the time for her but with my other teachers… they made me feel stupid like I was dumb. That's why I was bad in their classes.

I got heavily into my drugs until one day my mum picked me up, she was crying. It sort of touched me, it woke me up. You know it was time for a change, it wasn't only affecting myself but it was affecting my loved ones, all my parents and stuff. It gave me a wake-up call.

The Te Kotahitanga facilitators put me in this Te Kotahitanga system and it took me a while to get used to it, because I really wasn't used to teachers going that extra mile for me. I was so used to them just only telling me what to do and if I didn't do it they'll give up. Yet those teachers were going the extra mile for me all the time.

I didn't really notice that until I was in there for about a term and then I sort of woke up and thought about 'yeah these teachers here are here to teach me' so I might as well give them a go. Then I got really hard out into the system of Te Kotahitanga and it changed my life. It really did because if I hadn't of jumped into the system you know I probably wouldn't have been in school right now.

Like if I didn't go into the Te Kotahitanga system that they had… wouldn't be here.

School staff confirmed the details of his story. Once back in school, he responded well within the Te Kotahitanga classes and succeeded as a senior student both in leadership and academic pursuits, so much that he was accepted for university for the following year."

Teachers

From 2007 to 2009, teachers in Phase 3 and Phase 4 schools continued to develop more effective caring and learning relationships with their Māori students and also continued to shift away from using traditional transmission pedagogic approaches most of the time to having a more balanced pedagogic approach that included more discursive and less transmission practices.

chapter 04

Changes in teacher practice, Phase 3 and 4 schools

Changes in teacher practice, as teachers implemented the effective teaching profile (see Table 1), were measured by data obtained through the observation tool. This tool records evidence of each of the understandings from the effective teaching profile. Teachers' interactions and relationships with Māori students are coded by trained observers. The evidence is then fed back to teachers and goals to support any desired change are negotiated as part of the teachers' ongoing individual professional learning.

The observation tool is used to measure such aspects as the incidence of discursive teaching practice; the incidence of teacher interactions with the whole class; rates of Māori student engagement and work completion; changes in the cognitive level of the work; and the quality of teacher–student relationships; all relative to teachers' own baseline data.

Teacher–student relationships

The first three cohorts of teachers in Phase 3 schools had established and maintained a high rating for the quality of their teacher–student relationships during their first three years of participation. The fourth, fifth and sixth cohorts of teachers in Phase 3 schools (2007, 2008 and 2009) followed a similar pattern. In particular, teachers generally established a high level of relationships in caring, expectations for performance and behaviour, and managing more effective classroom pedagogy in their first year of participating in the programme, and they maintained these practices thereafter. They also achieved a high rating for providing a culturally appropriate context and culturally responsive learning contexts from the third year of participation.

Teachers in Phase 4 schools showed a significant increase in their rating level for teacher–student relationships in all years, relative to the baseline, and maintained this increase over time.

Discursive practices

Teachers in Phase 3 schools also used discursive practices more, with a general increase in the use of discursive practices by Term 4 2009, relative to Term 1 of the first year of participation. There was a steady decrease in the percentage of teachers demonstrating 20% or less discursive practices in their classrooms. There was a significant decrease in the percentage of interactions with the whole class, and a shift to individual or group interactions, relative to the baseline data.

Each cohort of teachers in Phase 4 schools showed a similar pattern in the use of discursive practices. All cohorts started with a low percentage of discursive practices in the first term of any year and consistently increased their use in terms 2, 3 and 4.

Overall, for Phase 3 and 4 schools, the data shows that teachers improved in their implementation of the effective teaching profile and they maintained these improvements over time. There was a general increase in the use of discursive practices by the fourth term, and this was maintained at higher levels relative to the first term of the first year of participation.

Incidence of whole-class interactions

The data show there was a consistent move away from whole-class instruction towards more group and individual work across all cohorts of teachers. This is a useful indication that there are now more opportunities for teachers and students to engage in effective interactive and discursive pedagogies rather than their former over-reliance on transmission modes of teaching to the whole class.

Māori student engagement and work completion

In Phase 3 schools, there were high rates for both student engagement and work completion. In Phase 4 schools, the level of student engagement increased significantly in the first year relative to the baseline and was maintained in the second and third year. The level of work completion by Māori students increased and was maintained.

Cognitive level of teaching

In both Phase 3 and Phase 4 schools, teachers increased the cognitive level of their teaching, relative to the baseline, and this was maintained in both phases. This is a useful indication of improvements in teacher expectations for Māori (and other) students.

Retention of staff

The retention of teachers experienced in the use of the effective teaching profile is an important aspect of the sustainability of Te Kotahitanga.

The greatest number of withdrawals from the programme took place in the first two years of Phase 3, and in the first year of Phase 4. Subsequently, very few teachers chose to withdraw. In addition, teachers leaving Te Kotahitanga schools have taken their experience of the professional development programme to other schools.

While withdrawals are now low, staff turnover means there is a need for ongoing professional development of the staff who are brought into the school as replacements. This issue affects some schools more than others.

Survey of teachers

An electronic survey of teachers was conducted in July and August 2010. In total, just over 50% of the participants in 11 of the 12 schools in Phase 3 and about 30% of the participants in Phase 4 responded. Survey responses are not a proxy for actual behaviour, but they provide a useful set of data to be triangulated with other forms of evidence of the sustainability of the project in schools.

Overall, teachers in both phases were positive about the project and its sustainability in their schools.

There was a strong positive response to questions relating to the use of evidence to support students' learning and engagement. Nearly half the respondents in each phase noted that data collection in their school now focused more clearly on the progress of individual students, Māori students in particular.

However, respondents did identify a number of ways in which the collection and processing of student outcome data needed to change in order to support the improvement of Māori students' learning and achievement further. These included:

- improved access to the data
- specific targeting of students' individual learning needs and goals
- consistent sharing of data with students to encourage higher self-expectations
- more consistent and accurate analysis and tracking of relevant student data at departmental and school levels.

Respondents commonly reported that the most useful things they had done to ensure that the gains made in Māori students' learning and achievement were maintained were:

- ensuring a positive relationship with all students
- recognising students' individuality
- incorporating new pedagogies
- creating a respectful environment and a culture of achievement
- continuing professional learning for all staff in the school.

Quantum leaps in teaching practices

After being in Te Kotahitanga for four years, a teacher described the change in teaching practices associated with Te Kotahitanga as a paradigm shift:

> *"The difference between classical physics and quantum physics; Newton, classical physics… the whole process, that once everything's in place, the whole universe is in place. Quantum physics: all about possibilities and probabilities. It's about moving this from classical physics to quantum physics…*
>
> *And we're in the middle of it… and you're seeing it everywhere, you're seeing it in lots of different places. Yeah, there's lots of difference, working from prescribed, determining and fatalistic approaches to possibilities and probabilities.*
>
> *I mean, this is where Te Kotahitanga has done this. It's allowed us the opportunity to say this. Now, if Te Kotahitanga wasn't here we would still be prescriptive and so it opens up the opportunities, it switches us from the paradigm of let's stick with classical physics that the world is going to go round here all the time, to the possibility that hey, we can actually do this and it's opened up the possibility; it's basically, to be honest, it's freed the creativeness of teachers.*
>
> *'Cause it's that opportunity. Now, you could argue how much there, was Te Kotahitanga? But Te Kotahitanga has pointed people in that direction, it's allowed, to a certain extent, the justification in terms of hey it's ok to think this way, it's ok to do these things, it's ok to celebrate it this way…*
>
> *It actually put people in those mindsets to actually have those conversations and as a consequence of those conversations then you have that change; the changed focus, the changed attitudes…*
>
> *It's become embedded in the school. 'I can make a difference'. But it's also the fact that you can actually say that.*
>
> *The next step that has to happen is that it's one thing to have brand-new processes, but it's getting to that process of going beyond that brand-new process; the idea that hey, asking the kids what solution would they come up with so in other words even though 9NC comes up with this and it's a fantastic thing, it'll go straight across the whole of the department, it's owned by 9NC, not necessarily by the individuals in 9AB, where they might come up with a totally different process. And so it's that… yeah, it's getting that next step in there. There are new processes, brilliant, brilliant new processes but you also need to have that actually appearing in your [own] class rather than just borrowing it all the time."*

This teacher had found that he could make a difference with others by focusing on relationships, embedding the notion that there is potential and possibility in all people, and encouraging teachers to understand their own agency. Working in this way with students had resulted in fewer resistant behaviours and greater student engagement. In these contexts, students reported that they were able to work more autonomously and with greater use of non-directed activity, and achieve more creative thinking and higher levels of attainment.

Leadership

School leadership is critical for embedding successful Te Kotahitanga practices in classrooms and schools that fully implemented and maintained the programme in an integrated way had the best outcomes for Māori students.

To sustain Te Kotahitanga and to improve on initial gains in Māori student achievement will require a further distribution of leadership and a reconceptualisation of the role of heads of department to give a clearer focus on supporting the improvement of Māori students' learning and achievement.

chapter 05

Evidence of leaders' participation

Leadership survey

Leaders were surveyed in July and August 2010. There were 100 responses from leaders in Phase 3 schools and 89 from leaders in Phase 4 schools. Overall, leaders were positive about the sustainability of the project in their schools. They were also positive in their self-evaluations as leaders in Te Kotahitanga schools and in their evaluations of the systems and support provided to their schools by the Waikato University research and development team.

The majority of leaders in both phases perceived that the collection and processing of student outcomes data had changed since the school had been part of Te Kotahitanga, with many commenting that data collection in their school now focused more clearly on the progress of individual students, Māori students in particular. However, the majority of deans and heads of department or faculty felt that the collection and processing of student outcome data could be further improved.

The majority of respondents reported that the overall culture of the school had changed since they had been part of the project. Staff were now more likely to engage in reflective conversations about practice and to work collaboratively. There was also an openness to change among staff, and more focus on individual student progress and on raising Māori students' achievement. They felt that relationships between students and staff had improved, there were higher expectations of students, and that Māori students were prouder of their school and more motivated and engaged. There was a greater emphasis on the promotion, use and celebration of Māori culture, language and Māori student achievement, and a more inclusive style of teaching with less deficit theorising.

Configuration maps

Leaders in Phase 3 and Phase 4 schools completed leadership and institutional configuration maps at the leadership hui in May 2010. These maps indicate school leaders' perceptions of the sustainability of the project in their schools.

Leadership configuration map

Areas where the leaders in both phases felt most confident include their belief in their ability to inspire and motivate others to achieve a common vision, their belief that responsibility for the goals of the school are owned by the school, and their belief in their ability to develop and establish specific measurable goals for Māori student attendance, retention, engagement and achievement so that progress can be shown, monitored over time, and acted upon.

Leaders in both phases were also confident in their ability to lead institutional change to ensure an environment that supported their schools' goals and implementation of caring and learning relationships and discursive teaching practices within the classrooms.

Institutional configuration map

Leaders in both Phase 3 and Phase 4 schools felt their institutions had a clear academic vision, goals and targets for supporting the improvement of Māori students' attendance, engagement, retention and achievement. However, in both phases, leaders identified that Māori students' performance statistics were not yet the same or better than national averages for all students. They also demonstrated a clear understanding that Māori student achievement would improve as more teachers learnt how to improve their levels of caring and learning relationships, how to plan their lessons based on a detailed understanding of students' progress and prior knowledge and how to make regular use of discursive teaching interactions such as using students' prior knowledge, providing feedback/feed-forward, or co-constructing new knowledge with students.

Implementation of Te Kotahitanga at the school level: The GPILSEO model

As part of their Te Kotahitanga professional development, school leaders attend an annual leadership hui where they learn about the GPILSEO model (Bishop and O'Sullivan, 2005; Bishop, O'Sullivan, and Berryman, 2010) and how to apply it in their school.

Figure 7: GPILSEO: A reform initiative must have these dimensions from its inception

(Source: Bishop and O'Sullivan, 2005, p69)

The theoretical model in Bishop and O'Sullivan (2005) uses GPILSEO as a mnemonic device for the essential dimensions of a reform initiative at the school and system levels. This model suggests that to ensure the reform initiative will be sustainable and scalable, the following dimensions should be present in the reform initiative *from the very outset*. Each dimension includes a clear focus.

Those dimensions are:

- a school-wide **goal** and vision for improving Māori student achievement
- a means of developing a new **pedagogy** to the point where it becomes habitual
- a means of developing new **institutions** and organisational structures to support the in-class initiatives
- a means of developing **leadership** that is responsive, transformative, proactive and distributed
- a means of **spreading** the reform to include all teachers, parents, community members and external agencies
- a means of using **evidence** of the progress of the reform in the school by developing appropriate tools and measures of progress, and using the evidence to modify classroom teaching and further improve student achievement
- a means of creating opportunities for the school to take **ownership** of the reform in such a way that its original objectives are protected and sustained.

It is important to emphasise that although each dimension is presented as if it should be implemented in an orderly, linear fashion, this is not how it works in reality. Rather, each dimension is interdependent and interacts with the others in a variety of ways and in a variety of settings.

In Table 11 below, the GPILSEO model is mapped onto the findings from the leadership best evidence synthesis (BES) (Robinson, Hohepa, and Lloyd, 2009) to illustrate how this model is supported by empirical research from a range of studies.

Table 11: Relationship of GPILSEO leadership to key features of leadership BES findings

Effective leadership of sustainable educational reform: GPILSEO (Bishop, O'Sullivan, and Berryman, 2010)	Key features of leadership BES findings (Robinson et al., 2009)
▲ Establishes and develops specific measurable **goals** so that progress can be shown, monitored and acted upon	▲ Establishing goals and expectations
▲ Supports the development and implementation of new **pedagogic** relationships and interactions in the classroom	▲ Planning, promoting and evaluating teaching and the curriculum ▲ Promoting and participating in teacher learning and development ▲ Using smart tools
▲ Changes the **institution**, its organisation and structures	▲ Ensuring an orderly and supportive environment
▲ Spreads the reform to include staff, parents, community, reform developers and policy makers so that a new school culture is developed and embedded	▲ Creating educationally powerful connections
▲ Develops the capacity of people and systems to produce and use evidence of student progress to inform change	▲ Engaging in constructive problem talk
▲ Promotes and ensures that the ownership of the reform shifts are within the school	▲ Resourcing strategically

Differences in implementation of the project at the school level leads to differences in Māori student outcomes.

In 2009 and 2010, we analysed individual case studies in Phase 3 schools in their sixth and/or seventh year of the project, using the GPILSEO model as a tool to investigate the degree to which schools were implementing and maintaining the project. This analysis showed that there were marked differences in the degree to which the schools had actually implemented the model and how they were maintaining the implementation of the project, with consequent implications for sustainability and Māori student achievement. For the purposes of this comparison we were able to divide the 12 Phase 3 schools into two groups. Group 1 (7 schools) are those schools who were able to implement fully and maintain the project in their school. This group includes some schools which had previously been full implementers of the project but were currently low maintainers; this was because their previous full implementation continued to have a residual and positive effect on student achievement. Group 2 consists of those schools which were partial to low implementers of the project and were having problems maintaining the project. Table 12 shows that those schools which fully implemented and maintained the programme in an integrated way (Group 1) had the best outcomes for Māori students.

Table 12: Comparison of Māori student outcomes at Year 11 NCEA Level 1, 2006–2009, between Group 1 and Group 2 schools

	Mean % pass NCEA Level 1			
Implementation categories	2006	2007	2008	2009
Group 1	50.99	49.23	47.88	54.65
Group 2	42.96	45.07	36.79	43.01
% point (pp) differences	8 pp	4 pp	10 pp	12 pp
Z value	Z = 2.44	ns	z = 3.4	z = 3.49
P value	p <0.05	ns	p <0.001	p <0.001

The data in Table 12 indicates that:

- in every year between 2006 and 2009, the mean percentage pass rate in Year 11, NCEA Level 1 for Māori students in Group 1 schools was higher than in Group 2 schools; the trend indicates that this difference may continue to increase over time
- the mean percentage Māori students' pass rate in Year 11, NCEA Level 1 was significantly higher in Group 1 schools than in Group 2 in 2006 ($p < 0.05$), 2008 ($p < 0.001$) and in 2009 ($p < 0.001$).

School leadership is a vital component of the effective implementation of Te Kotahitanga and for ensuring that it is embedded in a school. In terms of the GPILSEO model, there are a number of additional features these schools have in common:

- The senior leadership teams are agentic leaders and present a united front in their determination to support the implementation of the school's goal to improve the achievement of Māori students and to reduce educational disparities, and these visions are of a long-term nature. There are also clear specific measurable goals for Māori student achievement in these schools.
- There have been marked changes made in the institutional and structural arrangements in the school in a manner that is clearly responsive to the needs of the pedagogic intervention, including policy development and implementation.
- There has been a concerted effort to effectively distribute leadership throughout the school.
- Most or all of the staff are included in the project.
- There is evidence that they are making steady progress towards improving positive supportive learning relations with their Māori parents and community.
- There has been a concerted effort to ensure improvements in evidence gathering, analysis and use.
- These schools have taken ownership of the project, its goals and means of implementation. One indication of schools taking ownership has been a reprioritising of funds available in the school so as to support the establishment of an ongoing professional development function (facilitators) in these schools.

Further developments of Te Kotahitanga

The analysis of Phases 3 and 4 has shown the importance of school leadership in both implementing Te Kotahitanga and in ensuring that the project is embedded in the school culture and sustained. In keeping with the iterative nature of Te Kotahitanga and based on the findings to date, the research and development team has further developed the GPILSEO model into a more systematic intervention that will support the sustainability of Te Kotahitanga.

chapter 06

Two key requirements will be for leaders to:

- establish a distributed leadership model so that all leaders in the school are implementing dimensions of the GPILSEO model, in accordance with their level of responsibility
- reconceptualise the role of heads of department and faculty so it includes a clear focus on improving teaching and learning such that staff in these positions support the improvement of Māori students' learning and achievement.

Co-construction meetings

Using the GPILSEO model, additional co-construction meetings have been introduced at the senior and middle management levels as the means for developing distributed leadership patterns. Co-construction meetings have now established professional learning communities across all levels of the school (see Table 13).

The purpose of these meetings is to improve student learning outcomes through collaborative problem-solving based on evidence of students' educational performance in relation to established goals.

Table 13: Levels of co-construction hui

Level	Function	Who should participate
School level	Term by term problem-solving and goal setting pertaining to progress of Māori students towards school attendance, retention, engagement and achievement (AREA) goals	Principal (chair), board of trustees' chair, senior management team members Other senior staff
Head of department/ faculty and deans level	Using evidence gathered at departmental level, heads of department and faculty co-construct ways that they can support their staff to support Māori student learning	Chaired by principal Heads of department and faculty and deans
Classroom level (note that this is the established practice within Te Kotahitanga schools)	Using evidence of Māori student performance in their classes, teachers co-construct ways that can change their teaching so that Māori students can more effectively improve their learning and outcomes	Chaired by facilitators for teachers in cross-disciplinary settings (as developed in previous phases of Te Kotahitanga)

Co-construction meetings and associated follow-up activities provide opportunities for iterative sense-making related to their own influence and contribution to Māori students' learning. These meetings take school leaders beyond superficial understandings of Māori language, culture and identity, and they help teachers develop a deeper understanding of these facets than was provided by the taha Māori approach that was common in the 1980s.

The meetings provide leaders with the opportunity to develop their understanding and skills as pedagogical leaders. This, in turn, enables teaching practices that build caring and learning relationships, and interactions that lead to improved outcomes for and with Māori learners.

In this way, a distributed leadership pattern is built and supported within each school. Tables 14, 15, and 16 illustrate some ways leaders could implement the model of reform at each of the different levels of distributed leadership.

Table 14: Implementation of the GPILSEO model by principals and boards of trustees

Goal	Ensure that the school sets goals related to improving Māori student attendance, retention, engagement and achievement (AREA), to developing staff commitment to the goal, and to ensuring the goals are clear, measurable and achievable
Pedagogy	Ensure that the conditions where effective pedagogy can occur are provided by: ▲ developing a culture of evidence-based problem-solving within the school ▲ maintaining orderly and supportive teaching and learning environments
Institution	Ensure that institutional, organisational and structural supports are aligned to support effective pedagogy in classrooms, and constructive problem-solving conversations for effective pedagogical purposes
Leadership	Ensure that leadership is distributed throughout the organisation so that leadership tasks are carried out at appropriate levels
Spread	Ensure that all teachers are involved in realising the goals of the school Create educationally meaningful relationships within the school and beyond through effective networking Ensure that Māori parents and families are able to participate in their children's education
Evidence	Ensure that data management systems are appropriate for formative and summative purposes Ensure that discipline systems are aligned with pedagogic practices
Ownership	Ensure that schools' resources, including staffing and finance, are strategically aligned to pedagogical purposes Ensure that a culture of Māori student improvement becomes normal in the school

Some of the activities that principals and boards of trustees could lead include:

- setting vision and goals in relation to Māori achievement
- changing the organisational structure and policies to support pedagogic reforms
- spreading the reform to include all concerned
- ensuring ownership of the reform
- recruiting only staff who will commit to the reform
- changing school policies and processes that limit Māori student achievement; for example, adopting a policy of having classes that are not streamed, and changing the discipline system
- overseeing the compatibility of assessment and reporting with the school's aspirations to include parents and community in the education of their students
- integrating all professional development in the school so that it all focuses on achieving the school's goals
- ensuring that funding is reprioritised so as to achieve the school's goals.

Table 15: Implementation of the GPILSEO model by the senior leadership team

Goal	Ensure that the means of implementing the goals of the school are working effectively
Pedagogy	Provide active oversight and support for the conditions wherein effective pedagogy can occur Support the implementation of a culture of evidence-based problem-solving across the school
Institution	Ensure that institutional, organisational, and structural supports are aligned to support effective classroom pedagogies Ensure that orderly and supportive learning environments are implemented effectively
Leadership	Undertake tasks appropriate to the senior leadership team member as part of a distributed leadership approach
Spread	Ensure that the means of spreading the reform to all members, leaders, students and their families is working effectively
Evidence	Ensure that data management systems are working to support formative and summative purposes Ensure that discipline systems are working in association with pedagogic processes
Ownership	Assist with ensuring that school resources, including staffing and finances, are strategically aligned with pedagogic purposes

Some ways that the senior management team could ensure the implementation of the GPILSEO model would be to:

- induct new teachers into the school culture
- ensure quality data management systems are in place and working
- reform the timetable to allow Te Kotahitanga pedagogic interventions to take place in a quality, sustainable manner
- ensure that the discipline system works in a way that is supportive of caring and learning classroom relationship
- ensure that all professional development initiatives work in concert towards the school's goals
- support teachers who are having problems coming to terms with the transformation of the school's culture
- participate in head of department and faculty co-construction meetings.

Table 16: Implementation of the GPILSEO model by heads of department or faculty, and deans

Goal	Ensure that goals are established at appropriate levels that focus on improving Māori student attendance, retention, engagement and achievement (AREA) goals
Pedagogy	Provide active oversight and consideration of the teaching programme Observe in classrooms and provide effective feedback Ensure there is an intensive focus on the teaching and learning relationship
Institution	Hold department-level co-construction meetings that promote collective responsibility and accountability, and that provide the opportunity to engage in problem-solving conversations about student achievement and well-being Ensure orderly and supportive working and learning environments
Leadership	Ensure that leadership is promoted among teachers and students
Spread	Ensure that all teachers are included in co-constructing improved pathways for Māori learners
Evidence	Ensure that evidence of student performance is used for the systematic monitoring of student progress and pedagogic improvement Ensure assessment results are used for ongoing programme improvement
Ownership	Ensure that all departmental/faculty resources are strategically aligned to pedagogical purposes

Some ways that deans and heads of department or faculties could ensure the implementation of the GPILSEO reform model include:

- setting Māori student achievement goals for their department/faculty
- gathering evidence of the participation and achievement of Māori students in their department/faculty
- from this evidence, determining the implications for Māori students, for teachers in the department and for themselves as pedagogic leaders
- acting as a pedagogic leader for staff to support individual teachers' pedagogy emerging from evidence of student outcomes and from evidence of teacher observations
- acting as a general pedagogic leader (emerging from aggregated teacher observation data)
- reprioritising funding and resourcing at appropriate levels
- supporting the use of assessment for pedagogic purposes
- participating in co-construction meetings for heads of department or faculty
- conducting co-construction meetings for subject departments. Deans would conduct co-construction meetings for cross-curricular groupings to:
  - collaboratively plan future teaching based on evidence of student performance i.e. collegial discussion about the relationship between what is taught and what is learned
  - coordinate results so as to feedback to teachers
  - evaluate teaching in ways that are useful to teachers
  - support teachers through resource allocation, timetabling, and assessment procedures.

Reconceptualising the role of heads of department and faculty

To sustain the change in classroom practices and the consequent improvement in Māori students' learning will also require a shift from the traditional administration role of the head of department or faculty to one where these people focus more closely on improving teaching and learning in ways that have a positive effect on Māori students' learning.

Heads of department or faculty are usually responsible for the management of the appraisal system in their departments. The challenge is to ensure that this role does not conflict with their role as pedagogical leader. To be able to openly share evidence of areas for improvement, teachers need to be assured that their attempts to improve remain confidential; that is, they are able to make mistakes and reveal weaknesses in an environment that supports ongoing development but, at the same time, remains private and is not part of the public record.

Examples of how to resolve this tension include:

- a senior head of department deciding to continue with the role of administration and appraisal could ask an aspiring head of department or someone with high levels of pedagogical skills and content knowledge to engage in supporting teachers through observations, feedback sessions and co-construction meetings
- in smaller schools, the principal and senior management team opting to take the task of staff appraisal off the heads of department to release them to become pedagogic leaders
- school leaders understanding that their appraisal system offers sufficient means of providing formative support for teachers and having their teachers in agreement with this dual approach.

chapter

07

Conclusion

The data in this summary shows that Phase 3 schools have maintained the improvements in Māori student achievement patterns that were seen in their earlier years in the project. These gains were made in association with changes in teachers' discursive positioning and classroom practices being maintained in Phase 3 schools.

Phase 4 schools replicated the patterns of Māori student achievement seen earlier in Phase 3 schools, again in association with changes in Te Kotahitanga teachers' classroom practices and discursive positioning. In other words, Phase 3 schools have maintained the project in their schools and Phase 4 schools have replicated the implementation seen earlier in Phase 3 schools.

In effect then, in both phases of the Te Kotahitanga project, teachers have built their knowledge, skills, and capacities through the implementation of the Te Kotahitanga effective teaching profile and their subsequent development of contexts for learning that are culturally responsive and embedded in reciprocal relationships of respect. Simultaneously, their Māori students have experienced continuous improvement in mathematics and reading in the junior school, and made significant gains in external examinations in the senior school. In both phases, these gains have been maintained.

The central professional development process of the project was maintained in schools and further dimensions were trialled, adapted and added to the programme to ensure sustainability.

While the overall data shows that the project was maintained in Phase 3 schools, the detailed case study analysis undertaken in 2009 and 2010 revealed that there were differences in the degree to which the schools had implemented and maintained the implementation of the project, with consequent implications for sustainability. This variation was often exacerbated when the principal changed during the period of the implementation. Further, those schools that fully implemented and maintained the programme in an integrated way had the best outcomes for Māori students.

It has become very clear how vital school leadership is to the effective implementation and sustainability of Te Kotahitanga. While a model for effective leadership had been developed it was realised that in order for it to be implemented successfully, a systematic intervention based on the GPILSEO model was needed to support leadership at all levels. Therefore, in keeping with the iterative ethos of Te Kotahitanga, an additional professional development component has been introduced that supports the development of distributed leadership within the school, and thus the sustainability of the reform. This, along with everything else that has been learnt during this research phase, is now being applied in Phase 5 schools and will continue to be developed and applied in future iterations.

08

References

Bishop, R., Berryman, M., Tiakiwai, S., and Richardson, C. (2003). *Te Kotahitanga: The experiences of Year 9 and 10 Māori students in mainstream classrooms.* Wellington: Ministry of Education.

Bishop, R., Berryman, M., Cavanagh, T., and Teddy, L. (2007). *Te Kotahitanga: Phase 3 whanaungatanga: Establishing a culturally responsive pedagogy of relations in mainstream secondary school classrooms.* Report to the Ministry of Education. Wellington: Ministry of Education.

Bishop, R., Berryman, M., Powell, A., and Teddy, L. (2007). *Te Kotahitanga: Improving the educational achievement of Māori students in mainstream education – Phase 2: Towards a whole school approach.* Wellington: Ministry of Education.

Bishop, R., Berryman, M., Cavanagh, T., Teddy, L., Clapham, S., Lamont, R., . . . Jaram, D. (2008). *Te Kotahitanga: Towards sustainability and replicability in 2006 and 2007.* Wellington: Ministry of Education.

Bishop, R., and O'Sullivan, D. (2005). *Taking a reform project to scale: Considering the conditions that promote sustainability and spread of reform.* A monograph prepared with the support of Ngā Pae o te Māramatanga, The National Institute for Research Excellence in Māori Development and Advancement. Unpublished manuscript.

Bishop, R., O'Sullivan, D., and Berryman, M. (2010). *Scaling up education reform:* Addressing the politics of disparity. Wellington: NZCER Press.

Robinson, V., Hohepa, M., and Lloyd, C. (2009). *School leadership and student outcomes: Identifying what works and why: A best evidence synthesis iteration.* Wellington: Ministry of Education.

Shields, C., Bishop, R., and Mazawi, A. E. (2005). *Pathologizing practices: The impact of deficit thinking on education.* New York: Lang.

Timperley, H., Wilson, A., Barrar, H., and Fung, I. (2007). *Teacher professional learning and development: Best evidence synthesis iteration (BES).* Wellington: Ministry of Education.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