



Libraries and Learning Services

University of Auckland Research Repository, ResearchSpace

Version

This is the publisher's version. This version is defined in the NISO recommended practice RP-8-2008 <http://www.niso.org/publications/rp/>

Suggested Reference

Meyer, L. H., Penetito, W., Hynds, A., Savage, C., Hindle, R., & Sleeter, C. (2010). *Evaluation of Te Kotahitanga: 2004-2008: Report to the Ministry of Education*. Wellington: Ministry of Education. Retrieved from <https://www.educationcounts.govt.nz/publications/91416/english-medium-education/evaluation-of-te-kotahitanga-2004-2008/executive-summary>

Copyright

This is an open-access article distributed under the terms of the [Creative Commons Attribution-International](#) License.

Items in ResearchSpace are protected by copyright, with all rights reserved, unless otherwise indicated. Previously published items are made available in accordance with the copyright policy of the publisher.

<https://www.educationcounts.govt.nz/site-info/privacy>

<https://researchspace.auckland.ac.nz/docs/uoa-docs/rights.htm>



TE TĀHUHU O TE MĀTAURANGA AOTEAROA
Ministry of Education New Zealand



Evaluation of Te Kotahitanga: 2004-2008

Report to the Ministry of Education

**Luanna H Meyer, Wally Penetito, Anne Hynds
Catherine Savage, Rawiri Hindle & Christine Sleeter**

ISBN: 978-0-478-34284-0

ISBN: 978-0-478-34285-7 (web)

RMR-955

© Ministry of Education, New Zealand — 2010

Research reports are available on the Ministry of Education's website Education Counts:

www.educationcounts.govt.nz/publications.

Opinions expressed in this report are those of the authors and do not necessarily coincide with those of the Ministry of Education

He Whakamārama

The kōwhaiwhai design on the cover is featured in Te Wāhanga, a meeting room in the Ministry of Education's Head Office dedicated to te ao Māori. The kōwhaiwhai symbolises the journey from one generation to the other. The continuous line indicates the passage of time. The pattern in red depicts the generations of today and the black represents those who have passed on. The triangle is a symbol regularly used in tukutuku, raranga and tāniko designs to depict strength and determination. The cover, then, is symbolic of the challenge that education has offered and continues to offer those who have passed on and those of today.

Final Report Evaluation of the Te Kotahitanga Programme

Submitted by
Luanna H. Meyer, Wally Penetito, Anne Hynds,
Catherine Savage, Rawiri Hindle, and Christine Sleeter



JESSIE HETHERINGTON CENTRE FOR EDUCATIONAL RESEARCH

Te Puna Rangahau ki Ako Pai



Acknowledgements

Many people contributed to our evaluation of Te Kotahitanga and to this report, which synthesises findings reported in the two preliminary interim reports across all 12 Phase 3 and 10 of the Phase 4 schools participating in the project. The project proposal funded by the Ministry of Education was originally developed by Professor Janice Wearmouth of Victoria University (VUW) in collaboration with Professor Wally Penetito (VUW), with input from an international team of researchers including Drs Christine Sleeter, Bruce Wilson and Celia Haig-Brown. Following Dr Wearmouth's departure to the U.K., Professor Luanna Meyer took on leadership responsibility for the project at the start of 2008, and Rawiri Hindle, Dr Anne Hynds, and Dr Catherine Savage (VUW) joined the project along with Professors Meyer, Penetito, and Sleeter who continued with the project as a key member of the research team throughout. The evaluation project has benefited from the additional expert input provided through the participation of the international consultants, key personnel in the Ministry of Education, and our national advisory group.

A number of staff from the Ministry of Education have played key roles in supporting the evaluation from its inception. These include our initial project manager Lynette Bradnam, followed by Martin Henry and Colin Brown. Kate Shaw as senior project officer has also worked with us throughout the reporting and final revision phases. Sarah Hopkins assumed major responsibility for the project as Senior Advisor Māori in English medium for the Ministry of Education in the final revision phase. Others in the Ministry of Education who provided crucial input include Cheree Shortland-Nuku, Prue Kyle, Fred Bishop and Heleen Visser. We were also fortunate in being able to consult with Dr Michael Johnston at New Zealand Qualifications Authority (NZQA) regarding the student outcome databases, and he also served on our national advisory group. We thank also the members of the evaluation project's national advisory group which met on three occasions to review the research plan, critique preliminary findings, and review the draft final report. While not all participated throughout the project, those with whom we consulted at various stages include Dr Johnston, Cheree Shortland-Nuku, Garrick Cooper, Lynette O'Brien, Para Meha, Arthur Graves, Angela Roberts, Keri Milne-Ihimaera, and Arihia Stirling.

At VUW, Rochelle Finlay and Sian Wright provided Research Office support during this phase of project activities. It has been important as well to liaise with the University of Waikato Te Kotahitanga Research Team to ensure that our evaluation had access to the necessary information and data sources, and we express our continuing appreciation to Professor Russell Bishop (Project Director) and his staff. Professor Bishop has been consistently open and collaborative in providing advice on data collection approaches, addressing queries from our team and discussing issues arising from the data.

We were fortunate to have the help of many additional key personnel at the Jessie Hetherington Centre (JHC) for Educational Research who assisted in data collection, coding, data analysis, and report preparation. JHC's Research & Development Officers Lynanne McKenzie and then Dr Susan Davidson oversaw data entry by project coders, guided coding of qualitative data using NVIVO, and provided technical support in the analysis of classroom observations and interview data including preparing summaries of the qualitative analyses using NVIVO. Executive Assistants Pam Ritchie and Virginia Neal took on the mammoth tasks of organising school visits; communications with school personnel and others; and performing the myriad of support functions needed in a project of this scope. Virginia Neal also joined the Phase 4 school site visit research team, carrying out interviews and observations along with our core research team. The JHC's Research Administrator Susan Kaiser provided technical assistance in the preparation of data displays and production of the report. Expert statistical advice was provided at various stages by Professor Richard Harker (Massey University), Dr Michael Johnston (NZQA), and Dr Flaviu Hodis (VUW), and Larissa Kus (PhD student in Psychology at Victoria) worked on the data analyses of student National Certificate of Educational

Achievement (NCEA) achievement outcomes and also provided support to the analyses of qualitative data. Thanks are also extended to Joe McClure, Melissa Romanov, Sylvia Kwang, Brenda Watson, and Anna Thompson who prepared Word transcripts from audio-recorded interviews and/or from handwritten focus group notes.

Gathering data on-site at the 12 Phase 3 and 10 Phase 4 schools covered by this report involved over several hundred classroom observations and interviews with hundreds of participants over a period of many weeks in March-April and October 2008. This required a large team comprising both Māori and non-Māori researchers with relevant expertise and training for this task. We are particularly grateful to senior Māori researchers Dr Mere Kēpa, Dr Tepora Emery, and Dr Georgina Stewart; their participation along with the VUW Māori research team members was key to our commitment that expertise in Māori research methodologies and Māori Kaupapa was respected and represented throughout. For the Phase 3 school data collection, the team comprised VUW team members Hindle, Hynds, Meyer, Penetito and Savage; our international consultants Sleeter and Wilson; and independent Māori researchers Kēpa, Emery and Stewart. For the Phase 4 school data collections, the team comprised VUW team members Hindle, Hynds, Meyer, Neal, Penetito, and Savage; our international consultant Sleeter; and independent Māori researcher Emery.

Finally, of course, this report and the work that underpins it would not have been possible without the cooperation and participation of the many adults and students associated with the twelve Phase 3 and ten Phase 4 Te Kotahitanga schools. We also wish to acknowledge the contribution made by ten Phase 5 schools that allowed our team to carry out classroom observations prior to implementation of Te Kotahitanga, both as baseline for their future development but also to provide a sample for comparison with the Phase 3-4 schools. The principals and lead facilitators were particularly helpful and accommodating in arranging and coordinating observations of lessons, meetings, and interviews involving teachers, students, whānau, and various other school personnel who met and talked with us about Te Kotahitanga and their experiences. These participants have opened their schools to us and trusted us with reporting our findings with integrity and clarity. Our response to their extraordinary good will must be by ensuring that the information and ideas they have shared with us will not just be recorded in the pages of evaluation reports but will be put to good use. They and we share the same goal—to utilise evidence on processes, outcomes and people to inform educational practice.

Luanna Meyer
Wally Penetito
Anne Hynds
Catherine Savage
Rawiri Hindle
Christine Sleeter

March 2010

Table of Contents

Executive Summary	1
Summary of Evidence for the Evaluation Questions	2
What is the quality of the overall design, content and implementation of Te Kotahitanga?	2
How valuable are the outcomes for the teachers who participate—what new knowledge, understandings and skills do they develop, and how valuable are these learnings?	2
How valuable are the outcomes for Māori students, and what is the impact on other classmates/peers?	2
How valuable are the outcomes for whānau?	3
How beneficial (or detrimental) are the effects of Te Kotahitanga on school culture (covering any changes in formal systems and policies; informal practices, or “the way we do things around here”; and underlying beliefs, values, assumptions and attitudes)?	4
What are the enablers and barriers for getting Te Kotahitanga to work most effectively?	4
To what extent is Te Kotahitanga likely to work effectively in other settings and contexts? How sustainable is the initiative likely to be when ministry investment of resources is scaled back?	5
What are the most critical factors in improving teacher efficacy?	5
Key Findings for PD, Classrooms, Students and Schools	6
Findings for Te Kotahitanga as a professional development model	7
Findings for impact on teachers’ classroom practice	7
Findings for impact on students	8
Findings for impact on schools	9
Findings for sustainability of Te Kotahitanga in schools	11
Recommendations based on Evaluation Findings	12
For teacher professional development	12
For classroom instruction	12
For students	13
For schools	13
Chapter 1: Te Kotahitanga and the Focus of the Evaluation	15
Overview of Te Kotahitanga	15
Te Kotahitanga as professional development	17
The facilitation team	18
Teacher cohorts in the school	19
The professional development model	19
Initial hui	19
Classroom observations with feedback and shadow-coaching sessions	19
Co-construction meetings	19
Sustainability of Te Kotahitanga	20
Chapter 2: Evaluation Research Method	21
Overview of the evaluation methodology	21
Bicultural dimension of the evaluation	23
Ethics review and approval	23
Data collection for the evaluation	24
Selection of schools	24
School site visits	25
Classroom observations	26
Interviews	28
Teacher interviews	29
Interview procedures	29
Principal and school leader interviews	30
Facilitator interviews	31
Student interviews	32
Whānau and BOT interviews	33
Procedures for the whānau focus group interviews	34

Procedures for the BOT Chair interviews	35
Coding and data analyses	35
Classroom observations.....	35
Interview transcription, coding and analyses.....	36
Procedures to evaluate student outcomes.....	36
Procedures for matching comparison schools	39
Comparison of NCEA achievement across schools for all students	40
Chapter 3: The Te Kotahitanga Professional Development Model	41
How the Te Kotahitanga professional development model actually works in practice.....	41
Professional development model as a whole.....	41
Perceptions of the initial hui	42
Classroom observations with feedback.....	43
Co-construction meetings	45
Pedagogical and cultural leadership for enabling change in the classroom	46
Principals' perceptions of facilitators.....	46
Teachers' perceptions of facilitators	46
Facilitators' perceptions of the importance of facilitator expertise	47
Developing facilitator expertise	50
Supporting the professional development model	52
Leadership support.....	52
Team composition, staffing	53
Key findings: The Te Kotahitanga professional development model	55
Chapter 4: Impact on Teachers' Classroom Practice	57
Observations of ETP implementation	58
Exemplars of implementation of the ETP	62
Analysis of interview data: A focus on teachers and classrooms.....	62
Teacher beliefs about the ETP and culturally responsive practices.....	64
Change in the classroom: Teacher repositioning, co-construction/power-sharing and student-focused classrooms.....	66
Changes in teacher beliefs, expectations and understandings	69
Change in teacher agency	71
Change in teacher efforts, understandings and practices: Valuing, respecting and including Māori students language and/or cultural knowledge	72
Changes in the classroom: Teacher monitoring and related assessment activities	74
Increased job satisfaction, motivation and empowerment for teachers	75
Ongoing challenges—A lack of change in some classrooms.....	76
Key findings: Impact on teachers' classroom practice.....	78
Chapter 5: Impact on Students	81
Learning and belonging as Māori	81
School personnel on Māori student identity	82
Student perspectives on learning as Māori	82
Whānau perspectives on Māori identity	83
High expectations for achievement.....	84
Impact on attendance, engagement, and retention	86
Data on achievement-related behavioural factors	90
School reports on achievement outcomes	91
School leader reports on achievement.....	91
Teacher and facilitator reports on achievement.....	94
Assessment data on student achievement.....	96
Year 9-10 student achievement outcomes.....	98
Longer-term student achievement outcomes: Years 11-13	99
Total credits attained by Year 11 students	99
Level 1 NCEA Literacy and Numeracy attainment in Year 11.....	102

NCEA level 1 credits attained in selected subjects by year 11 students.....	104
Attainment of University Entrance in Year 13.....	106
Key findings: Impact on students	108

Chapter 6: Impact on Schools 111

Culturally responsive schools	111
Goal: A focus on improving outcomes for Māori students including participation and achievement	112
Pedagogy: A Culturally responsive pedagogy of relations across all classrooms that is used to inform relations and interactions at all levels within the school and community.....	113
Institutions: Capacity for new institutions and structures within the school, including time and space for timetables, staffing and organisational structures to support reform	116
Leadership: Leadership responsive to reform needs and proactive in setting targets and goals as well as distributed to allow power sharing.....	120
Spreading: Inclusion in reform whereby all staff can join the reform, and parents and community are included.....	121
Evaluating: Use of measures that enable facilitators, researchers and teachers to use data monitoring implementation of the reform for formative and summative purposes	123
Ownership: A means whereby the whole school, including the Board of Trustees, can take ownership of the reform.....	125
Relationships with the community	125
Te Kotahitanga and Boards of Trustees.....	125
Te Kotahitanga and the role of principals	125
Te Kotahitanga and Māori support groups	125
Te Kotahitanga and parental motivation in the changing process	127
Sustainability of Te Kotahitanga	128
The facilitation role.....	131
Key Findings: Impact on schools.....	133
Key Findings: Sustainability	134

References 137

Appendices 139

Appendix 1: Evaluation questions and where addressed in the report	139
Appendix 2: Participant information sheets and consent letters	141
Appendix 3: Participant group specific interview questions	155
Appendix 4: Data collection school site visit sample schedule	159
Appendix 5: Effective teaching profile (ETP) definitions	161
Appendix 6: Observation data collection protocols	163
Appendix 7: Exemplars of different levels of implementation of dimensions of the Effective Teaching Profile in Mathematics, Science, English, Social Studies and other subjects.	167
Appendix 8: Brief Biographies for the Te Kotahitanga Evaluation Research Team	172
Appendix 9: Te Kotahitanga Evaluation Advisory Group Membership and Terms of Reference.....	175

List of Tables

Table 1: Implementation timeframes at Phase 3 and Phase 4 Schools	16
Table 2: Baseline comparison data in 2004 for 12 Phase 3 Te Kotahitanga schools and 12 matched comparison schools	40
Table 3: Percentage of Māori students on the total school rolls for Te Kotahitanga and matched comparison schools, 2004–2008	40
Table 4: Effective Teaching Profile (ETP) results at the 12 Phase 3 schools	58
Table 5: Effective Teaching Profile (ETP) results at 10 of the Phase 4 Schools.....	59
Table 7: Effective Teaching Profile (ETP) results by subject area across Phase 4 schools for teachers participating in Te Kotahitanga (N = 115) in October 2009	60
Table 8: Effective Teaching Profile (ETP) evidence at schools in English, mathematics, science and social studies: Percentages and numbers of observations rated at different levels of implementation.....	61
Table 9: Measures available from Te Kotahitanga or other data bases (e.g., NZQA, MOE, schools) that can be analysed for project impact on student achievement	97
Table 10: Percentage of all year 11 students attaining 40 or more credits at Level 1 or higher, 2004–2008	99
Table 11: Year 11 students' attainment of NCEA Certificates at Level 1 as a percentage of Year 9 entrants two years earlier	101
Table 12: Year 11 students who met Year 11 Literacy and Numeracy requirements in 2004, 2005, 2006, 2007 and 2008.....	102
Table 13: Comparison of Literacy L1 attainment by year 11 students for 2005–2008.....	103
Table 14: Comparison of Numeracy L1 attainment by year 11 students for 2005–2008	104
Table 15: Mean number of credits in compulsory subjects attained by Year 11 students	105
Table 16: Mean number of credits in selected elective subjects attained by Year 11 students	106
Table 17: The mean percentage of Year 13 students gaining University Entrance in 2004–2008	107

List of Figures

Figure 1: Percentage of all year 11 students attaining 40 or more credits at Level 1 or higher, 2004–2008	100
Figure 2: Percentage of Year 9 entrants achieving NCEA Level 1 in Year 11 at 12 Phase 3 Te Kotahitanga and 12 comparison schools	101
Figure 3: Percentage of all Year 11 students who met Year 11 Literacy and Numeracy requirements in 2004, 2005, 2006, 2007 and 2008.....	103
Figure 4: Percentage of all Year 13 candidates to gain University Entrance by 2004, 2005, 2006, 2007 or 2008.....	107

Executive Summary

The main research question for this evaluation is *How well and in what ways does Te Kotahitanga work towards the goal of improving Māori student achievement?* To address this question, the evaluation was designed specifically to answer the following sub-questions:

- What is the quality of the overall design, content and implementation of Te Kotahitanga?
- How valuable are the outcomes for the teachers who participate—what new knowledge, understandings and skills do they develop, and how valuable are these learnings?
- How valuable are the outcomes for Māori students, and what is the impact on other classmates/peers?
- How valuable are the outcomes for whānau?
- How beneficial (or detrimental) are the effects of Te Kotahitanga on school culture (covering any changes in formal systems and policies; informal practices, or “the way we do things around here”; and underlying beliefs, values, assumptions and attitudes)?
- What are the enablers and barriers for getting Te Kotahitanga to work most effectively?
- To what extent is Te Kotahitanga likely to work effectively in other settings and contexts? How sustainable is the initiative likely to be when ministry investment of resources is scaled back?
- What are the most critical factors in improving teacher efficacy?

To address these questions, our evaluation team of Māori and non-Māori researchers carried out school visits at 22 Phase 3 and Phase 4 schools participating in Te Kotahitanga. We observed classrooms and professional development (PD) components, and we interviewed school leaders, teachers, project facilitators, whānau, students and board of trustees (BOT) chairs. Hundreds of interviews with participants and classroom observations were analysed using quantitative and qualitative approaches. We also reviewed school and Ministry of Education reports and other documents, and we reviewed student achievement data and information on other student outcomes from a variety of sources including official records in the Ministry of Education and New Zealand Qualifications Authority (NZQA).

This executive summary first summarises the evidence addressing each of the evaluation sub-questions to answer the main research question of *How well and in what ways does Te Kotahitanga work towards the goal of improving Māori student achievement?* Next, key findings are highlighted with respect to Te Kotahitanga as a model for teacher professional development and its impact on teachers’ classroom practice, students and schools, reported in more detail in the body of the report. Key findings are also presented on the issue of sustainability of Te Kotahitanga as a school-based teacher professional development programme designed to enhance Māori student outcomes including achievement in mainstream secondary schools. Finally, we include a set of recommendations emerging from the evaluation that have the potential to enhance the effectiveness and sustainability of Te Kotahitanga towards improving Māori student achievement outcomes.

Summary of Evidence for the Evaluation Questions

To answer the main research question for this evaluation *How well and in what ways does Te Kotahitanga work towards the goal of improving Māori student achievement?*, the evidence with respect to each of the eight sub-questions is summarised:

What is the quality of the overall design, content and implementation of Te Kotahitanga?

Across the board and with very few exceptions, teachers, principals, Boards of Trustees chairs, and facilitators were most enthusiastic about the Te Kotahitanga professional development model, viewing it as a sound and effective process for improving classroom teaching for Māori students. Teachers valued the interconnected parts of the model, voicing most enthusiasm for the classroom observations with feedback which they saw as not only improving their teaching but also improving their ability to reflect on their teaching. Components of the model working well were facilitator observations with feedback to teachers and co-construction meetings; shadow coaching did not appear to be well understood or used according to the model. Teachers, principals and other school leaders affirmed that their own expectations had been raised for and relationships improved with Māori students, and they attributed this shift to Te Kotahitanga. Teachers were less clear about development of Māori culturally grounded identity as an educational outcome for students.

The Te Kotahitanga professional development model is associated with improved classroom teaching. In comparison with classrooms where Te Kotahitanga was not yet implemented, classroom observation results indicate that the majority of teachers (approximately 75%) evidenced either moderate or high implementation according to criteria based on the Effective Teaching Profile (ETP). More than one in five teachers demonstrated a high level of implementation of the ETP in Year 9-10 classrooms across subjects and schools. At the same time, observational data indicate variability across subjects and schools in the quality of implementation. On average, one in four teachers had not mastered sufficiently key dimensions of the ETP; in these classrooms, PD needs extend beyond those Te Kotahitanga was designed to address.

How valuable are the outcomes for the teachers who participate—what new knowledge, understandings and skills do they develop, and how valuable are these learnings?

Interview analysis confirmed that teachers valued relationship-based pedagogies. The majority of teachers affirmed that Te Kotahitanga professional development had an impact on classroom instruction leading to enhanced outcomes for Māori students as well as for all students. Most teachers were able to highlight particular teaching strategies and methods in their subjects introduced by Te Kotahitanga that had a relational/interaction focus towards improving practice and outcomes for Māori students. Teachers spoke of change in their classrooms in terms of: (a) change in teacher beliefs, expectations and understandings; (b) change in teacher agency, and (c) increased teacher job satisfaction, motivation and empowerment. They described increased experimentation and risk-taking in the classroom; increased understanding and awareness of Māori students needs such as valuing, respecting and including Māori students language and/or cultural knowledge; teacher repositioning, co-construction, power-sharing and student-focused classrooms; group work and cooperative learning approaches; teacher monitoring and related assessment activities; and an increase in teacher satisfaction, motivation and empowerment.

How valuable are the outcomes for Māori students, and what is the impact on other classmates/peers?

Students reported enhanced valuing of their identity as Māori learners and increases in culturally responsive practices at most schools; perceptions of school personnel and whānau provide additional support for growing appreciation for Māori cultural identity in schools. Māori students were proud of Māori culture and identity and felt that, on the whole and in most schools, they were able to “be Māori” in school rather than having to leave that identity outside the school entrance in order to succeed academically. When students discussed ways in which the school as a whole either did or did not demonstrate valuing of Māori culture and language, they gave examples such as use of powhiri, kapahaka and

waiata, and they were able to define places and people—such as the Te Kotahitanga room, the marae, and Māori teachers—that helped them to ‘feel Māori’ at school in a positive way. While appreciated by the students, these examples appeared to be episodic rather than reflecting systemic changes to the overall culture of the school.

Students were able to articulate how teachers showed they valued them as learners and as Māori, and they were able to discuss how teachers had changed in establishing positive relationships with them as learners. They emphasised the importance of teachers’ caring about them as persons to support their learning. They commented on how difficult it was for them to care about how well they did and do the work in classes if teachers made it clear they did not. However, there were still perceptions among Māori students in a few schools that a ‘double standard’ continued to exist whereby Māori students were singled out and disciplined for behaviour ignored for students from other cultural groups.

Teachers, facilitators, principals and other school leaders reported improvements in student attendance, participation, motivation, and engagement in school and classroom learning activities. There is numerical evidence of enhanced student retention and increases in Māori student enrolment in the senior school and National Certificate of Educational Achievement (NCEA) credit attainment at Year 11 for Phase 3 schools in comparison to 12 matched comparison schools.

Systematic comparisons of Year 11 student performance between the 12 Te Kotahitanga Phase 3 and 12 matched schools reveal higher increases (gain) across 2004-2008 in the percentage of Year 9 entrants attaining NCEA Level 1 in Year 11; Te Kotahitanga schools also evidenced twice the increase in this percentage gain than the average gain nationally. These comparisons also reveal lower achievement outcomes for literacy and similar achievement outcomes for numeracy at NCEA level 1 in 2008.

Systematic comparisons of Māori student NCEA achievement at Te Kotahitanga Phase 3 schools compared to matched schools reveal statistically significant differences favouring the Te Kotahitanga schools in mathematics, physics and science, and no differences across the two groups of schools in English and history. NCEA findings, however, are early days for the Phase 3 schools, where the first student cohort to experience full implementation of Te Kotahitanga did not reach Year 11 until 2008. It would be inappropriate to make NCEA comparisons at the Phase 4 schools where no student cohort had yet experienced full implementation and thus reached Year 11 by 2008-2009.

Te Kotahitanga schools were associated with a higher mean percentage of the total school population at Year 13 who gained University Entrance in comparison with the 12 matched comparison schools.

How valuable are the outcomes for whānau?

For whānau whom we interviewed, Te Kotahitanga was associated with major changes in the way their children approached school and their motivation to do well. Most stressed that while they themselves had never enjoyed coming to school, their children were enthusiastic about school and did not have to be persuaded or forced to attend. They valued high achievement for their children, and many emphasised whānau expectations that their young people would do better in school than the previous generation of Māori. They also valued that their children were ‘able to be Māori’ while learning, unlike how they themselves recalled feeling about being in school. At a few schools, whānau were critical of the extent to which Māori culture and te reo were supported, and they felt that their children had to struggle to be both Māori and high achievers at school.

The commitment of Māori whānau and the school community to Te Kotahitanga and to Māori student achievement in the mainstream requires ongoing communication and information sharing. Present communication strategies with communities are tenuous, nor are effective strategies for engaging with Māori whānau evident. Enhanced communication links would further support sustainability, particularly in periods of change in school leadership. These links were not key elements in Te Kotahitanga as implemented during Phases 3-4, but future development of such

linkages would enhance the model and school capacities to support achievement and other positive outcomes for Māori students. To some extent, the small sample of whānau whom we interviewed can be viewed as an indicator of less than optimal levels of involvement and communication with Māori families.

How beneficial (or detrimental) are the effects of Te Kotahitanga on school culture (covering any changes in formal systems and policies; informal practices, or “the way we do things around here”; and underlying beliefs, values, assumptions and attitudes)?

School leaders, teachers and students noted a focus and a change in the relationships within the school as a result of the Te Kotahitanga programme.

Principals were able to articulate achievement targets and achievements for students, but these were not always shared with the school community including teachers, facilitators, whānau and the Boards of Trustees. Chairs of Boards of Trustees and particularly whānau expressed the desire to know more about Te Kotahitanga and an interest in closer connections between the school and its community. There is, for example, potential for improving the use of the Marae and facilities in enhancing these relationships.

Te Kotahitanga has created new professional leadership opportunities in schools, including facilitation, mentoring, and leadership skills for teachers through the creation of new roles. There is less evidence of leadership distributed across the school with respect to responsibility for the GPILSEO framework; the support of Deans, Heads of Departments and DPs is more philosophical than structural. In a few schools there is evidence that this power has been shared with leadership opportunities extended for Māori students with the creation of mentoring roles, prefect and head boy/girl positions.

Schools struggle over the dilemma of voluntary participation or full inclusion of staff. Shared problem-solving and decision-making by co-construction teacher groups work best when all members of the group are participating in Te Kotahitanga and can be prohibitive when some are not. The implementation of the programme can initially cause division amongst staff as some are resistant to change, although there is evidence that this dissipates after time. There continue to be concerns at some schools that targeting of Māori student achievement may be misconstrued as deficit theorising in attributing less than satisfactory outcomes to the students and their families rather than schools and teachers assuming agency for student results.

Principals generally indicated that Te Kotahitanga had not had significant impact on other school practices and/or school policy. Their discussions of the programme emphasised the teacher change in developing the Effective Teaching Profile rather than the GPILSEO framework and how it had impact on their school overall. Thus, they did not generally see Te Kotahitanga as a school reform initiative, but rather as focused on teacher professional development.

What are the enablers and barriers for getting Te Kotahitanga to work most effectively?

The Te Kotahitanga professional development model works best when: it has active support from the school's leadership team, particularly the principal and the other senior managers; the leadership team views it as an essential vehicle to improve academic achievement of Māori students; and there are effective communications between the school's senior management team and the lead facilitator.

Trained facilitators are critical to the success of this professional development model. Facilitators as well as teachers affirmed that the facilitator role required expertise in Māori culture and its relationship to culturally responsive classroom pedagogy; subject matter expertise that they can connect with culturally responsive pedagogy; and the process of working with teachers and other adult learners. This is not a role that can be shifted to other personnel in the school who have not developed this expertise. The challenges for facilitators in providing effective professional development support for teachers included uneven availability of: curriculum expertise for ETP exemplars across

different subject areas; timely student outcome data for feedback to teachers; and differentiated PD activities to accommodate teachers at different stages of implementation, expertise and cultural knowledge. Enabling teachers in the different subject areas who have demonstrated high levels of implementation of the ETP to play a greater role in mentoring other teachers could provide a way forward as well as recognise teacher leadership.

The Te Kotahitanga professional development model appears to function best when there is stability in the facilitation team; when most facilitators are based within the school thus connected to its school community; and either full-time or, if part-time, have a sufficiently flexible schedule for project responsibilities; and all facilitators have sufficient training around issues of culture, pedagogy and subject knowledge.

Planning for the implementation of Te Kotahitanga is crucial to the success of the programme as new staff needed to be employed, provision to timetables needed to be made and physical space appropriated. The interview data demonstrate that the physical space given to the programme signals the importance and permanence of the programme to staff and students. Some schools indicated that initial implementation is challenging for schools given the necessity of making changes to systems and structures to accommodate Te Kotahitanga. Principals felt that networking and/or mentoring relationships with colleagues more experienced with the model could have assisted in this process and expressed interest in playing this role for schools new to Te Kotahitanga.

To what extent is Te Kotahitanga likely to work effectively in other settings and contexts? How sustainable is the initiative likely to be when ministry investment of resources is scaled back?

Principals emphasised sustainability of Te Kotahitanga was dependent on continued resources and expertise associated with the facilitator role, although some principals explored ideas for embedding the culture of Te Kotahitanga in school relationships and related school processes including staff appraisal and peer support networks.

The BOT chairs who were interviewed also emphasised that sustainability of Te Kotahitanga depended upon both people and financial resources, and they expressed concern about funding being reduced or withdrawn. They generally saw the lead facilitator's role as key to sustainability. They emphasised existing budget limitations and wondered aloud whether their Boards would support re-directing funds from other initiatives in order to continue funding Te Kotahitanga should targeted Ministry of Education funding end.

Sustainability of Te Kotahitanga is currently dependent upon delivery of professional workshops and hui from the Waikato research team to develop school leader and facilitator skills and expertise in support of the initiative. Without the availability of ongoing training and mentoring opportunities, there is risk of losing expertise needed to sustain teacher professional development programme towards enhancing Māori student outcomes in mainstream schools.

Without better access to student outcome data on a regular basis, teacher participation in the professional development activities may wane once teachers themselves feel they have mastered the critical components or no longer have interest in doing so. Sustainability will require more efficient and relevant data on student outcomes at the school level for teacher use throughout the year. With some exceptions, the present data collection and reporting systems are not achieving this.

What are the most critical factors in improving teacher efficacy?

There is agreement across school personnel at all levels that the role of lead facilitator is central to Te Kotahitanga with its focus on teacher professional development towards the Effective Teaching Profile towards enhancing student outcomes for Māori in the mainstream. There are also concerns that integrating the role within the school with additional professional development coordination duties could have a negative impact on programme effectiveness if responding to multiple initiatives shifts the focus away from Māori student achievement. There was strong support for a

permanent senior teacher leadership role held by a person with the necessary cultural and instructional expertise so that this work would continue.

Across schools and across subjects, Te Kotahitanga has communicated effectively to teachers that relationships in the classroom are important. The success to which these relationships were transferred into successful learning situations was variable in some subjects and some schools. A key challenge was how to overcome a lack of change in some classrooms, particularly for teachers shown and perceived to be low implementers. Some teachers may require additional work and exemplars to assist them in constructing lessons that enable learning relationships to develop in the classroom.

Factors associated with low implementers were the absence of stated learning outcomes and achievement criteria; low expectations for students; and classroom management challenges. These classrooms did not evidence culturally responsive pedagogies of relations, and students did not appear to be engaged as active participants in building understandings and bringing their own knowledge, cultural identity and experiences to new learning opportunities. Difficulties being experienced by some teachers indicated professional needs beyond those that Te Kotahitanga is designed to address. Some may be performance appraisal issues, but these teachers require more support and advice than Te Kotahitanga is designed to give.

The percentage of high implementers was high, at approximately 2 in 5 at the Phase 4 and 1 in 5 at the Phase 3 schools. The fact that the percentage of high implementers was highest at Phase 4 schools could be due to a number of factors. One possibility is that refinements to the Te Kotahitanga programme model might have resulted in enhanced effectiveness at Phase 4 compared to Phase 3 schools. Another could be that the benefits for teaching practice reach their peak within two-three years, and teachers may lose momentum for demonstrating high implementation when the cycle becomes repetitive. Facilitators indicated that it seemed unnecessary to continue to carry out the same observations and feedback sessions for teachers who had long since demonstrated their skills on the ETP. There could be further differentiation of the model for the involvement of high implementers. This differentiation could be done by moving onto senior secondary subjects once a certain level of master is reached in years 9-10. Alternatively, high implementers along with Heads of Departments could become more active in mentoring others or even serving on the facilitation team. Such initiatives might also enable the ETP to be better integrated into the different subject areas and across the senior secondary school.

There also needs to be better access to student outcome data on a regular basis to inform the co-construction planning meetings. Without this, teacher participation in the professional development activities may wane once teachers feel they have mastered the critical components or no longer have interest in doing so. Most importantly, the co-construction teams' problem-solving and planning processes require these data if they are to focus change based on evidence rather than collective impressions regarding impact on students. Sustainability will require more efficient and relevant data on student outcomes at the school level for teacher use throughout the year. With some exceptions, the present data collection and reporting systems are not achieving this.

Appendix 1 lists reference to specific sections and page numbers of the report where evidence relating to each sub-question can be found.

Key Findings for PD, Classrooms, Students and Schools

In addition to reporting our findings for each of the evaluation sub-questions, this section reports the evidence with respect to four "categories" that have more functional utility for educational policy and practice. The first set of findings is related specifically to Te Kotahitanga as a professional development model, and we then report findings with respect to impact on teachers' classroom practice, students, and the school as a whole. This alternative organisation for our

findings does not introduce new evidence but instead strives to present that evidence for particular constituent or stakeholder groups including those engaged in professional development design and implementation; teachers and curriculum specialists; educators and whānau/families; and school leaders and the school community. These include evidence around the issue of sustainability for Te Kotahitanga in schools.

Findings for Te Kotahitanga as a professional development model

- Across the board and with very few exceptions, teachers, principals, Boards of Trustees chairs, and facilitators were most enthusiastic about the Te Kotahitanga professional development model, viewing it as a sound and effective process for improving classroom teaching for Māori students.
- Teachers valued the interconnected parts of the model, voicing most enthusiasm for the classroom observations with feedback which they saw as not only improving their teaching but also improving their ability to reflect on their teaching. Co-construction meetings appeared most effective and useful when all teachers in the group were trained in Te Kotahitanga and problem-solving was based on student evidence provided to the group on a regular basis. The implementation of shadow coaching across Phase 3 and Phase 4 schools appeared variable. Data analysis indicated that some lead facilitators and facilitators were less knowledgeable and/or confident about the implementation of shadow-coaching in their school. Some teachers also indicated that they were unclear about the process of shadow-coaching, how it differed from other components of the PD model and/or its contribution to their ongoing professional development. More attention needs to be placed on facilitators' knowledge and use of shadow-coaching and the quality of its implementation within participating schools.
- Trained facilitators are critical to the success of this professional development model. Facilitators as well as teachers affirmed that the facilitator role required expertise in Māori culture and its relationship to culturally responsive classroom pedagogy; subject matter expertise that they can connect with culturally responsive pedagogy; and the process of working with teachers and other adult learners. This is not a role that can be shifted to other personnel in the school who have not developed this expertise.
- The Te Kotahitanga professional development model works best when: it has active support from the school's leadership team, particularly the principal and the other senior managers; the leadership team views it as an essential vehicle to improve academic achievement of Māori students; and there are effective communications between the school's senior management team and the lead facilitator. It also appears to function best when there is stability in the facilitation team; when most facilitators are based within the school thus connected to its school community; and either full-time or, if part-time, have a sufficiently flexible schedule for project responsibilities.
- The challenges for facilitators in providing effective professional development support for teachers included uneven availability of: curriculum expertise for ETP exemplars across different subject areas; timely student outcome data for feedback to teachers; and differentiated PD activities to accommodate teachers at different stages of implementation, expertise and cultural knowledge.

Findings for impact on teachers' classroom practice

- Classroom observation results indicate that the majority of teachers (approximately 75%) evidenced either moderate or high implementation according to objective assessment using criteria based on the Effective Teaching Profile.
- More than one in five teachers demonstrated a high level of implementation of the Effective Teaching Profile in Year 9-10 classrooms across subjects and schools.

- Major changes reported by teachers who were interviewed which they attributed to Te Kotahitanga professional development were: (a) change in teacher beliefs, expectations and understandings; (b) change in teacher agency, and (c) increased teacher job satisfaction, motivation and empowerment.
- Sub-themes associated with these changes included increased teacher experimentation and risk-taking in the classroom; increased understanding and awareness of Māori students needs such as valuing, respecting and including Māori students language and/or cultural knowledge; teacher repositioning, co-construction, power-sharing and student-focused classrooms; group work and cooperative learning approaches; teacher monitoring and related assessment activities; and an increase in teacher satisfaction, motivation and empowerment.
- Interview analysis confirmed that teachers valued relationship-based pedagogies, and the majority of teachers affirmed that Te Kotahitanga professional development had an impact on classroom instruction leading to enhanced outcomes for Māori students as well as for all students. Teachers held varied beliefs about the extent to which the ETP differed from good teaching generally.
- Most teachers were able to highlight particular teaching strategies and methods in their subjects introduced by Te Kotahitanga that had a relational/interaction focus towards improving practice and outcomes for Māori students.
- Observational data indicate variability across subjects and schools in the quality of implementation. On average, one in four teachers was not observed to be implementing key features of the Effective Teaching Profile. In addition to an absence of mastery of culturally responsive pedagogies of relations, students in these classrooms experienced an absence of explicit learning outcomes, criteria for success and high expectations, along with high levels of off-task and disruptive behaviour likely to interfere with learning. The PD needs associated with low implementation of the ETP go beyond factors that are the responsibility of Te Kotahitanga and would seem to indicate the need for good teaching support generally.
- Interview analysis identified ongoing challenges in the attempt to improve practice and outcomes for Māori students. A key challenge was how to overcome a lack of change in some classrooms, particularly for teachers shown and perceived to be low implementers.

Findings for impact on students

- Students reported enhanced valuing of their identity as Māori learners and increases in culturally responsive practices at most schools, and the perceptions of school personnel and whānau provide additional support for growing appreciation for Māori cultural identity in schools. Māori students were proud of Māori culture and identity and felt that, on the whole and in most schools, they were able to “be Māori” in school rather than having to leave that identity outside the school entrance in order to succeed academically.
- Students were able to articulate how teachers showed they valued them as learners and as Māori, and they were able to discuss how teachers had changed in establishing positive relationships with them as learners. They emphasised the importance of teachers’ caring about them as persons to support their learning. They commented on how difficult it was for them to care about how well they did and do the work in classes where teachers made it clear they did not. However, there were still perceptions among Māori students in a few schools that a ‘double standard’ continued to exist whereby Māori students were singled out and disciplined for behaviour ignored for students from other cultural groups.
- Students discussed ways in which the school as a whole either did or did not demonstrate valuing of Māori culture and language. They gave examples such as use of powhiri, kapahaka and waiata, and they were able to define

places and people—such as the Te Kotahitanga room, the marae, and Māori teachers—who helped them to ‘feel Māori’ at school in a positive way.

- Interviews with whānau affirmed that their children view school positively, loved coming to school, and had greatly improved their attendance and participation, which many contrasted with their own more negative memories of schools and schooling.
- Teachers, principals and other school leaders affirmed that their own expectations had been raised for and relationships improved with Māori students, and they attributed this shift to Te Kotahitanga rather than to the ETP specifically. Teachers generally did not use the language of the ETP when they discussed Māori learners, expectations, relationships and pedagogy in the classroom. While they noted the relevance of culture to teaching and learning, few discussed specifically that the development of a culturally-grounded identity was an educational outcome for students. The work of facilitators with teachers may require more explicit focus on culturally responsive pedagogies and how to support learning grounded in students’ Māori identity towards adding to and enhancing existing conceptions of good teaching. This will also require more dialogue with the Māori community.
- Teachers, facilitators, principals and other school leaders reported improvements in student attendance, participation, motivation, and engagement in school and classroom learning activities which they attributed to Te Kotahitanga.
- There is numerical evidence of enhanced student retention and increases in Māori student enrolment in the senior school and NCEA credit attainment at Year 11 for Phase 3 schools in comparison to 12 matched comparison schools.
- Systematic comparisons of Year 11 student performance between the 12 Te Kotahitanga Phase 3 and 12 matched schools reveal higher increases (gain) across 2004-2008 in the percentage of Year 9 entrants attaining NCEA Level 1 in Year 11; Te Kotahitanga schools also evidenced twice the increase in this percentage gain than the average gain nationally. Comparisons also reveal lower achievement outcomes for literacy and similar achievement outcomes for numeracy at NCEA level 1 in 2008.
- Systematic comparisons of Māori student NCEA achievement at Te Kotahitanga Phase 3 schools compared to matched schools reveal statistically significant differences favouring the Te Kotahitanga schools in mathematics, physics and science, and no differences across the two groups of schools in English and history.
- Te Kotahitanga schools were associated with a higher mean percentage of the total school population at Year 13 who gained University Entrance in comparison with the 12 matched comparison schools.

Findings for impact on schools

- School principals were able to articulate achievement targets and achievements for students, but these were not always shared with the school community including teachers, facilitators, whānau and the Boards of Trustees.
- Across schools and across subjects, Te Kotahitanga has communicated effectively to teachers that relationships in the classroom are important. The success to which these relationships were transferred into successful learning situations was variable in some subjects and some schools.
- While evident within the schools, there is less evidence that this focus on relationships has been extended beyond the school to relationships between the school and its Māori community and whānau. Chairs of Boards of Trustees and particularly whānau expressed the desire to know more about Te Kotahitanga and an interest in closer

connections between the school and its community. There is, for example, potential for improving the use of the marae and facilities in enhancing these relationships.

- Planning for the implementation of Te Kotahitanga is crucial to the success of the programme as new staff needed to be employed, provision to timetables needed to be made and physical space appropriated. The interview data demonstrate that the physical space given to the programme signals the importance and permanence of the programme to staff and students.
- Some schools indicated that initial implementation is challenging for schools given the necessity of making changes to systems and structures to accommodate Te Kotahitanga. Principals felt that networking and/or mentoring relationships with colleagues more experienced with the model could have assisted in this process and expressed interest in playing this role for schools new to Te Kotahitanga.
- Te Kotahitanga has created new professional leadership opportunities in schools, including facilitation, mentoring, and leadership skills for teachers through the creation of new roles. There is less evidence of leadership distributed across the school with respect to responsibility for the GPILSEO framework; the support of Deans, Heads of Departments and DPs is philosophical rather than structural. In some schools there is evidence that this power has been shared with leadership opportunities extended for Māori students with the creation of mentoring roles, prefect and head boy/girl positions.
- The implementation of the programme can initially cause division amongst staff whose different perspectives on enhancing student achievement may result in resistance. There is evidence that resistance to the programme dissipates over time, but schools still struggle over the dilemma of voluntary participation or full inclusion of staff. Shared problem-solving and decision-making by co-construction teacher groups works best when all members of the group are participating in Te Kotahitanga and can be prohibitive when some are not.
- Schools leaders, teacher and students noted a focus and a change in the relationships within the school as a result of the Te Kotahitanga programme. The classroom observations indicate that further emphasis on fostering learning relationships between students within some classrooms is needed.
- There continue to be concerns at some schools that targeting of Māori student achievement may be misconstrued as deficit theorising in attributing less than satisfactory outcomes to the students and their families rather than schools and teachers assuming agency for student results.
- Whānau at a few schools were critical of the extent to which Māori culture and te reo were supported, and they felt that their children had to struggle to be both Māori and high achievers at school. There is evidence from our school visits that a few staff at a few schools engaged in deficit theorising and racist attitudes, seen by students, teachers and whānau as continuing to impede progress for Māori students at those schools.
- Principals generally indicated that Te Kotahitanga had not had significant impact on other school practices and/or school policy. Their discussions of the programme emphasised teacher change in developing the Effective Teaching Profile rather than the GPILSEO framework and how it had impact on their school overall. They did not generally regard Te Kotahitanga as a school reform initiative, but rather as focused on teacher professional development.

Findings for sustainability of Te Kotahitanga in schools

- School leaders emphasised that sustainability of Te Kotahitanga at their schools was dependent on three factors: (a) the lead facilitator role, performed by a professional with the necessary cultural knowledge, secondary curricular and pedagogical expertise, and credibility and skill in providing technical advice and support to teachers; (b) individualized expert advice to teachers and support for co-construction team activities; and (c) the availability of ongoing expert training and consultation as had been provided by the University of Waikato research team.
- There is agreement across school personnel at all levels that the role of lead facilitator is central to Te Kotahitanga with its focus on teacher professional development towards the Effective Teaching Profile towards enhancing student outcomes for Māori in the mainstream. There are also concerns that integrating the role within the school with additional professional development coordination duties could have a negative impact on programme effectiveness if responding to multiple initiatives shifts the focus away from Māori student achievement. There was strong support for a permanent senior teacher leadership role held by a person with the necessary cultural and instructional expertise so that this work would continue.
- Principals emphasised that sustainability of Te Kotahitanga was dependent on continued resources and expertise associated with the facilitation team, although some principals explored ideas for embedding the culture of Te Kotahitanga in school relationships and related school processes including staff appraisal and peer support networks.
- BOT chairs also emphasised sustainability of Te Kotahitanga depended upon both people and financial resources, and they expressed concern about funding being reduced or withdrawn. They generally saw the lead facilitator's role as key to sustainability. They emphasised existing budget limitations and wondered aloud whether their Boards would support re-directing funds from other initiatives in order to continue funding Te Kotahitanga should targeted Ministry of Education funding end.
- While also important, the role of additional facilitators in schools has presented various challenges to schools regardless of targeted Te Kotahitanga funding. Reasons for this include staff time, expertise and credibility around issues of culture, pedagogy and subject knowledge. Further, the evidence on uneven implementation of the Effective Teaching Profile, despite length of participation, suggests that teacher participation could be better differentiated. Enabling teachers in the different subject areas who have demonstrated high levels of implementation of the ETP to play a greater role in mentoring other teachers could provide a way forward as well as recognise teacher leadership.
- Sustainability of Te Kotahitanga within the Phase 3 and Phase 4 model is dependent upon delivery of professional workshops and hui from the Waikato research team to develop school leader and facilitator skills and expertise in support of the initiative. Without the availability of ongoing training and mentoring opportunities, there is risk of losing expertise needed to sustain teacher professional development programme towards enhancing Māori student outcomes in mainstream schools.
- Without better access to student outcome data on a regular basis, teacher participation in the professional development activities may wane once teachers themselves feel they have mastered the critical components or no longer have interest in doing so. Sustainability will require more efficient and relevant data on student outcomes at the school level for teacher use throughout the year. With some exceptions, the present data collection and reporting systems are not achieving this.

- The commitment of Māori whānau and the school community to Te Kotahitanga and to Māori student achievement in the mainstream requires ongoing communication and information sharing. Present communication strategies with communities do not appear to be effective, nor are effective strategies for engaging with Māori whānau evident. Enhanced communication links would further support sustainability, particularly in periods of change in school leadership.

Recommendations based on Evaluation Findings

Based on the findings from this evaluation, the following recommendations are made:

For teacher professional development

1. There should be continued support for the Te Kotahitanga professional development model as a viable process for improving classroom teaching, and particularly teachers' ability to teach Māori students. Schools require further advice and technical assistance to determine how they can institutionalise the model without relying on an ongoing stream of additional funding.
2. Given the key role of the lead facilitator and the importance of trained facilitators who are critical to the Te Kotahitanga professional development model, there should be encouragement for development of alternative training formats such as university-based programmes along the lines of the RTLB professional, postgraduate programme leading to a formal qualification.
3. Since schools have at least some teachers who are implementing the effective teaching profile at a high level, consideration should be given to facilitation teams that include more opportunities for high implementer teachers to serve part-time as facilitators for limited time periods, especially to provide subject-specific advice and support. This offers rich possibilities for developing teacher leadership while addressing concerns that facilitation teams lack expertise in specific subject matter areas.
4. Teachers indicated the need for more subject-focused advice on culturally responsive pedagogies, suggesting possible alignment whereby Heads of Departments and experienced Te Kotahitanga teachers might become more involved in supporting colleagues in the different curriculum areas where they have expertise.

For classroom instruction

1. Te Kotahitanga professional development should be recognised for contributing to positive change in teachers' classroom practice. Analysis of interview data indicated changes in teacher beliefs, expectations and understandings and teacher agency as well as teacher satisfaction, motivation and empowerment.
2. Teachers also should be recognised for their role in creating more responsive classrooms for Māori students, particularly in the area of relationship based and interactive pedagogies. Interview and observational analyses also confirmed the value of relationship-based pedagogies.
3. At present the professional development programme does not differentiate between teachers who are working as 'High' 'Moderate' or 'Low' implementers. Teachers have different strengths and challenges, whereas the professional development programme now represents a 'one size fits all' approach. There is a need for more specific and targeted professional development to better cater for teachers' needs with more targeted PD goals for improvement.
4. Teachers working as High Implementers could be used more effectively in coaching/mentoring activities, specifically working in classrooms with those teachers who are currently operating at a Low Implementation level. This recommendation also has implications for school leadership, emphasising the involvement of Heads of

Departments working alongside other, new teacher leaders both within and across schools. Teacher leaders should be recognised and their contributions towards ongoing improvement valued.

For students

1. Whenever initiatives are intended to have an impact on student outcomes, systematic measure of those outcomes should be reported on an annual basis by the school to the Ministry of Education and to the school's Board of Trustees, students and families. For Te Kotahitanga, these data should minimally include an agreed measure of student achievement as well as achievement-related motivation and/or engagement. There are measures now available normed in New Zealand to measure each of these and already in use in some schools, some of which may require disaggregated norms for Māori students as well.
2. Schools receiving special initiative funding should be provided a template and technical support for reporting required student outcome data annually to the funding agency in a format that is consistent across schools. These data should also be shared annually with school personnel, parents and their Boards of Trustees. Minimally, these data should include the overall data and data disaggregated by ethnicity covering: average percentage daily attendance; retention as a percentage of students returning to school in the year following their 16th birthday; the total number of suspensions, stand-downs and expulsions; and numbers and levels of streamed groups including percentage composition by ethnicity.
3. The Ministry of Education should also provide technical support to schools as needed in order for them to establish reliable data management systems and designated school personnel who will be responsible for these data.
4. If achievement results are expected to be demonstrated beyond the year groups affected by a project or initiative, there should be systematic planning for extending an appropriate level of project activities. For the Te Kotahitanga project, for example, this could comprise selected facilitator observations and feedback sessions focused on NCEA subjects in the senior secondary school for teachers once they have demonstrated mastery in the junior school, rather than assuming transfer of processes and new skills without scaffolding.

For schools

1. All schools and particularly mainstream schools with significant Māori populations should establish staffing patterns, policy and procedures, and cultural advice to teachers across disciplines to support student achievement in culturally responsive ways. Accountability for these systemic processes and changes should be with the principal and the senior management team.
2. There should be focus on high achievement for all Māori students alongside evidence of high expectations represented by access to enhanced learning opportunities, gifted and talented programmes, and appropriate educational supports including lesson differentiation for students with special educational needs
3. Data should be collected, analysed and summarised in a manner appropriate for use by school personnel to improve instruction and programmes. Summaries of student outcome data should also be shared on a regular basis with teachers, whānau and the students themselves. Whānau and students should be included in the feedback loop and given opportunity to participate in the visioning and goal setting for the school. This includes creating opportunities for whānau to participate in reform; some schools may need to address relationships with whānau and local iwi given evidence that historical disputes and/or past schooling experiences for whānau at the school were seen as barriers to participation.

4. There needs to be an expectation of overall school change associated with Te Kotahitanga driven by school principals and other school leaders accountable for that change. This should include consideration of the implications for specific school and personnel systems such as supports for provisionally registered teachers, professional mentoring, performance management, professional development activities, curricular reform, and relationships with the community and families.

Chapter 1: Te Kotahitanga and the Focus of the Evaluation

The main research question for this evaluation is *How well and in what ways does Te Kotahitanga work towards the goal of improving Māori student achievement?* To address this question, the evaluation was designed specifically to answer the following sub-questions:

- What is the quality of the overall design, content and implementation of Te Kotahitanga?
- How valuable are the outcomes for the teachers who participate—what new knowledge, understandings and skills do they develop, and how valuable are these learnings?
- How valuable are the outcomes for Māori students, and what is the impact on other classmates/peers?
- How valuable are the outcomes for whānau?
- How beneficial (or detrimental) are the effects of Te Kotahitanga on school culture (covering any changes in formal systems and policies; informal practices, or “the way we do things around here”; and underlying beliefs, values, assumptions and attitudes)?
- What are the enablers and barriers for getting Te Kotahitanga to work most effectively?
- To what extent is Te Kotahitanga likely to work effectively in other settings and contexts? How sustainable is the initiative likely to be when ministry investment of resources is scaled back?
- What are the most critical factors in improving teacher efficacy?

It is important to qualify that this evaluation report and the findings reported here are focused on Phases 3-4 of Te Kotahitanga led by the University of Waikato research team. Prior to the preparation of this synthesis report across these two phases, the VUW evaluation research team submitted two separate interim evaluation reports in March 2009 and June 2009 that were focused on the findings from data collection at Phase 3 and Phase 4 schools, respectively. The two interim reports were prepared for the Ministry of Education and for the University of Waikato Te Kotahitanga research team, hence were available to inform the design of Te Kotahitanga for Phase 5. Thus, aspects of the Te Kotahitanga design and approach for Phase 5 differ from those used in Phases 3-4, including modifications made by the project in response to issues arising from our interim findings. A comprehensive, authoritative description of the current Te Kotahitanga model as it is being implemented in Phase 5 schools from 2010 can be found in Bishop, O’Sullivan, and Berryman (2010).

This chapter, therefore, focuses on description of Te Kotahitanga as it was implemented in Phase 3-4 schools and as evaluated at those schools and reported here.

Overview of Te Kotahitanga

Te Kotahitanga is a professional development programme designed for secondary school teachers with a focus on Years 9-10. Its purpose is to help teachers improve achievement of Māori students by focusing on relationships between themselves and the students within a cultural pedagogy of relations. It does this by implementing strategies and processes that recognise the importance of culture as found in every classroom. These include the ways in which

participants relate to one another, the context within which the participants interact, the content of what is taught and learned, and the actual pedagogical act itself. Te Kotahitanga is one of a series of mainstream initiatives designed and implemented to enhance Māori student educational achievements; Māori students attending schools participating in Te Kotahitanga will have transitioned to secondary from other mainstream and/or immersion or bilingual school programmes. Hence, Te Kotahitanga is designed for mainstream secondary schools that include Māori students but are also delivering educational services to the wide range of students enrolled in New Zealand schools. The model, therefore, involves school leaders, other school personnel, and especially teachers who are themselves representative of the wide range of cultural identities found in schools, and where there may be relatively small percentages of Māori among professionals who interact with and teach Māori students in those mainstream schools.

Of 330 state and state-integrated secondary schools in New Zealand at the time, the Ministry of Education selected the first 12 Phase 3 schools based on their participation in one of its schooling improvement programmes that provided the funding source for the project. Selection of the Phase 4 schools was done collaboratively by the Waikato research team and the Ministry of Education. This selection started with an advertisement in the *Gazette* calling for expressions of interest from schools that required information regarding school staff, board of trustees and principal support; indication that the school's student management system could accommodate the project's needs for data; and other criteria. More than 50 schools responded, and a joint selection panel comprising project leaders along with Ministry of Education personnel then identified 21 schools invited for Phase 4 based on both the percentage of Māori students on the roll (generally higher than 20%) and geographic region (to allow the project to extend beyond the Waikato and Auckland regions where school rolls showed the highest proportion of Māori students).

Table 1 indicates the timeframe for implementation of Te Kotahitanga at the Phase 3 and Phase 4 schools. Phase 3 schools began participation in late 2003 with initial programme preparation followed by the first full year of participation and training the first teacher cohort in 2004. Phase 4 schools began participation in late 2006 with initial programme preparation followed by up to three teacher cohorts experiencing their first full training years in 2007, 2008 and 2009.

Table 1: Implementation timeframes at Phase 3 and Phase 4 Schools

Project Year	Phase 3 Schools (N = 12)	Phase 4 Schools (N = 21)
1 st Year	2004 (years 9-10) <i>Training Year</i>	2007 (years 9-10) <i>Training Year</i>
2 nd Year	2005 (years 9-11) <i>Training Year</i>	2008 (years 9-11) <i>Training Year</i>
3 rd Year	2006 (years 9-12) <i>Full Implementation</i>	2009 (years 9-12) <i>Training Year</i>
4 th Year	2007 (years 9-13) <i>Full Implementation</i>	2010 (years 9-13) <i>Full Implementation</i>

Training years are those in which cohorts of teachers are using the Te Kotahitanga model and being observed for the first time. Full implementation years signify that all teachers participating in Te Kotahitanga have been trained in the model, so that all students across Years 9-10 have exposure to Te Kotahitanga trained teachers. Year 9 students in Phase 3 schools in 2006—the first year of full implementation—will not be in the Year 11-13 student cohort until 2008-2010. Year 9 students in Phase 4 schools in 2010—the first year of full implementation—will not be in the Year 11-13 student cohort until 2012-2014. These timelines are important to acknowledge in any evaluation anticipating effects on student outcomes. Because secondary school students in Years 9-10 are enrolled in different subjects across the curriculum, on

any given school day a particular Māori student will be exposed to 5-6 different teachers; in the “training years”, some of those teachers will be participating in Te Kotahitanga and others not. Even in the “full implementation” years, students will be exposed to various subjects where the teacher is new to the project or may have chosen not to participate at all. Hence, student exposure to the Te Kotahitanga model is difficult to quantify nor would it be possible to quantify the quality of that exposure. These are the kinds of complications that make it challenging to track student outcomes as a function of teacher professional development initiatives and which must be kept in mind in reading this report.

Te Kotahitanga as professional development

During Phases 3-4, Te Kotahitanga was implemented primarily as a professional development model designed to enhance teaching and learning towards enhancing Māori student achievement in mainstream secondary schools¹.

In contrast to most professional development (PD) initiatives, the origins of and approaches taken by the project were not based primarily on existing PD theory nor were they driven by professional and adult stakeholder perspectives or conceptions of how to promote Māori student achievement and culturally responsive pedagogies in mainstream schools. Instead, the Te Kotahitanga professional development model is grounded in the voices of Māori students as they articulated what does and does not work for them in school, and how they have been victimised by teacher deficit theorising coupled with a transmission approach to teaching. The “Effective Teaching Profile” (ETP) of Te Kotahitanga came directly from the Māori student narratives; as Bishop, Berryman, Cavanaugh and Teddy (2009) explain, “the narratives [of the students] were used in the professional development part of the project to provide teachers with a vicarious means of understanding how students experience schooling in ways that they might not otherwise have access to” (p. 736).

¹ Ministry of Education Note: The evaluations of both Phase 3 and Phase 4 synthesised in this final report were used formatively in the design of the new implementation phase of Te Kotahitanga. Phase 5 is therefore significantly different in design from Phases 3 and 4. Many of the modifications are in response to recommendations made within this report. They have been made through an iterative process of collaboration and critique between the evaluation team, the Ministry of Education and the University of Waikato Te Kotahitanga team.

Te Kotahitanga in Phase 5 has evolved from being a purely professional development programme aimed at improving teacher practice, to a wider programme that sets out to achieve whole-school change in addition to improved teacher practice. A stronger emphasis is now placed on school leadership and evidence to inform teaching practice. These intervention points recognise the importance of influencing both policy *and* practice to affect sustainable, whole-school change.

In the Phase 5 model, leaders in each of the participating schools are provided with specific support. This additional support is provided to enable leaders to increase their pedagogical leadership and establish whole-school policy that supports Māori student achievement in a culturally responsive environment.

The importance of using evidence to inform practice in Phase 5 of Te Kotahitanga is crucial. It is intended that systematic measures of student outcomes are reported on an annual basis to the Ministry, the school's board of trustees, students and families. While there are some very strong markers of success within this evaluation, it is clear that schools continue to need support to develop greater capability and capacity in this area. Helping schools to use evidence to inform teaching and learning, particularly as it relates to Māori, is a strong focus in the Phase 5 implementation model.

There are also some important changes to the design of the teacher professional development programme itself. The evaluation identifies some of the issues in measuring the success of a year nine and year ten teacher development programme by NCEA results. In Phase 5, Te Kotahitanga now includes all teachers in a three- year cycle of professional development. As years 9-10 remain a priority group, teachers in this area will begin the process first.

The evaluation also identified that the professional development programme did not differentiate between teachers who were working at ‘High’ ‘Moderate’ or ‘Low’ implementation in Phases 3 and 4. Undoubtedly, teachers, like their students, have different learning needs. In response to this recommendation, Phase 5 has more specific, targeted professional development to better cater for teachers’ needs. New descriptors within the Effective Teaching Profile provide the means for an in-school team to differentiate the needs of their staff, and to respond in ways that include using high implementers as shadow coaches.

In summary, this evaluation report, has already played an important role in informing the design of Te Kotahitanga. The professional development model of phase five is significantly different in design, in response to recommendations that are made within this report. The University of Waikato Te Kotahitanga team and the Ministry of Education are anticipating that these design changes within Te Kotahitanga will further enable Māori to enjoy education success, as Māori, in English-medium schools. The Ministry of Education continues to support the philosophies that underpin Te Kotahitanga. It has begun to explore ways in which wider gains can be made from the knowledge gained within the programme.

The Te Kotahitanga professional development model links culturally relevant/relationship-based classroom pedagogy with a site-based process for working with teachers in the classroom. Implementing the Effective Teaching Profile operationalises the project's "culturally responsive pedagogy of relations" to establish "a learning context that is responsive to the culture of the child and means that learners can bring who they are to the classroom in complete safety and where their knowledge is acceptable and legitimate" (Bishop et al., 2009, p. 741).

The model reflects research on the most effective forms of professional development for teachers. Researchers have found that professional development that is most likely to have an impact on teaching is sustained over time, focuses on specific instructional strategies or content areas, involves teachers collectively rather than individually, is coherent, and uses active learning (Garet et al., 2001; Snow-Runner, 2005). Peer coaching in the classroom is emerging as an important facet of teacher professional development that is linked with improved student learning (Joyce & Showers, 2002; Neufield & Roper, 2003). The Te Kotahitanga professional model reflects this research. The Te Kotahitanga programme takes on particular significance given the growing international interest in effective professional development approaches for teachers of indigenous and other minoritised student populations in mainstream schools (Castagno & Brayboy, 2008).

Project schools begin by participating in Te Kotahitanga training delivered by the University of Waikato Te Kotahitanga research team. Over the years of the project, this training has evolved and become highly structured as well as being driven by ongoing data collection reported to the research team by the schools. The school principal, the lead facilitator and, over time, additional school personnel including the facilitation team and school leaders are expected to participate in training opportunities at both the national and regional level. During Phase 3, there was regional facilitation expertise and support provided to schools from the Waikato team, but this regional support has not been part of the Phase 4 model and was discontinued at Phase 3 schools in 2008.

The facilitation team

At each school, Te Kotahitanga activities are coordinated by a lead facilitator supported by one or more additional facilitators with the total percentage of FTE for the team determined based on student and teacher numbers. At a typical medium size-secondary school, the lead facilitator is a full-time appointment and there will be additional facilitators who are usually working part-time as Te Kotahitanga facilitators and spend their remaining time in a variety of roles; these include working with the school advisory services, as a Resource Teacher of Learning and Behaviour (RTLBs), and teaching within the school. Unless the remainder of the facilitator's role is as a teacher in the school, part-time facilitators will be spending set days within the school in that role and travelling to other schools for different work on the other days. These additional facilitators will also have varied reporting lines, thus not necessarily reporting to the principal as employees at that school: school support services advisors are employed by the university in that region running the advisory service, whereas RTLBs are likely to be employed by a school cluster.

The teams comprise a mix of expertise, experience and credibility as facilitators for Te Kotahitanga. Lead facilitators are generally appointed for their strengths relative to key aspects of Te Kotahitanga and nearly all will have themselves been master teachers respected by their peers. The majority of the lead facilitators are Māori but a few are New Zealand European in ethnic origin but genuinely bicultural as professional educators. Their background as teachers will also dictate their curriculum areas, so that any given lead facilitator is likely to have taught in only 2-3 subjects at secondary level. Remaining members of the facilitation team are in theory appointed with a view towards expanding subject area coverage across the curriculum as well as for their personal and professional understandings of Māori education and Māori culture. The majority of facilitators who are not lead facilitators are not themselves Māori nor bicultural, but they are all selected for their commitment to Te Kotahitanga and based on their credibility and experiences relevant to the role.

Teacher cohorts in the school

Teachers begin the programme in groups of 30 from the same school, and throughout, they have regular meetings with other teachers to analyse their own progress in teaching Māori students effectively. The effective teaching profile and classroom coaching focus specifically on teaching strategies and ways teachers position themselves in relationship to their students. Facilitators who are or have been excellent classroom teachers work directly with teachers in the classroom to improve their practice.

The professional development model

Bishop, Berryman, Cavanagh, and Teddy (2007) describe the separate components of the professional development programme as experienced by teachers:

- The initial induction workshop (hui) introducing Te Kotahitanga and the model of a culturally responsive pedagogy of relations
- Structured classroom observations followed by feedback sessions with teachers
- Co-construction meetings where teacher teams problem-solve collaboratively based on observational and student outcomes data
- Specific shadow-coaching sessions for individualised teacher professional development.

More detail regarding these components is provided in the next section.

Initial hui

The Te Kotahitanga professional development model begins with a three-day hui on the marae. At that time, teachers meet with the Waikato team; read parts of *Culture Speaks* (the narratives of experience that ground the programme); discuss the relationship between deficit theorising, pedagogy, and Māori student achievement; and learn about the process of the professional development programme itself.

Classroom observations with feedback and shadow-coaching sessions

Observations are carried out in the schools once per term for each teacher in the classroom, involving a facilitator who observes a teacher's classroom using an observation tool that is designed to capture various aspects of the effective teaching profile. Following the observation, the facilitator and teacher meet to discuss the lesson and findings recorded on the observation tool. In the post-observation conferences, teachers learn to analyse the observation data for themselves, and to reflect on it with the facilitator; both then establish goals for future growth that will form the basis for subsequent instructional planning, observation, and feedback.

The professional development model also includes shadow coaching, which follows a similar process except that the focus of the observation is on something specific that the teacher would like help with and the facilitator gives the teacher input throughout the lesson rather than providing feedback, privately, after the students have finished the lesson.

Co-construction meetings

In addition to the individual teacher observations, co-construction meetings are also central to the Te Kotahitanga model. These meetings normally involve small numbers of teachers who teach the same students but in different subject areas, meeting once every month or two to share concerns and strategies for improving Māori student achievement. The meeting is led by a facilitator who has observed the teachers in the classroom. The intended focus of co-construction groups is the analysis of a teaching-learning problem shared by the teaching team, using some form of evidence of learning and then developing a group goal. At a subsequent meeting, they analyse what they have been doing to improve their practice relative to that goal. For co-construction meetings to work as intended, teacher participants

require relevant evidence from both the observations as well as regarding student achievement and other achievement-related data such as attendance, disciplinary events, and so on.

Sustainability of Te Kotahitanga

Te Kotahitanga as a programme is long-term, and Phase 3-4 schools were assured funding for a six year time period with the expectation that the programme become self-sustaining over time. In theory, sustainability would evolve as a function of the expertise and commitment of school personnel. This would occur directly through the PD initiative providing teachers with the skills and understandings underpinning the Effective Teaching Profile and also indirectly through higher expectations for Māori across the school that would be reflected in school-wide accountability for Māori student achievement and other positive outcomes for Māori students.

Te Kotahitanga “uses GPILSEO as a mnemonic device to aid in referencing” (Bishop, Berryman, Cavanagh, & Teddy, 2007, p. 195) so that the reforms flowing from the project are sustainable. GPILSEO requires a school-wide Goal; new Pedagogy; new Institutions and structures for support: Leadership that is responsive, transformative, proactive and distributed; strategies for Spreading reform; Evaluating progress; and establishing school Ownership of the reform. Key school personnel such as principals, deputy principals, deans, and heads of departments were not themselves the primary focus of professional development, but commitments made at the school level through the principal and the Board of Trustees were expected to have an overall impact on how Te Kotahitanga schools operate and how they respect and respond to Māori students and their communities. And though the Board of Trustees must approve the school’s participation in the project and Māori communities and whānau receive information about the project, their involvement and participation are not formal components in the programme.

Thus, it is important to qualify that the focus of Te Kotahitanga during Phases 3-4 has been on a generation of the programme that was primarily teacher professional development, rather than overall school or systemic reform or on the development of other aspects such as enhanced networks between the school and its Māori community. The evaluation results in this report are focused on Phases 3-4 of Te Kotahitanga, utilising data gathered and analyses conducted in 2008-2009. The evaluation does not encompass the next generation of Te Kotahitanga as it later evolved in Phase 5, which will commence in 2010 with the new cohort of schools. Phase 5 is described as having a greater focus on overall school reform and factors such as accountability, systematic use of evidence on student outcomes at the school and teaching team levels, and relationships between school and community; this includes highlighting the GPILSEO framework at school level, discussed in more detail in Chapter 6 (Bishop et al., 2010). Nevertheless, changes made to the programme in the Phase 5 schools have been informed and influenced by the findings emerging from implementation in Phases 3-4, including the findings of this evaluation of Te Kotahitanga as primarily teacher professional development.

In order to address *How well and in what ways does Te Kotahitanga work towards the goal of improving Māori student achievement*, our evaluation addresses both the strengths as well as the limitations revealed by findings about programme impact and sustainability over time.

Chapter 2: Evaluation Research Method

Our bicultural evaluation research team was contracted by the Ministry of Education to carry out a comprehensive evaluation of the Te Kotahitanga Programme, led by the University of Waikato Te Kotahitanga Research Project and implemented in 33 secondary schools on the North Island (12 Phase 3 schools and 21 Phase 4 schools) at the time of the evaluation. For this evaluation research, we gathered data at all 12 Phase 3 schools and at 10 Phase 4 schools selected as representative of the 21 schools.

The overall aim of Te Kotahitanga has been to investigate effective teacher professional development strategies leading to culturally responsive pedagogies and improvements in the educational achievement of Māori students in mainstream secondary school classrooms in New Zealand. Thus, Te Kotahitanga focuses on professional development support for teachers across the curriculum to build more effective teaching and learning relationships with Year 9-10 Māori students in secondary classrooms and improving Māori student learning outcomes.

The primary research question for this evaluation is: How well and in what ways does Te Kotahitanga work towards the goal of improving Māori student achievement?

To address this overarching evaluation question, we developed the evaluation research design approach; specific data collection procedures including those for documents review, achievement data records, interviews, and classroom observations; and sub-sets of evaluation questions appropriate for each aspect and respondent group. These steps were carried out following the specifications of the original Ministry of Education request for proposals, our proposal, ethics review, and in consultation with members of a national advisory group, key researchers from the Waikato team, and senior Ministry of Education personnel with responsibility for the project.

This final report synthesises the information previously reported in two interim evaluation reports based on findings from evaluation activities at the two sets of schools. The first interim report (March 2009) focused on the 12 Phase 3 schools that began participation in Te Kotahitanga late in 2003 with implementation phased in across 2004-2005, while the second interim report (June 2009) focused on 10 of the 21 Phase 4 schools that began participation in Te Kotahitanga in 2007.

This final synthesis report highlights findings based on evidence gathered at the 22 schools. We also summarise issues and recommendations for consideration in ongoing and future planning that we consider relevant to Te Kotahitanga and related initiatives directed to the development of culturally responsive pedagogies and enhancing Māori student social and achievement outcomes.

Overview of the evaluation methodology

The evaluation project was mixed-methods, involving both quantitative and qualitative methods comprising multiple data sources that informed one another and allowed triangulation of emerging findings (Creswell, 2009). Comprehensive data were gathered from the 22 schools during school visits and from other sources, including participant perspectives, review of individual school reports, and student outcome data including achievement results.

To investigate aspects of the teacher professional development model and its impact on classroom teaching and learning interactions, we conducted *in vivo* classroom observations following a detailed observation protocol to allow analyses across the data. We also observed teacher professional development sessions and co-construction meetings and interviewed a sample of teachers following these sessions in order to clarify and elaborate agenda and issues. To investigate perspectives of key stakeholders and constituents regarding how well and in what ways Te Kotahitanga

works towards the goal of improving student achievement, we conducted individual and small group interviews with teachers, principals, deputy principals, deans, heads of departments, Te Kotahitanga facilitators, Board of Trustees chairpersons, and focus groups of whānau and the students themselves.

To investigate student outcomes associated with Te Kotahitanga implementation, we utilised multiple data sources encompassing three broad categories: student achievement, student behaviour, and student attitudes about their learning. Sources of evidence on achievement and behaviour included formal assessment information as well as school reports and interviews with various constituent groups. Formal achievement results sourced by our project included Year 11-13 NCEA achievement data for the original 12 schools from the NZQA and the Ministry of Education Benchmark Indicators databases.

Sources of information on student attitudes about their learning included interviews with school personnel and whānau/family as well as what the students had to say about their learning, about the project, and about being Māori in schools. To investigate Māori student perspectives on Te Kotahitanga and on being Māori in their schools, we interviewed focus groups of Māori students from Years 10 to 13.

We reviewed available data for student social and educational outcomes in Years 9-10 that could show the immediate effects of Te Kotahitanga, including information about student attendance, retention, percentage representation in different ability bands for core subjects, percentage representation in the school's disciplinary statistics, and preliminary achievement assessments such as asTTle. We reviewed a large sample of Te Kotahitanga milestone reports submitted by schools to the Ministry of Education; available school data on student outcomes including Year 9-10 assessments and behavioural data; and interviewed key personnel from the University of Waikato Te Kotahitanga Research Team.

For the Phase 3 schools, we compared longer term Year 11-13 student outcomes in the senior school—where the project is not directly involved—at Te Kotahitanga schools with student achievement at a matched group of comparison schools. These data were obtained from the Ministry of Education annual benchmark reports and from records of the NZQA on Year 11-13 NCEA performance at Levels 1, 2 and 3. The NCEA achievement data analyses include the percentage of Year 9 students who attained NCEA Level 1 two years later when they were in Year 11 from 2004-2008; literacy and numeracy attainment; credits attained in Year 11 in different subject areas; and the percentage of students attaining University Entrance. Where possible, these analyses are disaggregated for Māori learners; in some cases, only the total school population can be reported where the source databases are not disaggregated by ethnicity. We also summarised the percentage of Māori and New Zealand European school leavers who had attained at least a Year 12 qualification for the “baseline” years 2004-2007; these data are not included in the report because 2008 results—the first year in which it would be reasonable to evaluate this outcome for the Phase 3 schools—were not included in the Ministry of Education benchmark report within the timeframe available to us.

Observations, interviews and focus groups were conducted individually or in pairs by members of the research team comprising experienced Māori and non-Māori researchers using specific protocols that had been piloted. More information regarding the observation and interview protocols and questions are provided in the relevant sections of the report, along with information on how data were analysed using either SPSS (for quantitative student achievement data) or NVivo (for qualitative data from the interview transcriptions). Transcriptions of interview recordings and observation notes were checked by the researchers, and coding was carried out by trained and experienced coders familiar with such data sets according to keywords and phrases. These categories were identified based on reviews of selected interview transcripts followed by research team group discussions, then cross-checked as data were coded and analysed throughout coding to allow modifications and additions. Specific analysis procedures are described throughout the report for particular data sources.

Bicultural dimension of the evaluation

Given the focus of this evaluation on the nature of teaching and learning activities for Māori students in mainstream schools, it was crucial that this evaluation research be carried out in adherence with the principles of biculturalism and that our team encompassed cultural expertise as well as other expertise required for evaluation research. To achieve this, seven key points are pertinent:

1. The cultural composition of our team includes Māori and non-Māori members both within the VUW research team as well as being represented by additional international experts experienced in cultural pedagogies and independent Māori researchers contracted in the regions of the schools participating in the project;
2. Three of the six Māori research team members were involved only in the data collection on site in schools, whereas the three Māori research team members at VUW took part in every aspect of the evaluation;
3. The research team affirmed Māori cultural protocols at every opportunity during school visits. These included formal powhiri and less formal elements of mihihihi, hongī me te hariru, waiata, and karakia when appropriate;
4. Whānau group meetings were informal but included whakatau, karakia, sharing of kai, and poroporoaki. Each of these meetings was led by one of the Māori researchers with another member of the research team responsible for taking notes. Meetings with students were more formal and constrained by time, but also included Māori cultural elements whenever possible. We checked back with whānau, students and others to confirm the accuracy of our notes with what was said, and more detail on these processes is provided in this chapter;
5. There were occasions, though rare, when Māori teachers and whānau members felt more comfortable commenting in te reo Māori. They were delighted when there were researchers who could reciprocate in kind;
6. The mixed method approach of quantitative and qualitative research was generally welcomed. Teachers in particular were familiar with the data collection and analyses of formal school assessments but could also appreciate the need to elicit other kinds of data such as that derived from observations and interviews. On every occasion, Māori teachers, students and whānau members were enthusiastic about sharing with us what they knew about Te Kotahitanga, what they knew about constraints in the schools, and what they thought was needed to address issues of Māori schooling achievements.
7. Finally, our national advisory group included Māori knowledge, expertise and experience that provided further input and fresh eyes in reviewing key aspects of the evaluation plan and findings.

Ethics review and approval

As this research involves direct contact with and gathering data from and about school personnel, whānau, and school-aged students, appropriate and rigorous procedures for participant consent, data collection, and protection of privacy and confidentiality were followed. These consent protocols, information sheets, and letters distributed to participants to gain their consent are included in Appendix 2. Participation in observations and interviews was voluntary, according to the evaluation research requirements.

The proposed data collection approach, data collection measures and questions, and processes for obtaining consent and protecting the privacy of natural persons (and the identities of the individual schools) were comprehensively reviewed and fully approved by the VUW Human Ethics Committee. Our ethics protocols guaranteed confidentiality to individual participants from the schools, including that their identity would neither be revealed in our reports nor would their schools be able to associate data with particular persons. Even for very small groups where there is a risk that

someone's privacy would not be protected (e.g., a BoT chair or the principal), we have attempted throughout the report to disguise those identities so that they cannot be traced to individual schools and thus identified to others.

All data are kept according to strict ethical guidelines in locked and password-protected files at the Jessie Hetherington Centre for Educational Research at VUW. These will be kept for a proscribed period of time as required, and raw data will be destroyed after 5-10 years depending on the nature of the data.

Data collection for the evaluation

Selection of schools

Our sample for gathering data comprised all 12 Phase 3 and 10 of the 21 Phase 4 Te Kotahitanga schools in 2008 to gather representative data on site at each school systematically. We also visited 10 of the newly selected Phase 5 schools in October 2009 to conduct observations in classrooms focused on four compulsory subjects to provide a comparison sample of non-Te Kotahitanga trained teachers. In all, we gathered comprehensive data at 22 project schools (Phases 3-4) and selected comparison data at 10 additional pre-implementation schools (Phase 5).

With regard to the selection of 10 of the Phase 4 schools for our sample, it was not feasible to site visit all 21 Phase 4 schools in order to replicate the methodology used to collect data in the 12 Phase 3 schools. We judged that carrying out parallel-intensity data collection and analyses at a non-biased sample of 10 of the Phase 4 schools—approximately half—would be preferable to a more cursory review across all schools. By replicating Phase 3 procedures, we would also have a comparable data set for comparison across the two phases of Te Kotahitanga to examine for recency and/or sustainability effects.

There are slight regional variations across the Phase 3 and Phase 4 schools. Phase 3 schools are predominantly located in Northland, Auckland, and rural regions of the North Island. Phase 4 schools were from three geographic regions—Auckland, Bay of Plenty and the Waikato. Like the Phase 3 schools, the Phase 4 evaluation sample included both coed (N=7) and single-sex (N=3) schools, and schools were selected to include those with large, medium and small sized student rolls as with the Phase 3 total sample. Given that several schools from Northland had been involved in the Phase 3 evaluation, we did not include additional Northland Phase 4 schools in the evaluation; rural or small towns represented by Phase 4 schools are in the Bay of Plenty. Both Phase 3 and Phase 4 samples include several Auckland schools as a major region with large percentages of Māori students in mainstream schools. Phase 3 did not include schools from the Waikato, and we included Phase 4 Waikato schools given that this area also enrolls significant numbers of Māori in mainstream schools. Similar decision processes were used to select the ten Phase 5 schools that provided baseline data.

Thus, school selection was not biased with respect to factors considered likely to influence results. Initially, 11 Phase 4 schools were approached about participation on the assumption that we could do all 11, but that if one declined, we would still have a reasonable sample of 10 schools. Indeed, one school declined participation citing an upcoming ERO report during the same timeframe along with other pressures at the time.²

For the Phase 3 report, all 12 schools were involved hence the identities of the schools is known. While the identities of the 21 Phase 4 Te Kotahitanga schools are also public knowledge, the identities of the 10 schools that were involved in this evaluation will be kept confidential by our project though each school's identity is of course known to participants

² Note also that we site-visited and collected data at one of the Phase 3 schools during this same October timeframe. As explained in our Phase 3 report, that school was recruiting a new lead facilitator at the time of the April Phase 3 site visits. We felt it would be more appropriate to return in October to complete data collection at that school once the new lead facilitator had had at least one full term to establish Te Kotahitanga PD routines.

at the schools. Similarly, while the total sample of Phase 5 schools is public knowledge, the 10 participating in classroom observations is known only to the evaluation project and to the schools.

School site visits

Site visits were conducted at the schools with from 2-5 research team members visiting each school for between 1-3 days depending on school size. More detailed biographies are provided for all members of the evaluation research team in Appendix 8. School site visits were scheduled by geographic regions including schools in Northland, Auckland city, Auckland suburbs, Waikato, and Bay of Plenty; urban, suburban and rural schools are represented in the sample of school visits.

Data were gathered on site at 11 of the 12 Phase 3 schools in March-April 2008; at the twelfth school, the majority of the data collection occurred in October 2008 (during the time period for Phase 4 data collection). This was because that school's lead facilitator position had been vacant at the start of the year and it was felt that the new lead facilitator should be in the role for at least one full term prior to our site visit. We did visit this school for selected interviews (e.g., the principal) for one day during the timeframe for the other school visits, though most interviews were carried out during the October visit.

As is appropriate for evaluation research to investigate the impact of a particular programme, purposive sampling was used to identify samples for data collection (Kline, 2009; McMillan, 1996; Shadish, Cook, & Campbell, 2001). Participation in the school site visits, interviews, and observations carried out by our evaluation team was voluntary to individual participants but not to schools as they were expected to participate in the evaluation as part of their participation in Te Kotahitanga. All Phase 3 schools agreed to participation. One of the Phase 4 schools originally approached by our team declined participation due to other commitments that meant the visit timeframe could not be accommodated without serious compromise to either our visit or that associated with another major activity; a similar school fitting our geographic visit schedule was then approached and agreed. Similarly, individual participation in interviews and/or observations was through informed consent and thus voluntary. The actual participants were recruited by the school's facilitation team working in concert with the principal. While this could have resulted in pressure to participate by school leaders, no person at any of the schools we visited indicated to us that they had been unduly pressured or forced to agree to participation. Indeed, participants seemed overwhelmingly positive about the opportunity to participate.

The large numbers of observations and interviews conducted across the 22 schools also provide multiple replications for data collection, thus enhancing the external validity of findings (Kline, 2009). Finally, the validity of data from naturalistic observations and independent interviews is also supported by low-inference data collection procedures used by the evaluation project and participant familiarity with similar processes such as the facilitator observations conducted each term (Cozby, 2009; Huck & Cormier, 1996; McMillan, 1996). The quasi-experimental research design and sampling procedures used in our evaluation research are characteristic of educational research where random assignment, non-voluntary participation, and deception regarding the purpose of data collection are neither possible nor would they be desirable. The procedures followed here represent best practice in evaluation research of this nature, reducing as much as possible the likelihood that these data are somehow non-representative of the broad range of stakeholder perspectives or with regard to classroom teaching and learning activities.

Once the visit and dates had been agreed with the school principal in consultation with the school's lead facilitator, subsequent details for the school site visit were negotiated by the project director and the lead facilitator. We provided the school with a template for the scheduled dates and that particular school's daily schedule that was filled in by us to reflect a target number of observations in different subject areas and both individual and focus group interviews; the schedule also included after-school session times for meetings with the BoT chair and whānau. The schedule we

provided indicated the number of researchers who would be gathering data at the school on the day/s, with pairings included for designated time period whenever two researchers were required for focus group interviews. A sample schedule is provided in Appendix 4. The lead facilitator worked within the school to accommodate our visit by filling in the template with as close to the desired number and range of interviews and observations, and it was agreed that our initial template was intended to be a guide such that the school could make various changes while trying to accommodate the basic framework and numbers of types of sessions. All within-school negotiations to solicit observations and interviews on a voluntary basis were done by the lead facilitator—generally working with the principal or principal designee (one of the deputy principals)—to seek voluntary participation from teachers, students, family members and others, who were under no obligation to agree.

The final schedule was provided to the evaluation project director at least several days prior to the visit to allow checking that required activities were included (e.g., an interview with the principal, observations across a range of subjects) and to finalise the research team assignments for the visit (e.g., who would do particular interviews and observations). For the 3-4 weeks of scheduled site visits, the research team was split into two teams according to the original schedule of activities; at each school, approximately half the team was Māori, fluency in Māori was represented by at least one researcher, and a Māori male included so that we could participate appropriately in cultural protocols. With rare exception, focus group interviews with Māori whānau and student were led by a Māori researcher as facilitator.

Some of the schools we visited welcomed our research team on campus with a pōwhiri, and we were prepared with our response including waiata.³

Classroom observations

Māori student experiences in mainstream classrooms and schools are the focus of Te Kotahitanga. The teaching and learning activities in the classroom are the authentic measure of shifts in teachers' view of students away from deficit to strengths-based perspectives and the transformation of classroom instruction from transmission models to more discursive, interactive models building on student culture, experiences and understandings.

The research team observed 336 lessons across the Year 9-10 curriculum at 22 Phase 3-4 schools in 2008. Participation in the observations carried out by our evaluation team was voluntary, and teachers were recruited by the school's lead facilitator to participate in the observations. We requested that the teachers we observe would include both male and female teachers of diverse ethnicities including Māori and non-Māori, a range of subjects across Years 9-10, different levels of teaching experience, and at different ages. With the exception of a very small number of double class periods, virtually all our observations covered a full class period ranging from 45-60 minutes depending on the individual schools' daily schedule. Observations were alternated with interviews as much as was practicable, so that the observer could be in the classroom at the start of the lesson and remain until the students had left (i.e., for the entire class period of that lesson).

Of the 204 observations in March-April 2008 at the 12 Phase 3 schools, we observed from no fewer than 5 at the smallest school to a maximum of 34 at the largest school. The largest number of observations (nearly 100 of the total) occurred in core subjects such as English, mathematics, and science, and the smallest number of observations (no fewer than 4 observations each) were carried out in elective subjects such as Japanese, te reo Māori, dance, and health.

³ At one school, however, the kaumātua challenged the principal who mistakenly stood with our research team rather than with whānau welcoming us onto the marae, an incident revealing that not all school leaders are cognisant of appropriate cultural protocols.

Of 132 classroom observations in October 2008 at 10 Phase 4 schools, we observed from no fewer than 5 at the smallest schools to a maximum of 29 at two of the largest schools. Approximately 60% of these observations occurred in the core subjects of English, mathematics, science, and social studies, and the smallest number of observations occurred in elective subjects such as Japanese, te reo Māori, technology, and drama.

The original research design had posited a comparison of classrooms using Te Kotahitanga versus those not using Te Kotahitanga, thus we requested that some of the teachers we observed be non-participants in the project, invited as experienced (not first year/beginning) teachers who may not be participating because they were new to the school and not yet trained or had chosen for whatever reason not to participate. We emphasised that we did not want the non-participant group to be selected or seen as teachers opposed to the programme or beginning teachers, which would bias our data in unknown ways. The non-participant group observed was disproportionately small at each school and would not have provided a “random” sample, given that teacher consent to be observed would likely bias the data. Also, non-Te Kotahitanga teachers at the Phase 3 schools were primarily new to the school or even new to teaching, hence other factors influencing their practice could affect the validity of any comparison with experienced teachers; we had asked that beginning teachers not be included in the sample for our observations. Any teacher at these schools could likely be influenced and affected in unknown ways by a model operating within their schools for more than four years, whereas a comparison would require confidence that the contrast group is naive with respect to the model and hasn’t been influenced accordingly.

At the Phase 4 schools, the overwhelming majority of teachers whom we observed were Te Kotahitanga trained participants at the time of our visits (N=116). These schools were late in the second training year of the project, with a third additional training year to follow. Hence, in theory, these schools could provide a comparison group of non-Te Kotahitanga teachers. The non-participants whom we observed (N=15) fell into one of three groups: (a) not yet trained but scheduled for future training (as transfers from another school, part of a final cohort to be trained, or new hires); (b) not trained because they had chosen not to participate in Te Kotahitanga; or (c) had been trained in Te Kotahitanga previously but had withdrawn from the programme and were no longer participating in the PD activities. While in principle this could allow some comparison across the two groups, there are design issues that make this comparison questionable: (a) the two groups differ greatly in size, and the group of non-participants is so small that it can be questioned whether this is a representative group; (b) the small non-participant group also represents a select group of teachers who volunteered to be observed, who may differ in ways biasing the findings from those who declined being observed; and (c) even though the participation period was shorter than in Phase 3 schools, Te Kotahitanga is nevertheless intended to be a school-wide initiative that could have school-wide impact, including influencing teachers prior to being involved formally in the model.

Thus, we judged that a comparison of Te Kotahitanga with non-Te Kotahitanga teachers would be inappropriate using this small sample of teachers from the Phase 4 schools. With the support of the University of Waikato Research Team, we approached 12 of the newly selected Phase 5 Te Kotahitanga schools in September 2009 to carry out observations in October that could provide us with a comparison sample. Ten of these schools agreed providing an additional comparison sample of 98 observations; two schools declined, indicating non-project related reasons for being unable to accommodate our visit during the required timeframe (e.g., a scheduled ERO visit). The comparison design is quasi-experimental given that schools were not randomly assigned to the three cohort groups (3, 4, or 5). Nevertheless, 10 schools contributing 98 classroom observations provide a sizeable dataset that is valid for comparison purposes. These data also provide Te Kotahitanga with baseline, pre-intervention data for future comparisons to evaluate effectiveness of future implementation of project activities and professional development to support Māori student achievement.

Observation procedures

A classroom observation data sheet was developed by core project personnel including the following information:

- Basic demographic information including an observation record number (assigned at the end of observations prior to coding); school; teacher name/ethnicity/Te Kotahitanga participation; class level; number of students including, if available, numbers of Māori and non-Māori; curriculum area; the lesson topic; name of the observer; and date of the observation
- Room environment: the observer drew a diagram of the classroom including furniture, seating, whiteboards, location of materials, teacher positioning, student seating/grouping, visual display on the board of aims for the day's lesson, and where the observer was situated. Teacher movement during the period was recorded (e.g., movement from "front and centre" to groups). Space was also provided to include description of visuals related to Māori culture and/or Māori icons (required if present) plus a record of classroom changes and/or comments regarding teacher position and movement.
- Lesson Narratives: a running record was made of the first and final five minutes of the lesson, including how the teacher greeted students, whether and how expectations were set, references to Māori culture/names etc, and how the lesson was concluded including checks for student understanding of the learning outcomes. Space was also provided to record Māori curriculum content (if evidence) including use of Māori intellectual knowledge in the substance of the curriculum at any time during the lesson.
- Effective Teaching Profile (ETP): Space provided to record evidence and examples of the six major dimensions comprising Manākitanga (caring for students as culturally located individuals); Mana motuhake (high expectations for learning); Whakapiringatanga (managing the classroom for learning); Wānanga (discursive teaching practices and student-student learning interactions); Ako (range of strategies to facilitate learning); and Kotahitanga (promote, monitor and reflect on learning outcomes with students).
- Teaching and Learning Types: After each 10 minute interval, all types observed during that interval were ticked including teacher presentations with different types of questions, group work, individual seatwork, project activities, student-led presentations, and non-academic and transition times.

The observation data sheet is included in Appendix 6 along with instructions for recording exemplars of the Effective Teaching Profile (Appendix 5). The observation form was trialed through practice observations carried out by members of the team independently coding video samples of classroom lessons and through *in vivo* observation of a social studies lesson in another educational setting (not one of the project schools). Team members compared and discussed their results following observations to reach consensus on procedures for future observations. A formal training session was conducted with the observation team as a whole prior to the first day of observations during school visits, and periodic de-briefs discussions were held away from the schools at the end of the day during the time of school visits.

Interviews

Individual interviews were conducted in a private space involving only the interviewee and the researcher conducting the interview. All interviews were digitally recorded using high quality, small digital recorders generally positioned on a table or chair close to both persons; note-taking was not done so that the flow of conversation would be personal and uninterrupted. Individual interviewees were shown the full list of questions at the time of the interview, and a set of indicative questions was made available for use by the lead facilitator to share with interviewees in advance of the interviews; most interviewees had not seen this list in advance, but they indicated knowledge of the evaluation focus and they had either previously signed consent or did so at the time of the interview. The choice of interviewer was influenced by scheduling logistics, but whenever possible certain interviews were carried out by particular members of the research team (e.g., most principal interviews were done by one of the two project co-directors, and Māori whānau and student interviews involved at least one Māori interviewer).

Focus group interviews were also held in a location that was separate from other activities; these were conducted by two researchers using note-taking rather than digital recording. Following introductions, one researcher served as facilitator to introduce the questions and would begin by reading out all the 4-5 focus group questions to the group then returning to the questions one at a time to allow for group responses. This group facilitator gave full attention to group responses including making decisions along the way regarding the need for probe questions or examples for clarification. The second researcher assumed a listening role that was focused on taking detailed notes to record virtually all verbal responses in writing. Immediately after the group indicated that they had made all comments considered relevant to each question or issue, the note-taker read out the recorded responses to the group to allow for additions and edits and to check for accuracy. Changes and additions were then made at that time according to input from the group. This process encourages focus groups to take an active role in listening to input from everyone in the group (one at a time rather than speaking all at once) and ensures that all voices are heard rather than allowing domination by a one or a few members. Just as importantly, it has an advantage over digital recording followed by transcription in providing immediate member-checking of the validity and reliability of the information recorded by the researcher/s, and participants commented favourably on the process and the accuracy of our notes. Pairings of researchers conducting the focus groups was influenced by scheduling logistics (e.g., ensuring that one researcher wasn't taking notes—an intensive task—for two back-to-back sessions) as well as other key factors such as ensuring that all Māori student and whānau focus groups were led by a Māori facilitator to use te reo and adhere to Māori cultural protocols.

Teacher interviews

Teachers are central to the experiences of both Māori and non-Māori students in mainstream schools. The main purpose of the Te Kotahitanga project is to shift teachers' view of students away from a deficit view, and to shift classroom instruction from a transmission model to a more discursive, interactive model. To explore the impact of Te Kotahitanga on teachers and teaching at schools, we conducted individual observations of full-period classroom lessons, teacher professional development sessions, and individual and focus group interviews with teachers. Data collection for each aspect was guided by the overall evaluation research questions with a particular focus on teacher and teaching aspects as well as the dimensions of the Effective Teaching Profile (ETP) expected to be reflected by teachers.

As part of our data collection to investigate how teachers implemented Te Kotahitanga practices in their teaching and student learning across subjects, we interviewed 85 teachers in the 12 Phase 3 schools and 65 teachers in the 10 Phase 4 schools, for a total of 150 teacher interviews.

Interview procedures

Teacher interviews at the original Phase 3 schools were guided by the three main evaluation questions (full interview protocols are available in Appendix 3):

1. To what extent do teachers believe Te Kotahitanga helps them to develop their vision for education outcomes for Māori students and their sense of agency for improving Māori student achievement?
2. To what extent do teachers believe Te Kotahitanga is helping them improve their teaching of Māori students, and of students more generally? What has been its impact?
3. How do teachers evaluate the various elements of the Te Kotahitanga professional development process and program?

Each of these explicit questions was followed by probe questions as needed to pursue issues requiring further clarification, explanation and/or examples. Rather than following exactly the same set of questions for our teacher interviews at the Phase 4 schools later in the year, we revised the set of questions based on our analysis of the Phase 3 interview data in order to focus on and elaborate with respect to three key issues emerging from the earlier interviews:

1. Teacher expectations for Māori students
2. Evidence of enhanced learning outcomes for students
3. Teacher knowledge and understandings of culturally responsive practice in teaching and learning.

At all schools, individual interviews were conducted by one of the researchers at a private place in the school setting during the scheduled site visit; however, a small number of teachers (3) asked that they be interviewed off-site and/or at another time rather than at the school during the visits. We granted these requests and did not pursue the reasons for the request.

At the Phase 4 schools, focus group interviews with 2 or more teachers were also conducted in October 2008 in addition to individual interviews. These focus group interviews covered five main (revised set of) questions specifically to ascertain teachers' knowledge and understandings of culturally responsive pedagogies:

- What do you think is most important for teachers to do to promote Māori student achievement? Why?
- How can you tell if what a teacher is doing is working?
- What does it mean to you to enable students to learn 'as Māori' and to be themselves 'as Māori'?
- Can you give an example of "caring for students as culturally located individuals"?
- How is Te Kotahitanga different from good teaching generally?

These questions were shared with the teachers at the start of the group meeting, then returned to one by one for comment from the group. Each question could also be followed by probe questions for elaboration, clarification, explanation or to provide examples. In all interviews, teachers were encouraged to add any comments they wished to make about teaching using Te Kotahitanga approaches, strategies to enhance Māori achievement, caring for Māori students as learners, and other issues.

Principal and school leader interviews

Twenty of the 22 school principals were interviewed individually, generally in their offices, by one of the senior research team members based at VUW. In addition, we sought interviews at each school with one or more Deputy Principals (most schools will have 2 or more DPs with particular duties), one or more Deans, and at least 2-3 Heads of Departments (who are also teachers). In all, 60 of these additional school leaders (19 Heads of Departments, 19 DPs and 22 Deans) were interviewed either individually or in small groups of 2-3 by one of our researchers. All interviews were recorded digitally for later transcription.

One principal was away during the data collection timeframe (we did interview the Deputy Principal who was Acting Principal), and one additional interview of another principal was accidentally deleted from the file. We reviewed our notes from the individual schools' visits by the research team and judged that it was unlikely that information from the remaining 2 principals would have differed significantly from the 10 available interviews, so these were not rescheduled.

The full list of interview questions addressed to principals, deputy principals and other school leaders is included in Appendix 3. In general, questions for the principals and deputy principals focused on issues and considerations arising from the project's main research questions, including specific topics such as:

- How the principles of Te Kotahitanga are reflected in his/her role as principal, how the principal supports Te Kotahitanga in the school, how the school strives to affirm students' identities as Māori and what the challenges are for his/her school in implementation
- Impressions of the quality of the Te Kotahitanga professional development process, content and implementation
- Ways in which the project had helped the school gather and use evidence to enhance Māori student achievement and other outcomes
- Perceptions of the value of project outcomes for Māori students, all students, and school personnel
- The nature of feedback from teachers, parents and others about Te Kotahitanga and its focus on Māori achievement
- Whether and in what ways school policies and procedures changed as a result of participation in Te Kotahitanga.

Principals were also asked about the sustainability of Te Kotahitanga and invited to make specific suggestions to support sustainability as well as offer advice to other schools starting Te Kotahitanga. At the conclusion of the interview, they were also asked if there was any other issue they saw as critical that was not covered in the interview.

Questions for the Heads of Departments and Deans included:

- How well is Te Kotahitanga being implemented in this school? How have you worked to implement the intervention?
- What are the reasons teachers have for deciding whether or not to participate in Te Kotahitanga?
- How valuable are the outcomes of the project for all students, both Māori and non-Māori.
- [For those who have been in the school for several years] What changes have you noticed in the school since Te Kotahitanga has been implemented?

Facilitator interviews

Lead facilitators have a critical role in the implementation of Te Kotahitanga at the school level. While lead facilitators appeared to have substantive relevant experience related to their role as professional development coordinators and regarding teaching Māori students, not all were themselves Māori. Generally, however, the lead facilitators were seen to have credibility in their role amongst teachers with whom they worked on a regular basis. One issue that did arise was the relationship of the lead facilitator with school management, as they did not generally sit on the school's senior management team that met regularly to inform school policy and practices. This meant that their influence was highly dependent upon informal networks with middle management and with the principal's as well as each lead facilitator's communication skills and capacities. Several lead facilitators explained that they were very new in their role. In some schools, there had been two or even more people in the lead facilitator role since joining the project in late 2003. All 22 lead facilitators were interviewed individually. One lead facilitator was not appointed in time for the interviews at the other Phase 3 schools but was instead interviewed later in the year when we gathered data at Phase 4 schools.

Facilitators also play critical roles in the implementation of Te Kotahitanga at schools. In all, we interviewed 32 professionals working as facilitators at 18 of the Phase 3-4 schools; not all facilitators could be interviewed as many were part-time and hence not present in the schools on the day/s scheduled for our visit. In smaller schools, there may be only one person (in addition to the lead facilitator) in this role, and thus these interviews were individual. In larger

schools where there were two or more facilitators, the interview may have been carried out individually or with 2-4 persons together.

As was the case with other groups, interviews were conducted in a private space by one member of the research team and recorded digitally for later transcription and coding.

Interviews focused on the facilitators' beliefs about the impact of the Te Kotahitanga programme at their school on teachers and Māori students. The questions derived from the overall evaluation research questions focused on these broad issues and considerations, including specific questions such as:

- How Te Kotahitanga professional development operated within the school
- What they saw as valuable outcomes of Te Kotahitanga for students and teachers
- What were the main enablers for getting Te Kotahitanga to work well
- How does Te Kotahitanga affect professional attitudes, school culture, formal school policy and systems and informal practices, or “the way we do things around here”
- What they regarded as the most significant changes made by teachers to improve Māori student achievement
- What kind of training for Te Kotahitanga they had had, how effective it had been, and whether there were any additional training and supports they felt would be helpful.

Facilitators were also asked to tell us in their own words how they would describe Te Kotahitanga to someone, and, if they were new to the role, what their main challenges had been.

Each of the main questions could be followed by additional probe questions where clarification or explanation was needed, or where it appeared that examples would enrich the data.

Student interviews

In total, we interviewed 214 Māori students who were enrolled in Years 10-13 about their experiences at the Phase 3 and Phase 4 schools. At the 12 Phase 3 schools, 22 focus groups comprising 122 students met with us, and 17 focus groups comprising 92 students at 10 of the Phase 4 schools met with our research team. At each school, we requested that at least one student focus group be scheduled for up to an hour, and at most schools we met with two student focus groups.

The interviews with students were focused on how students felt about school, their learning, learning as Māori and other issues of cultural identity, and aspects of Te Kotahitanga. As in the other focus groups, the full set of questions was shared with students prior to returning to the questions one at a time for responses. The questions guiding these interviews were:

- How does this school support your learning? How do your teachers show they care about your learning, not just generally but each of you personally? What do they do or say to show they care about your learning?
- How do teachers make learning relevant to your own lives? Can you think of some examples where students could bring their ideas, experiences or questions into classroom learning activities, in different subject areas?

- What does being Māori mean for you? Does “being Māori” look different in school compared to how it looks outside school?
- Do you feel that you can “be Māori” in this school? In different classrooms? Can you give some examples of how teachers let you know that they respect and understand “being Māori”? What if anything makes you feel you aren’t supposed to “be Māori” in the classroom?
- How do the teachers incorporate Māori culture and understandings into different subjects? Activities that you do in school? Other?

Follow-up questions were pursued whenever issues were raised that required clarification, elaboration or examples. In the interviews, we highlighted more the question regarding whether “being Māori” looked different in school compared to outside of school in order to emphasise our interest in how Māori identity was represented in and out of school as well as whether students felt that this identity was welcomed and celebrated in the classroom.

Each focus group was facilitated by two researchers, at least one of whom was Māori. The group met in a variety of venues chosen by the school including the library, the marae meeting house, in the common area, in Te Kotahitanga project space, and outside. One researcher served as interviewer, reading out the questions one at a time. Students were encouraged to respond while detailed notes were taken by the second researcher to record each response. When students no longer added comments in response to a particular question, the note-taker read back all responses to the group for any edits, additions or deletions.

Whānau and BOT interviews

The perspectives of Māori parents and whānau are crucial to any evaluation of the impact of a programme that has at the heart the goal of meeting the educational aspirations of Māori. Indeed, Te Kotahitanga is grounded in the idea that schooling of Māori students should be accountable to the Māori community and whānau. In principle, family and the local community are meant to play a key role in New Zealand’s model of self-managing schools, such that each school is governed by a community Board of Trustees that sets strategic directions for the school within national requirements and that has responsibility for fiscal oversight and employment of the school principal. It would be the Board of Trustees that would have the ultimate authority to decide whether or not the school would participate in an initiative such as Te Kotahitanga, generally with the advice of and information provided by the principal.

We requested an interview with the Board of Trustees (BOT) elected chairperson at each of the project schools, to be organised at a time convenient to the BOT Chair either during the school day or after school during our scheduled evaluation visit if possible. This interview was done individually, in a private room, by a senior member of the evaluation team and recorded digitally for later transcription. Interviews were carried out with 9 BOT chairs at 8 of the 12 Phase 3 schools (2 of these were the newly elected BOT chair and the person who had been chair when the decision was made to participate in Te Kotahitanga) and 6 BOT chairs at 6 of the 10 Phase 4 schools.

It was beyond the scope of this evaluation to gather data from a large sample of parents and whānau. However, we were interested in how this critical group saw Te Kotahitanga and their children’s achievement at the project at the schools, so we requested a meeting to interview Māori whānau at each of the schools. As with other interviewees, we relied on the school (generally the lead facilitator working with the school principal) to organise a focus group meeting with Māori whānau after school hours, generally at the marae if there were one connected to and representing the iwi of the school community. In all, we held 19 Māori whānau focus groups at 17 of the 22 schools.

Because of the small sample sizes, the fact that not all schools participated in these interviews, and that those who did were selected by Te Kotahitanga personnel for participation, this sample is not representative of Māori whānau/families

whose children attend these schools. We will, however, identify emerging patterns where there were strong themes emerging across the data.

The practice adopted for our interviews with the Boards of Trustees chairpersons and whānau groups requires that as researchers we are cautious about collapsing discourses from interviews with individuals, namely, teachers and students, with those representing the institution of the school and the community. Pedagogy as the activity engaged in by students and teachers is at a different level of discourse from those concerned with schools as institutions. Interviews undertaken to date of both whānau groups and Boards of Trustees members attest to this difference. Both whānau and board members are obviously much less familiar with the project than those operating within the school and especially classrooms. This is only a concern in the sense that participation in schooling and attitudes to formalised learning are critical components of what is known about student performance in the life of schools generally. What the home and the community know about what goes on in classrooms and schools remains a ‘hidden garden’ unless action is taken to close the information gap.

Procedures for the whānau focus group interviews

The focus group interviews with whānau were conducted using a process involving two interviewers, at least one of whom was Māori. The Māori researcher served as primary interviewer though both interviewers contributed to the discussion (the latter was non-Māori in some cases). The meeting was digitally recorded for later transcription except in a few instances where whānau indicated they were not comfortable with the recorder and for those meetings using the note-taking method already described. In those instances, it was negotiated that notes would be written to read back to whānau to verify the accuracy of what had been recorded for the group. The focus group meetings followed marae informal meeting protocols and generally began with mihi mihi, and the research team provided for a light supper and drinks so a karakia was also said. These meetings ranged from approximately one hour to as much as two hours long, and no attempt was made to impose a rigid ending time though we were conscious of family commitments to return home within a reasonable time.

Whānau were asked the following questions following from the evaluation research questions:

- What does Te Kotahitanga mean to you?
- Have you noticed any change in your children’s interest in school that might be related to Te Kotahitanga? Tell us about this?
- How well is school working for your children academically? In general?
- Have you noticed any increase in the presence of Māori culture in the school in the last few years? Can you tell us about this?
- What changes have you noticed in how teachers approach students and why do you think that has occurred? What if any changes seem to have occurred as a result of Te Kotahitanga?
- In what ways have you been involved in the school? Has this changed in the past four years?
- Is there anything else you’d like to say?

The discussion with the parents generally followed these questions, but it was more free-flowing in allowing directions chosen by the parents rather than proceeding through a list as noted above.

Procedures for the BOT Chair interviews

Our questions for the chair of the Board of Trustees were organised around the following issues:

- Why and how the Board supported Te Kotahitanga
- How Te Kotahitanga had an impact on the school, benefits to the school, negative effects for the school, and what changes had been noticed or reported to the Board
- Impressions about the quality of the Te Kotahitanga programme and how these impressions had been informed
- What they considered to be valuable outcomes for Māori students and for all/other students
- What they considered as the main enablers and barriers for Te Kotahitanga and what advice they would give to another school considering adopting the programme
- What they felt was needed to sustain Te Kotahitanga

Finally, each interviewee was asked whether there was anything else that hadn't been discussed in the interview which was important to mention.

Coding and data analyses

Classroom observations

The results reported here across schools focus on the extent to which classroom teaching and learning reflected implementation of the ETP. We also provide examples of the range of implementation of the different aspects of the ETP including missed opportunities. Classroom observations were coded as High Implementation, Implementation, or Low Implementation of the ETP. High Implementation and Low Implementation (including missed opportunities) were coded as specified below, and "Implementation" was coded for observations that did not fit within either the High or Low categories as follows:

High Implementation

- Some evidence of at least 5 of the 6 ETP dimensions
- Strong evidence for at least 2 ETP dimensions
- Must include evidence of culturally responsive pedagogy
- Must reference learning outcomes/objectives/aims
- Evidence of positive teacher-student relationships
- Positive classroom management supporting learning

Low Implementation

- No evidence of any of the ETP dimensions observed
- Alternatively, weak examples or missed opportunities
- Misconceptions or inaccuracies/wrong message

- Mismanagement of the classroom disrupting learning

These three categories were defined following independent review of a sub-sample of the observations from the Phase 3 data analysis by the authors. Once consensus was reached on the coding criteria, different pairs of researcher coders were assigned to code each observation, making sure that no one was coding an observation that he/she had done personally and ensuring that each researcher coder was paired with one another for at least some of the data. Observations were assigned to one of the three quality categories where the two independent coders agreed on the category. Where there was disagreement, a team of 3-4 researchers discussed the observation and reached consensus regarding how it would be coded. The baseline Phase 5 observations were carried out by four researchers (Hindle, Hynds, Penetito, Savage) and scored independently by two researchers who had not participated in those observations (Meyer, Neal). Again, any disagreement was resolved through scoring the observation by a third independent coder who had not been involved in that particular classroom observation

Results were summarised by subjects across schools and by school across subjects, and exemplars of different levels of implementation were identified.

Interview transcription, coding and analyses

Interviews were recorded on digital recorders as separate files. All interviews were typed into Word document transcriptions by experienced transcribers, with a sample of all interviews checked for accuracy by specific researcher interviewers; in some cases, researcher interviewers were asked to clarify text in the transcription where questions arose. The Word documents were then coded using NVivo by experienced coders with advanced training and experience using NVivo with similar interview and focus group data. Members of the team reviewed printed transcripts and met to review possible codes towards identifying themes in the interview data based on their experiences having carried out the interviews. To identify codes, two core researchers from the VUW based team reviewed a sub-sample of complete interview transcriptions to identify possible nodes and words for coding using NVivo, and the full set of codes was discussed further with the international consultant and an additional researcher team member prior to coding all the data. Once the data were coded, themes were identified from the data by those same team members and salient quotes identified to illustrate the themes.

Teacher interview results in particular were organised according to three key issues: (a) what teachers told us about their own expectations for Māori students and the evidence of outcomes for students as a function of Te Kotahitanga; (b) teachers' beliefs knowledge and understanding of culturally responsive pedagogies; and (c) teachers' experiences with the Te Kotahitanga programme and their perceptions of its impact on their teaching. In order to probe further teacher beliefs about expectations for Māori student achievement, follow-up questions focused on what they regarded as the most important educational outcomes for Māori students as well as for all students and how well they thought their own school was doing to achieve those outcomes. Information was noted regarding how many statements were made within selected themes. However, it is important to emphasise that these data are not intended at this point to be interpreted quantitatively nor subjected to statistical analyses to draw inferences about the representativeness of the issue raised. Rather, the number of comments is included to give an indication that a particular theme was mentioned often or rarely, which is likely to be of interest in inferences about the extent to which a particular interpretation is in the forefront of teacher perspectives. However, the main purpose of the interviews and the analyses of these interviews is to identify patterns in teacher responses to Te Kotahitanga and how they view effective teaching of Māori students towards better meeting the educational aspirations of Māori.

Procedures to evaluate student outcomes

At the original 12 Phase 3 schools, virtually all teachers teaching Year 9-10 students were trained in the model in either 2004 or 2005; only a few had either never been trained, had not yet been trained (e.g., new hires), or had chosen not to

participate. As Bishop and his colleagues have emphasised, Te Kotahitanga has not been implemented through random assignment of schools to the project versus comparison conditions, nor have teachers within schools been randomly assigned to the project. Thus, the approach taken to investigate student outcomes associated with Te Kotahitanga was restricted to a quasi-experimental research design and data analyses appropriate for this design.

The evaluation proposal had anticipated comparing: (a) project outcomes pre and post the introduction of Te Kotahitanga; (b) results across the same time period for students in classes taught by Te Kotahitanga teachers compared to students in classes taught by non-Te Kotahitanga teachers; and (c) comparisons across the same time period for Phase 3 schools with a comparable group of schools not participating in Te Kotahitanga.

Of these, comparing results for students in classes taught by participants versus non-participants (b) did not prove feasible nor valid for several reasons. At Phase 3 schools in their fourth year of implementation in 2008, nearly all teachers were directly involved in Te Kotahitanga at the time of data collection. Even teachers not currently involved had been trained and participated at some point in the project. At the Phase 4 schools, only one teacher cohort was nearing the end of the first year of full implementation following the training year, and a second teacher cohort was nearing the end of the training year. Attempting comparisons for individual student results is complicated by the reality of student experiences: as is true for all students, Māori students are enrolled in 5-6 subject periods daily including classes taught by both teachers participating and teachers not participating in Te Kotahitanga. To attribute student results to teacher participation in Te Kotahitanga would require quantification of percentages of classroom participation each term and across years, requiring a level of detail regarding student attendance that was not available to us even if this were possible. Even if it were possible to quantify each student's exposure to Te Kotahitanga teachers across the school day and year, one would also have to qualify this exposure by the implementation quality demonstrated by each teacher. Thus, quantifying the "influence" of portions of the school's day on each student's achievement is a complex matter beyond the scope of this evaluation. In addition to requiring many more hundreds of observations than were funded for this evaluation project, these multiple challenges to the validity of such comparisons would undermine their value.

Hence, our evaluation data focus on (a) and (c). Here too, the evaluation was limited by the extent of participation in Te Kotahitanga. For (a), the project required valid and reliable school level data on individual student outcomes including achievement and factors related to achievement. Year 9-10 student outcome evidence available is overviewed below. Year 9-10 evidence of results collected directly from schools included interview data providing information on outcomes perceived by various stakeholders (students, teachers, whānau, school leaders, and so on) as resulting from Te Kotahitanga.

Evaluation of longer term student achievement outcomes in Years 11-13 when students are completing NCEA credits requires that students were exposed to Te Kotahitanga teaching reflecting the ETP beginning in Year 9. As explained in chapter 1 (see also Table 1), comparisons would not be valid for Phase 4 schools. The timelines for implementation of Te Kotahitanga mean that the only valid comparisons at Phase 3 schools are those for NCEA Level 1 for Year 11 students in 2008 (those results are made available in 2009; 2009 results are not available in the relevant databases until mid-2010). Hence, we were able to report evidence with regard to (c) by comparing NCEA Level 1 student results for the 12 Phase 3 Te Kotahitanga and 12 similar, comparison schools across the years starting prior to implementation of Te Kotahitanga and extending to 2008.

The evaluation investigated the use of multiple data sources covering a range of quantitative and qualitative evidence of outcomes for students. Sources of evidence and project evaluation activities associated with each include:

- *Student Interviews*: Focus group interviews were carried out with students in Years 9-13 at the Phase 3 schools in April 2008 and at the Phase 4 schools in October 2008, investigating student perspectives about culturally

responsive teaching and learning; attitudes about their learning; perceptions of being Māori in school; and other aspects related to Te Kotahitanga.

- *Student Achievement in Years 9-10:* We report limited assessment data previously administered by the schools for the University of Waikato research team, including measures of numeracy and literacy. However, not all schools were systematically assessing students nor were their data management systems fully operational for reporting these data.
- *Student Achievement in Years 11-13:* NCEA and other qualifications attainment information was sourced by our evaluation project directly from NZQA and from the statistics in the Ministry of Education's Benchmark Indicators for 2004 to 2008. However, selected achievement outcomes sourced from the Benchmarks database do not break down results by ethnicity, so can be reported only for all students.
- *Māori Student Attendance and Retention:* These factors are noted explicitly within the Te Kotahitanga contracts as dependent variables expected to be affected by Te Kotahitanga. Direct evidence was not available from the Ministry of Education databases nor from milestone reports to the Ministry of Education. A request to the schools for these data met with variable response, and the schools' annual reports and Te Kotahitanga milestone reports did not include this information. We have been unable to source the data and thus are unable to provide these measures across the Phase 3-4 schools.
- *Percentage of Māori students in School Discipline Data:* The contracts also note that Māori are currently over-represented in stand-down, suspension and exclusion statistics, so that the percentage of Māori in these statistics would be expected to become more proportionate to their school population percentage as a function of the project. Again, these data were difficult to obtain, and a request to the schools for these data met with variable response.
- *Percentage of Māori students in High and Low Ability Bands:* For core Year 9-10 subjects, virtually all schools we visited utilised some form of grouping classes of students according to different achievement or ability levels. The proportion of Māori at the different levels would provide an indication of student achievement but also school and teacher expectations. All schools noted at least one accelerant or high ability class and one low achievement group (in addition to the group labeled as special needs who were receiving special services). We attempted to determine the percentage of Māori students in the one highest and one lowest ability/achievement band. These data are not recorded in any formal Ministry of Education-related database, and a request to the schools for these data met with variable response. Schools indicated that they did not record these data in their permanent databases either annually or over time.

Another challenge for the evaluation project was the timeframe. It is important to identify which years are appropriately identified as "baseline" or pre-Te Kotahitanga and which are implementation years during which the effects of Te Kotahitanga might be evidenced. The Phase 3 school implementation schedule means that only some year 9-10 classes were directly involved in the Te Kotahitanga model in 2004, depending on which teachers were in the first cohort. The first hui for teachers had occurred late in 2003, so that 2004 is realistically a "training" year, and this first cohort might not be expected to be well-versed in Te Kotahitanga until the 2005 year. For the second cohort of teachers, 2005 was the "training" year involving additional year 9-10 classes, with full implementation for this cohort in 2006. For the Phase 4 schools for which 2008-2009 were still training years for most teachers, it seems precipitous to expect student achievement results to be evident.

The majority of teachers who teach year 9-10 classes in the junior school are also involved in teaching senior secondary subjects. Thus, one might expect teachers to extend their understandings to how they approached teaching at years 11-13 as well. However, the generalisation of new teaching practices to the senior school is not within the scope of our evaluation nor, to our knowledge, has this issue been investigated by the University of Waikato team. Whether or not

teachers do generalise the skills practiced in Te Kotahitanga to their teaching in the senior secondary school is, of course, an empirical question that could and perhaps should be investigated.

Hence, for purposes of analysing student outcomes we generally regarded 2004 as a “baseline” year for student outcome measures and 2006 as the first full year of implementation at the Phase 3 schools and 2008 as the first year in which one might expect NCEA achievement to show any effects. However, the Te Kotahitanga project does not carry out any activities focused on teachers teaching Year 11-13 subjects; if what the students experience in Years 11-13 is unchanged and does not reflect culturally responsive pedagogies, this could be expected to have a (negative) impact on student outcomes once again as Māori students move to the senior school.

Procedures for matching comparison schools

Each of the NCEA data analyses described in Table 2 will be presented across time and for the 12 Te Kotahitanga schools in comparison to a sample of 12 “like” schools matched school-by-school with project schools as closely as possible using the following criteria:

1. North Island state schools: As Te Kotahitanga has been implemented only on the North Island to date and has not included area schools or schools with a special character, the 12 schools selected as comparison schools are also North Island and of a similar type (state schools, either coed or single-sex) and matched within one decile level;
2. Percentage of Māori students at the school in 2004: the 12 Te Kotahitanga and 12 comparison schools had an identical mean average of 41.4%, with no match showing more than a 20% difference;
3. Percentage of Māori students leaving school with at least a Year 12 qualification in 2004: across schools, the two samples showed a mean average difference of only 1.5%, with no match showing more than an 11% difference;
4. Geographic location/region and school size: Following application of the above criteria, comparison matches were then selected based on geographical region (e.g., both rural, small town, urban) and school size.

Table 2 shows these statistics, with school matching data reported across the 12 rows.

Table 3 shows the Māori percentage of the school roll for each year from 2004 to 2008 for the 24 schools. As indicated, the total student roll was larger at the Te Kotahitanga schools (4,628 compared to 3,816). However, these samples are sufficiently large and the standard deviations comparable across the two groups so that this numerical difference would not be expected to affect the validity of further comparisons.

Table 2: Baseline comparison data in 2004 for 12 Phase 3 Te Kotahitanga schools and 12 matched comparison schools

Te Kotahitanga schools				Matching comparison schools			
School ID	% Māori Leavers*	% Māori Roll	N of Māori Students	School ID	% Māori Leavers*	% Māori Roll	N of Māori Students
TKA	39.8	83.3	420	COJ	47.2	76.2	365
TKB	27.8	41.3	586	COD	38.7	30.9	360
TKC	57.1	19.8	244	COL	55.2	19.0	301
TKD	33.0	20.4	471	COE	35.7	14.4	259
TKE	29.2	26.6	307	COH	28.2	42.4	391
TKF	36.5	66.2	321	COK	36.6	47.5	258
TKG	29.6	46.3	131	COF	31.1	46.7	270
TKH	46.1	41.2	424	COC	55.1	46.5	416
TKI	33.3	27.4	279	COB	32.6	31.8	219
TKJ	33.3	21.8	306	COA	34.0	25.8	219
TKK	39.6	57.7	704	COG	44.0	76.8	397
TKL	32.7	44.4	433	COI	38.0	38.3	361
Total	36.5	41.4	4628	Total	39.7	41.4	3816

*With at least a Level 2 NQF or year 12 non-NQF qualification

Table 3: Percentage of Māori students on the total school rolls for Te Kotahitanga and matched comparison schools, 2004–2008

12 Te Kotahitanga schools					12 comparison schools			
	Mean	Median	SD	SE mean	Mean	Median	SD	SE mean
2004	41.1	41.3	19.9	5.8	41.4	40.4	19.6	5.7
2005	41.8	42.7	18.8	5.4	42.6	41.2	20.0	5.8
2006	41.9	44.1	19.1	5.5	42.5	41.0	20.5	5.9
2007	42.1	45.4	19.2	5.6	43.4	41.1	21.0	6.1
2008	41.3	36.5	20.8	6.0	43.1	39.6	20.3	5.9

For each of the achievement indicators described in the student outcomes chapter 2 of the report, data that are analysed were obtained from the Ministry of Education Benchmark Indicators based on school annual reports. Individual school results for the 12 Te Kotahitanga and 12 comparison schools were entered into a data set for statistical analysis using SPSS. As 2004 was a training year for the first Te Kotahitanga teacher cohort focusing on Years 9-10, we suggest that this is an appropriate “baseline” year for further analyses of NCEA results for Years 11-13.

Comparison of NCEA achievement across schools for all students

We report comparisons of various NCEA achievement outcomes reported in the Ministry of Education Benchmark indicators across the years 2004 to 2008 for the 12 Phase 3 project and the 12 comparison schools in this chapter rather than in the student outcomes chapter. The Ministry of Education Benchmark indicators do not provide a breakdown by ethnicity for all data, so that it was not always possible for us to utilise this data set in order to report on Māori achievement across this time period for some indicators. Frequency statistics were generated using SPSS and tests of significance used where individual student numbers were sufficient for these procedures.

Chapter 3: The Te Kotahitanga Professional Development Model

In this chapter, we synthesise what we learned about a) how the Te Kotahitanga professional development model actually works in the 22 schools we visited, b) how it reflects needed pedagogical leadership for reforming schools for Māori student achievement, and c) the kind of support required to make the professional development model work well.

How the Te Kotahitanga professional development model actually works in practice

This section describes perceptions that school leaders, teachers, and facilitators articulated about the professional development model. First we will describe how they viewed the programme as a whole, then how they saw individual parts of it.

Professional development model as a whole

All of the principals, as well as most other leaders we interviewed (deputy principals, heads of department) enthusiastically emphasised value of the Te Kotahitanga professional development model, using phrases such as “by far the most effective professional development I’ve ever seen,” “an outstanding process,” and “it should be in every school throughout the country.” They saw it as very well conceptualised, and as offering far more substance than what is usually the case in professional development; several expressed appreciation for its focus on improving what happens in the classroom. One principal commented that, “It’s made me think along different lines in terms of the way in which we do professional development. [It’s] made me observe teaching practice and learning in a slightly different way than I would have done before I became involved with Te Kotahitanga.”

School leaders also saw the model as changing how teachers talk about students. As one put it:

To be brutally honest, what I don’t hear anymore—whether it was here or at other schools—I do not hear “those Māori kids” I do not hear that conversation. And for too long, staffrooms have been full of dissenters. “Oh, I can’t teach them.” You know what I’m saying? So those conversations have almost dried up. And that may be due to a number of factors, maybe because there was nobody else listening anymore. That number of dissenters has almost disappeared. So has it changed staff behaviour? Absolutely!

Teachers’ comments about the model overall were also overwhelmingly positive. We repeatedly heard comments such as, “It’s so good you want more,” and “It’s been the best professional development for me, really helped me to reflect on my teaching and on what I can do to help the kids learning... so it’s all good.” One theme in their comments was their valuing the opportunity to reflect on their practice that the programme prompted. The phrase “reflection on your own practice” was heard several times, and was supported by how Facilitators discussed their work with teachers:

We question them, get them to self assess. [With] self reflecting, it’s not that we’re telling them you have to do this, or you should be doing this. They’re reflecting on their own practice and they have to see I could do this. That doesn’t take that much more to do, I could do that—and I could see how this could then fit the kids and make my life easier.

Several teachers appreciated learning a different way of teaching. As one point out, she had “been trained as a teacher who teaches with desks placed in rows, and very much transmissive;” it had not occurred to her that there was a different approach to teaching. Several teachers said that they valued the programme’s focus on Māori culture, its ability to help them understand their Māori students better, and the opportunity to learn cultural concepts such as mana,

wairua, and manākitanga. For some international teachers, this was their first sustained opportunity to learn about Māori culture.

The few negative teacher comments about the programme focused on four concerns. First, several teachers were put off by what they saw as its focus on Māori students to exclusion of other groups; as one put it, “If all kids are important, why do we just pick out the Māori kids?” Second, a few teachers disliked the idea that deficit theorising blamed teachers for low Māori student achievement, pointing out that there are other influences on student achievement besides the teacher. Third, a few teachers and facilitators commented that when participation in the programme was compulsory, teachers resisted. A facilitator commented, “Because it was compulsory, I felt it was obvious the teachers who didn’t really want to be on there, they became the more challenging feedback sessions, in terms of their thinking.” Fourth, there were a few comments that the programme needs to be more responsive to the different needs of different subject areas, such as math, a theme that recurs throughout this chapter.

The facilitators, as one might expect, were very positive about the model. They believed that the structure of the Te Kotahitanga professional development cycle—in-class observation and feedback, goal setting, shadow-coaching and co-construction meetings—enabled teachers to make positive changes. They talked about it from the vantage point of being both facilitators and also teachers. For example, one stated: “[It’s] the best professional programme I’ve ever been involved in, the most effective one. For me as a teacher because it forces me to look at what I’m doing and to make changes.” The facilitators emphasised that the structure Te Kotahitanga provided helped teachers to set goals and reflect on their work, giving them the basis for making needed changes to their classroom programmes. This in turn supports the notion of teachers being responsible for their class, which benefits all students. For example,

Across the school one of our goals, and our strategic plans is to improve formative assessment. The professional development structure is very much based on Te Kotahitanga, where we have a number of facilitators, we’ve had ten facilitators across department groups. This involved some professional development, followed by setting some goals in our groups, group goals and individual goals and then you come back and, and share evidence of what we’ve been doing.

Some facilitators also emphasised the centrality to the programme of embedding Māori and non-Māori partnerships within the school. As one commented, “It was Ako, right from the beginning it has been a two way thing, partnerships with all our Māori staff in the school. There has been good support with everyone down to the Māori lady who works in the library.”

Chairs of the Boards of Trustees viewed the programme positively, although as one would expect, most were not familiar with the intricacies of the programme. Based on their interactions with school leadership, facilitators, and occasionally teachers, they said things like, “Everyone who goes on the hui really comes back fired up. It’s great, I mean from a professional development aspect,” and “It seems extremely good. It seems like a lot of work to me but it’s got results.”

We asked the teachers and the facilitators to comment on specific parts of the professional development process they found most or least useful.

Perceptions of the initial hui

A few teachers talked specifically about the initial hui, although for many we interviewed, this was probably an experience distant enough that they did not talk directly about it. Most comments about the hui were positive, such as “awesome,” “brilliant,” and “lovely.” Teachers who commented on its impact mainly focused on the power of the narratives in *Culture Speaks* to help them understand the point of view of the students and whānau, and to put words to

the idea of deficit theorising. A couple of teachers also commented that the hui was a great way to begin the year, and integrate new teachers with the rest of the staff.

There were isolated criticisms of it. A couple of teachers thought the presentation of statistics was too abstract, and a couple were critical of the time the hui took when they needed the time for planning. A math teacher wished more linkage were made between the ideas presented and her discipline.

Classroom observations with feedback

As described in chapter 1, teachers are observed in the classroom by a facilitator using an observation tool that is designed to capture various aspects of the effective teaching profile, then conferring with the teacher afterward. These observations occur once per term, and are focused on dimensions of the Effective Teaching Profile as well as targets that might be set for students in the classroom who are Māori. In the post-observation conferences, teachers learn to analyse the observation data for themselves, and to reflect on it with the facilitator, then the teacher and facilitator together establish goals for future growth that will form the basis for subsequent instructional planning, observation, and feedback. There are also shadow-coaching sessions which are similar to observations but are sessions in which the facilitator provides input to the teacher during the lesson; shadow coaching typically focuses on something that the teacher would like assistance with.

Facilitator observations with feedback

Of the various dimensions to the professional development process, teachers were most enthusiastic about this process of classroom observations followed by feedback sessions, and this was the element that they commented on the most. For example, of the teachers interviewed for Phase 4, half of them talked about it. We heard very few negative comments about this part of the program, and many very positive comments such as “awesome,” “brilliant,” “fantastic,” and “great.”

Teachers appreciated the observations for various reasons. Several teachers discussed valuing the observation data about what they were doing when teaching, such as which students they interacted with and which they missed. They commented that having another set of eyes in the classroom was incredibly valuable; as one teacher put it, “you can only look in one direction at a time.” They appreciated being able to see their progress with students over time. Several noted that once teachers have been hired and completed the first couple of years of teaching, they may never again get feedback on their practice. They valued the practical suggestions and ideas they were offered. Several mentioned that this professional development process up-skills teachers, building on what they learned in their teacher training programme and adding to their teaching repertoire. One commented that over time if no adult holds them accountable, they just “switch off.”

Teachers valued the support given after the observations. Several described the process of being observed, then discussing the observation as promoting their reflection on their practice. (The few feedback sessions we observed confirmed that this is a reflective process in which the teacher usually does at least half of the talking, and all of it is directly related to what the data in the observation mean for the teacher’s practice.) One teacher commented, for example, that the process “forces me outside my comfort zone and it was quite scary at first... but now I really look forward to the observation and feedback sessions.” While teachers often felt nervous at the beginning of the process, less than a half-dozen teachers described the process of being observed as threatening and persistently uncomfortable. The great majority embraced it as a form of professional development with enthusiasm.

Similarly, the Lead Facilitators believed that teachers found the classroom observations and reflections useful. They pointed out that the cycle of in-class observation, feedback and analysis had enabled teachers to work more professionally. They saw the observation tool and feedback loop as being critical; as one put it, “It’s amazing, I look

what a feedback [session] does to kind of help someone look forward. A thing that happens with kids, and [teachers] get feedback. The observation tool for teachers is a huge thing.”

This process of a facilitator observing a teacher and then providing feedback enabled particular barriers to be overcome, including changing the belief that teachers own their classrooms and need to defend their territories; as a facilitator put it, “People used to own their territory, don’t you dare come in here and tell me to observe what I’m doing. But now [being observed] is an expectation, that is a big change and it is working as a professional with other professionals.”

Shadow coaching

Teachers’ experiences with shadow-coaching were more varied than they were with the observation and feedback based on the effective teaching profile. In several interviews, teachers were not sure what the difference was between formal observations and shadow coaching; teachers’ comments about the observation-feedback sessions likely include a few reflections on shadow-coaching for this reason. The effectiveness of shadow-coaching from the teacher’s perspective appeared to be dependant on the facilitator’s knowledge of the process and /or skill in being able to align the process to teacher’s individual needs.

I like the observations, and again, I think it’s some useful data on what I’m doing. Shadow coaching has been variable, as it depends on who’s been observing and what they’ve had to offer. Sometimes it’s been fantastic and they have actually sat down with me and said “here’s a different way you could’ve done it, and here’s some ideas” and I’ve found that really [useful], and other times they haven’t really offered anything at all, and so that has varied from person to person and observation to observation. (Teacher)

A few facilitators acknowledged that they lacked expertise and knowledge of the process, acknowledging that they themselves had not actually done shadow coaching yet. These comments seemed to reflect a lack of confidence in providing advice around different curricular areas for which they felt less prepared. Other facilitators explained that their role was very new and ‘foreign’ and that as teachers they had never experienced a similar professional development programme. This lack of prior experience with the approach to shadow-coaching could impact on a facilitator’s sense of confidence within this new and challenging role:

It’s quite a foreign process to me. I’ve never had a shadow coaching or that particular observation tool, or co-construction meetings. I’ve never done any of that in any school I’ve been at.

Individual Facilitators and Lead Facilitators acknowledged that shadow-coaching was not working as effectively as other components of the professional development model. These facilitators believe it was important to clarify the purpose and structure of shadow-coaching:

Shadow coaching wasn’t as strong as in-class observation or co-construction. We came home from the hui in term 2 deciding that we didn’t know what they were talking about and we had better find out. Everybody said ‘shadow coaching? I don’t think we’re doing any.’ And we weren’t. We have been trying to work on strengthening our shadow coaching. (Lead Facilitator)

I started to question the model of shadow coaching. I’d been doing a bit of reading about it and didn’t actually know where we fitted in the reading that I had been doing. Was it a business model where external goals were set, where there was help for people to meet the external goal, or was it a counselling model or was it a bit of both or, like, what was it? (Facilitator)

In some schools, the process of shadow-coaching had not been put into place mainly because the facilitators did not have time for the additional observations. As one facilitator explained, “We make it through to observations [and]

feedback about individual goals, but [we're] not getting to the follow-up for everybody. The hardest part is following those teachers up as well ... there're not enough hours in the day. I mean, I'm busy, they're busy."

Co-construction meetings

The co-construction meetings normally involve small numbers of teachers who teach the same students but in different subject areas, meeting once every month or two to share concerns and strategies for improving Māori student achievement. The meeting is led by a facilitator who has observed the teachers in the classroom. Co-construction groups are designed to analyse a teaching-learning problem that the teachers share, using evidence of learning as the basis for developing a group goal. At a subsequent meeting, they analyse what they have been doing to improve their practice relative to that goal. A few facilitators described how the use of data improved the quality of discussion in the group; for example:

We could go there when we had our co-construction meeting on Monday, 100% of the staff would give evidence to support data to show what they are doing to lift it in the school. And when I first started, when I first had a co-construction meeting it was a disaster and everybody couldn't stand them and so that shift from how the co-construction meetings have changed and no one was bringing data at all, so on Monday everyone was bringing something, I think just signifies a quiet shift in people's thinking: 'I'm going to this meeting, what am I...' You know? That puts an onus on them, they have to stand up and front up to what they are doing for Māori students in their classroom and I think there is evidence there for the success of the meeting, would you say?

The teachers generally found co-construction meetings valuable. About one-third of the teachers commented on co-construction meetings, and about three-fourths of these comments were positive. We were not sure, however, based on teachers' descriptions of co-construction meetings, how many groups were actually using student data meaningfully. Teachers said that they valued the time to reflect and to solve problems with other teachers who are working with the same students, and that usually teachers do not get time to do this. For example, one teacher explained that, "We had one co-construction meeting where it became fairly obvious that we were all struggling with the same people and the same issues;" teachers then brainstormed strategies that might engage these students better. Another teacher explained that the team developed consistency in their approach to working with students, which stopped students from trying to get away with things. Teachers in co-construction groups that worked well described the group as a "professional learning community" they found very supportive.

According to the facilitators, the quality of evidence used generally in co-construction meetings or within the school to assess Māori students' progress varied, and teachers often shared anecdotal evidence and impressions of progress, seeming reluctant to share data. Gathering the right kind of data to monitor shifts in Māori students' achievement was considered challenging in some cases; for example, "So what was the evidence that our teachers were bringing to co-construction, because we thought that that was pretty useless, some of the evidence, and we wanted more, meatier evidence to help our kids."

A Regional Facilitator acknowledged the challenges associated with the use of data on Māori student achievement within co-construction meetings and within schools. Emphasising that the Te Kotahitanga programme challenged established patterns of behaviours within the secondary school context, this key person reflected that a greater focus on teacher practice and school systems associated with data on Māori student achievement and learning was needed.

It's such a shift from established patterns of behaviour in a secondary context. You know? Why would I bother to talk to an art teacher about my English results? That for a start is a huge break down. There is a journey to travel in it I guess I'd say. I do think that some teams have had less of a handle on that than others.

The systems within [some] schools have restricted the configuration of co-construction meetings, so they haven't been able to meet around a core group of students. The conversation becomes much less relevant if I'm just talking to you about what I'm doing, but we don't share students. And so there are challenges in there, some of which are about teacher behaviour and teacher practice, some of which about school systems and structures.

In summary, there was broad-based validation for the Te Kotahitanga professional development model. With the possible exception of shadow-coaching, the great majority of participants found the various elements to the model, and the way they interconnected, to be quite effective and helpful. Also, with few exceptions, the teachers found the facilitators they worked with to be helpful, resourceful, and approachable. Although below we address concerns about deepening the knowledge base of the facilitation team, the large number of interviews we gathered substantiated the soundness of the model itself, as a vehicle for improving classroom practice.

The few teachers who did not find the co-construction meetings beneficial cited logistical or planning problems: a few were assigned to a group based on one of their classes that was not actually the main class in which they needed help; a couple of teachers experienced inconsistency between the co-construction group facilitator and the facilitator who was observing them in the classroom; and a couple of teachers commented that use of a non-contact period for co-construction meetings took away from time to plan for classes.

Pedagogical and cultural leadership for enabling change in the classroom

Reforming classroom practice to support Māori student achievement, using the Te Kotahitanga professional development model, requires expertise in several related areas. In the Te Kotahitanga professional development model, that expertise is concentrated in the facilitation team; it is their responsibility to use that expertise to teach teachers and other members of school. Below, we discuss various role groups' perceptions of the facilitators and their expertise, three specific (and overlapping) areas of expertise that facilitators need, and facilitator professional development.

Principals' perceptions of facilitators

Principals and other senior/middle managers overwhelmingly agreed that the role of the facilitators and particularly that of the lead facilitator was crucial to the success of Te Kotahitanga. They were also clear that this was a challenging role that didn't suit everyone, and that finding and keeping the right person was affected by staffing changes over time. The dispositions, skills, understandings, and even the credibility of the facilitator as someone in the role of supporting other teachers can be an issue. As one put it,

If you get the wrong people, it is a disaster so you've got to get people who have got respect from the rest of the teaching community. If you get someone who is seen as an idealist or, you know, right out there by the staff, the staff are pretty critical, they're pretty astute, our profession is to critique, so we'll find a hole straightaway. One of our younger staff and one of our young facilitators is a young buck, so hasn't got credibility with the staff so he's got to work through that.

Teachers' perceptions of facilitators

In various contexts, the teachers talked about the facilitators, mainly expressing appreciation for their knowledge, support, and help. We heard words like "fantastic," "incredible," "awesome," "really, really good," "great" and "supportive" used to describe the facilitators. Teachers commented mainly on their expertise and support in the classroom. As one put it, "The Facilitator is kind of like your on-site expert that teachers never had." Teachers particularly appreciated the facilitators' expertise in teaching and in Māori culture, as well as their resourcefulness. One teacher remarked, "The beauty with the Facilitator was like they're trained. They know how to have a professional conversation with you." Another said, "In terms of personal support and so on, ... and partly in terms of shadow

coaching and then also in regular feeding of information “have you tried this? Have you read this article? Here is a copy of it on the e-mail” or something like that. And those things have been quite useful.” For the most part, teachers also valued the flexibility and approachability of the facilitators.

A few teachers said they would have liked more balance between Māori and non-Māori facilitators, noting that “there should be more representation of Māori on the facilitation team” because of the importance of expertise in Māori culture. A few also said there was a bit of disconnect when facilitators only worked in their school one or two days per week.

When teachers critiqued facilitators, their main concern was wanting someone with more subject-specific knowledge, who could make a more direct connection to their subject matter, such as graphics, maths, or French. There were also about a half dozen teachers who felt that a facilitator they had worked with was too forceful with his or her ideas, “imposing how they think things should be on me.” As one teacher put it, “Sometimes I think people get a little bit, doctrinaire about things. And lose sight of what I would call common sense.” Overall, however, teachers valued the expertise of the facilitators, and found their role and their knowledge central to improving classroom teaching for Māori students.

Facilitators’ perceptions of the importance of facilitator expertise

To be most effective working with teachers, facilitators need expertise in several areas: Māori culture and its relationship to culturally responsive classroom pedagogy, subject matter expertise that they can connect with culturally responsive pedagogy, and the process of working with teachers and other adult learners. Facilitators were quite candid in discussing both their knowledge as well as their challenges and limitations in these areas.

Culturally responsive pedagogy and culture. Facilitators we interviewed were aware of their need for strong expertise in Māori culture, and the relationship between culture and culturally responsive pedagogies. An issue that is implicit throughout Te Kotahitanga but not explicit in the model or in most discussions is the cultural identity (Māori vs. non-Māori) and Māori knowledge base of the lead facilitator and the Facilitation team. Some facilitators stressed that having Māori strongly visible within the facilitation team lent credibility to the school’s commitment to Te Kotahitanga:

I wanted to make sure we had a Māori led facilitation team—it didn’t have to have only Māori Facilitators but we think we have broken a bit of a barrier this year as we’ve got a Māori Facilitator, which was really a gap in our team.

An area of particular challenge for teachers working towards the Effective Teaching Profile involves the extent to which facilitators are, as one put it, “steeped in Māori tikanga” and can demonstrate culturally responsive practices. The lead facilitators are not necessarily Māori nor are they necessarily fluent in Māori, but the extent to which all are bicultural could be crucial to the programme’s ability to provide teachers who are not bicultural with guidance on things Māori and how to reference culture across the curriculum.

Overwhelmingly, facilitators expressed that the most difficult part of the Te Kotahitanga professional development for teachers and for them as facilitators was the explicit focus on culture and culturally responsive pedagogies, because, as one put it, “it is an enormous amount to come to terms with. You’ve always got to question, you’ve always got to unpack.” Another commented:

It’s [culturally responsive teaching] also taken a lot of people to quite difficult places with themselves and their practice. So there’s been some really challenging, um, interactions, not horrible ones, but, you know, really difficult conversations. Um, for me personally I felt resistance from people that before I was a Facilitator I would never have had. You know there’s a, an uncomfortableness. So I guess it’s that dissonance

stuff. Um, and, and it's good at the end but those are real obvious things, because now it's being talked about and the word Māori is being struggled with and, and BOT at that level as well. It's like ... we're not used to that in New Zealand, we're not used to describing a group as Māori. All of those dissonance type interactions are happening.

Facilitators encountered groups of teachers who struggled to understand the importance and impact of relationship-based pedagogies for Māori students. As one facilitator commented, "There are some people who still can't get their head around this whakawhanaungatanga." Although the focus on Māori students was particularly challenging for some staff members, facilitators had to work to maintain that focus rather than allowing shifts to discussions about all students, and they worked to ensure that schools and teachers took ownership of the issue of underachievement. One facilitator explained,

The fact that it focuses on Māori students [is] challenging for a lot of our staff, to focus on Māori students. Someone might feel like the others are missing out, so, I think it's challenging to actually sell that to the staff really. The data's showing that [focussing on Māori] is important. National data's saying that this is where the need is.

Another commented, "If it wasn't here, I do wonder whether we would lose that focus on Māori student achievement."

Some facilitators emphasised a need for their own on-going development of expertise in Māori culture. Because the position of Māori culture within Te Kotahitanga is central to the programme, lack of expertise, or discomfort with directly addressing Māori culture sometimes led to friction within the facilitation team. One facilitator explained, for example,

I don't know if it was so clear, and it wasn't a priority that the Māori side of the training. [It] should have been the priority. But some [facilitators] were fairly young. They thought, well, I've got a handle on that but in fact the Māori side of it comes from that Hui structure. The Facilitators didn't go on training, didn't necessarily have a shared experience and particularly staying on the Marae and staying at the Hui, not everybody chose to do that.

Culturally responsive pedagogy and curriculum. As many as half of the facilitation teams saw a need for greater focus on the links between curriculum and culturally responsive pedagogies within the professional development programme to enable teachers, facilitators and principals to work together to improve classroom practice and learning outcomes for Māori students. The facilitation teams generally had a strong repertoire of teaching skills, and although the great majority of teacher comments about the helpfulness of facilitators underscored their pedagogical knowledge. Making these links requires that facilitators have both pedagogical and subject matter expertise. Teachers working in certain subject areas—maths was named most often—struggled to develop culturally responsive pedagogies aligned with their chosen curriculum area. One noted, "I've worked in two schools, and the maths department found it the most difficult to work in a different way, start to begin to work in different ways." It is evident in classroom observation data that many teachers in maths and science managed to make these connections despite the perceived challenges of doing so.

But facilitators occasionally commented on lacking the subject matter background to help them. For example:

It could also just be my lack of experience [working with different subject teachers] because I'm an English teacher, and I haven't been thinking, widely in those other cultural contexts for those other subjects. Next year, [I would like to] bring in a teacher with more subject expertise in the science and maths area.

We heard similar concerns from some teachers, who wondered if there might be “culturally neutral” subject areas because they were having difficulty envisioning what culturally responsive pedagogy would look like. For example, a science teacher discussed how difficult it was to conceptualise “bringing the cultural perspective into science. It’s quite difficult, depending on what topic you are teaching and how are you going to get the cultural perspective into science.” A maths teacher spoke to the need to address culturally responsive pedagogy in a subject-specific way:

It’s a blanket programme and it doesn’t identify enough, in my opinion, that different subjects have different needs and different approaches. Mathematics, for all you may want to do group work and differentiated learning, which we will come back to if you are interested. There is a sense in mathematics where you do have to be the teacher and impart knowledge. And again if you push and say ‘all your work has to be in group work’ and ‘Māori kids will only work if they are in a group with Māori kids’ you sort of put that as an absolute. Which is one of the things that we’ve informally heard, you create barriers.

Some facilitators indicated that subject matter expertise was not the only pedagogical area in which many facilitator teams felt stretched; they sometimes felt inadequate with respect to their own abilities to support and challenge teachers about their classroom practice for other reasons. Facilitators felt particularly stretched to figure out how to work with teachers who already had a high level of skill in linking culturally responsive pedagogy with curriculum, teachers who could be readily identified as ‘high’ implementers of the programme compared to others. At present, the professional development programme does not differentiate a role for them that would make use of and further develop their expertise. For example, one facilitator explained:

We have teachers who we call high implementers of Te Kotahitanga. I think the high implementers would possibly like more opportunities to have co-construction meetings, opportunities to bounce ideas and talk about pedagogy. I mean I have been part of co-construction meetings where there have been high implementers who have looked stunned because of comments from other people who aren’t high implementers.

At the other end of the spectrum, a related challenge confronting facilitators was working with teachers who had poor teaching and/or classroom management strategies and skills. Sometimes this was viewed as an issue of teacher competence within the school that was not being addressed by the senior management:

We were never, ever designed to be a project that picked up poor [teachers] who weren’t managing their classes, that was the end of it. So last year I pulled back a bit and said ‘In the end, we cannot do constructive Te Kotahitanga feedback in classrooms that are not managed [and are] simply out of control.’ So I wrote to the two people and said ‘Look, you need to get some help from specialist teachers, you have got to go to that, [so] you feel like you are able to manage your class better.’

Teacher professional development. Teacher professional development and working with adult learners was a third important area of expertise that facilitators needed, and for which their expertise was uneven. They needed to know how to establish and maintain a supportive, trusting working relationship with teachers while also providing enough challenge to drive teaching practice improvements, which was a delicate balancing act. Although most teacher descriptions of facilitators underscored their ability to do this well, the facilitators themselves were aware the need to pay attention to building relationships while at the same time offering critical feedback; this is a theme that came up frequently in interviews. For example:

It’s quite a different job to teaching. It’s a hard job, handling difficult situations. I made [that teacher] cry. I think we are going into teachers’ classrooms and challenging them, and that is a big ask.

Just recently when I was in a challenging situation, it was actually starting to unfold as we were doing the feedback. So it's like, how do I address this, and it got to a place where there was not actually a happy medium. As a result of that, you actually have to step back and I felt that the best thing to do was to step back and have someone else come in and then regroup to get it to that place which is where we have got to now. I don't actually think you can be prepared for it.

The facilitators need to learn to work diplomatically with teachers who are resistant to change, and particularly when confronting deficit views towards Māori students. A couple of them pointed out that Te Kotahitanga is both a philosophy that conflicts with that of some teachers, as well as a set of practices that teachers who are uncomfortable with relationship-based teaching resist. Learning to navigate, confront, and attempt to change resistant attitudes requires skill that the facilitators were in the process of learning.

A challenge that facilitators often mentioned was learning to work with and offer constructive criticism to teachers who were identified as traditional, older, more experienced and/or had higher status (for example, Heads of Departments) than facilitators. Facilitators—even lead facilitators—come to their roles as colleagues of teacher peers, and yet they are cast in a position of providing technical advice and support to others who may consider they are equally qualified and expert in dimensions of the ETP. Facilitators spoke openly and often about the challenges of managing the tension between providing encouragement that is culturally safe for teachers while also providing constructive criticism where this is needed. For example:

For me as a new Facilitator, the biggest challenge is challenging someone's positioning especially if I'm dealing with a teacher that is a lot more experienced than I am as a teacher. So that's quite scary, we've got someone who's been teaching for 25 years, to say 'well ... have you thought about doing something differently?'

A challenge I had when I first started was giving advice to people who I considered tuakana, older than myself, or more experienced than myself as well. I didn't like to tell people where I think they might need to improve. I'm basically at this stage having to explain to more experienced teachers than myself. I've only been a teacher for the last five years or so, [giving advice to] teachers that have been here for 20 odd years.

Developing facilitator expertise

The areas of expertise we discussed above—deep knowledge of Māori culture and its relationship to culturally responsive pedagogy, connecting culturally responsive pedagogy with curriculum, and knowledge of and skill in facilitating teacher professional development—are central to school reform for Māori students, and require facilitator professional development. Facilitators had been trained by the Waikato team, and they clearly gave these training sessions high marks. Phase 4 facilitators were better prepared than Phase 3 facilitators had been; experience helped the Waikato team identify more clearly the training that facilitators would need.

The professional development hui for facilitators at the beginning of the year was also well-regarded as a form of facilitator professional development, credited with clarifying how the programme worked. As one explained:

[Facilitators] need to do the hui. A new Facilitator would need to do the hui, the Te Kotahitanga facilitating hui, because once I did that this year, it just made things clearer and sort of put in place. [At the end of last year] because I knew I was coming on[as a Facilitator] this year, I did a little bit of shadow coaching with [the lead facilitator] and observing and stuff, and it just made a huge difference when I went to this hui because I could understand actually what was going on, what was being said in the observation tools, and if you do that then it makes you more confident in being able to go into a classroom. That was one of my fears

too coming out of the hui, oh my gosh, I'm going to have to now go in and do this observation, but it's really not as bad as that.

Some facilitators noted that their role was very new and 'foreign' and that as teachers they had never experienced a similar professional development programme. Lacking prior experience with this approach to professional development could impact on a facilitator's sense of confidence within this new and challenging role. As one noted, "It's quite a foreign process to me. I've never had a shadow coaching or that particular observation tool, or co-construction meetings. I've never done any of that in any school I've been at." All of the facilitators pointed out that they came into the role without the range of expertise they would need, and benefited greatly from professional development. The following comment was typical:

I started at the school solely as the head of [a particular department] and they said to me: Would you like to be part of Te Kotahitanga? At that stage I had no idea what it was but I always say yes and then think about what I have let myself in for afterwards.

Our evaluation research team felt that more emphasis on and preparation for the role of being a "critical friend" could assist with these challenges. Facilitators advocated for more ongoing training coupled with face-to-face support to enable them to cope with the new and challenging demands of their roles, for example:

I'd really like more face to face support, probably with other schools would be really good [to share] what's working well in your school. The Te Kotahitanga website is really useful as well, but it's not face to face. For me personally, I'd rather have someone to sit down and talk to, someone who can challenge me in my practice, and if I say something [who] can say 'Let's think about that again.' I guess what I'm looking for is sort of feedback and ideas on how to improve.

Training and ongoing professional learning and development for facilitators will require attention in the future. There hasn't been a specific training programme that could, for example, serve as a pre-requisite to being employed as a Te Kotahitanga Facilitator. A programme along the lines of the RTLB professional, postgraduate programme leading to a formal qualification might be useful both for current facilitators and those seeking to become facilitators. There should be encouragement and support for such initiatives as well as exploration of alternative strategies for ongoing skill training. The hui and associated support from University of Waikato has sufficed for these first few years of Te Kotahitanga, but the staffing difficulties reported here suggest that this will become increasingly difficult to sustain as additional schools adopt the model. The online network has met some needs for ongoing support, but opportunities to undertake short courses leading to credits towards a qualification would no doubt be interesting to these professionals and teachers as well. The facilitators themselves indicated that they would appreciate and benefit from opportunities to gain further professional development.

We also suggest that opportunities be expanded to enable experienced facilitators to mentor less experienced facilitators across schools as another strategy to enhance further the quality of training and support provided to this role. At present, there is little formal contact across schools or persons in parallel roles across schools, something that could add further value to the project.

In this section, we have examined the areas of expertise that are needed to enable the Te Kotahitanga professional development programme to work, reflected in the work of the facilitators. Facilitators expressed concern that teachers and HoDs, as well as some facilitators themselves, lack the necessary knowledge, experience and confidence to assist teachers across different curriculum areas to improve practice and learning outcomes for Māori students. If schools are to continue to work on improving classroom practice and learning outcomes for Māori students, we believe it is critical

that expertise for doing this effectively be recognised and developed. Schools need at least one trained facilitator as well as a facilitation team that has expertise in the areas we discussed above.

Supporting the professional development model

Our interviews probed what kind of support within the schools might strengthen the Te Kotahitanga professional development model. We discuss two main areas: support by the school's leadership, and staffing concerns.

Leadership support

All lead facilitators who were interviewed believed that it essential that the school have strong leadership supporting the vision and philosophy of Te Kotahitanga if change is to occur and be sustained within the school. Strong leadership entails vision, ownership and commitment to making a difference to Māori student achievement. They spoke about the need for supportive relationships between the lead facilitator, the principal, the Senior Management Team (SMT) and the Board of Trustees (BOT).

It was important that the Principal was seen to be leading changes within the school. It was also necessary that the Facilitation team and SMT work in partnership to achieve desired goals, requiring open, regular communication. One facilitator explained, based on experience, the link between strong Principal leadership, active support, and impact on Māori students:

The original principal had the vision and the strength to say that this is what [he/she] wanted for the school, talked to the board and people like that, advocated strongly for Te Kotahitanga all around the country. In the school, [he/she] put all the structures in place and the funding and made sure everything was here for the programme. The [first principal] had such strong beliefs that it was going to make a difference and when the times got really tough could have pulled out or the school could have backed away from the hard decisions, but they made the hard decisions and I believe it paid off in the end. Our results show Māori students are doing better than they were 4 years ago.

Strong support from senior management and heads of department was also considered necessary. Some lead facilitators were adamant that what was needed to improve practice and outcomes for Māori students required at the school level wider issues of school reform along with ongoing training and upskilling for all school personnel, not just classroom teachers.

Evidence of leadership support takes a variety of forms, such as seeing that the facilitation team is adequately staffed, verbally supporting the reform process to the staff, working with and sharing school-based data to guide efforts, and resourcing the programme. Lack of ongoing funding commitments for the programme was a major concern to facilitators, as inadequate funding risks job security, and thereby, continuity in the professional development programme. One of the facilitators, for example, commented, "They [other facilitators] would come up every so often, would say 'How do we plan, what do we do, what about our careers? We like what we are doing but what if it all suddenly changes, what happens to us?'" Some facilitators explained that they had tried to split the role in the past with part-time teaching in order to continue being credible as a teacher. This, however, had meant juggling competing demands which they felt impacted on the effectiveness of programme implementation. For example:

Funding for Facilitators to enable Facilitators to do the job they do, space for Facilitators to work, all those things that are just money issues. I do my facilitation 4 days a week because the position is .8, and I made that decision. I wanted to focus solely on Te Kotahitanga this year when I became the Facilitator, as previous to that I had been [a head of department]. Trying to juggle two jobs was too hard, I didn't feel as though I was giving anybody a good service and so that meant that I am now part-time.

Facilitators advocated more focus on leadership at different levels of the school if schools were to improve classroom practice and learning outcomes for Māori students. Some facilitators were particularly concerned about the lack of leadership at middle management level. They considered that Heads of Departments were key players who could either support or disrupt change from occurring within the school.

Facilitators believed that in the unique hierarchy of secondary schools, Heads of Department are responsible for curriculum leadership. This meant that the support teachers received would vary depending on whether HoDs supported the professional development initiative. Again, some participants believed that HoDs knowledge, confidence and experience of culturally responsive pedagogies aligned to their curriculum area was a key factor in supporting or disrupting reform within schools:

This is the principal's vision, but actually the DPs don't want to be part of this, or even HODs. Often that middle management level is where some of the greatest resistance [occurs], and why would we be surprised? Why would we be surprised that some of these people would start to be a little bit twitchy around something that actually challenges status quo?

Facilitators seemed poignantly aware that there were different layers of responsibility in secondary schools that all have an impact on school change and the experiences of students. They felt a disconnect between Te Kotahitanga activities driven by the principal's commitment and teacher participation, on the one hand, and the layers of other school leaders with major roles to play in the process and the life of the school.

Support of the Board of Trustees is also very important. Some chairs of the Boards of Trustees spoke to their commitment to the professional development programme, including ensuring that it is funded:

Our lead Facilitator needs to have the people, the budget, the time basically. If she doesn't have the people, she's going to be doing two people's jobs. So she needs people time to do it properly.

We need to make sure that whether it is Ministry funded or we try and fund it, that she has what she needs otherwise it's going to be a struggle. Money's the main enabler, isn't it?

Earlier we noted that Board of Trustees chairs had only a general idea of the nature of the professional development programme. As pressure to fund this programme increasingly may compete with other things, we suggest that the Board will need to know more about how the programme operates, why it operates as it does, and cost implications of its specific features.

Team composition, staffing

Our interviews yielded insights regarding staffing and building facilitation teams that have implications for the future. One issue is developing stability of the team, and particularly of who is in the position of lead facilitator. A number of lead facilitators explained that they were very new in their role, and in some schools there had been several people in the lead facilitator role. Turnover in this role creates the problem of stability within a school, as well as the need for the school to expend time and energy repeatedly identifying new lead facilitators and making sure they have time to be trained for their role. Facilitators—particularly lead facilitators—would appear to be greatly in demand, a situation that has escalated as Te Kotahitanga has been extended to additional schools. Hence, frequent staffing changes occurred requiring constant readjustment of existing relationships and making new ones with teaching staff and the senior management team at the school. Stability of staffing in the facilitation team was considered a major issue, since lack of job security and high turnover within the school facilitation team were also regarded as barriers to effective implementation.

A second issue is the fact that most facilitators were part-time, and the remainder of their full time employment represented commitments to other duties such as teaching, advising, and providing technical support to teachers in other roles. Principals shared that while it was helpful to have professionals from the regional advisory team or an RTLB from their cluster assigned part-time to the facilitator role, this was also a challenge. Many of these part-time facilitators are at the school only 1-2 days weekly, which introduces scheduling and other problems, such as continuity in their work with teachers through the observations, feedback sessions, and co-construction team meetings. Other facilitators are at the school in teaching or middle management roles, which can represent a 'conflict of commitment' for these professionals even on the days when they are carrying out their Te Kotahitanga roles. The position staffing commitments are temporary, so the uncertainties associated with non-permanent positions may contribute further to staff attrition as highly qualified professionals may be attracted away from the project on a regular basis to assume other positions in their schools and elsewhere.

Facilitators believed that logistical constraints such as lack of time, workload issues, and shortages of qualified staff representing ongoing challenges having impact on implementation of the programme at their schools. We heard comments such as the following:

Yeah, it is not having enough time dedicated to Te Kotahitanga because of my workload with my teaching, and you haven't got enough time to do a lot of researching or a lot of follow ups because you've really got constraints on you in that area because of your other duties you have to do as a teacher as well, so probably not enough time to give it the all that it deserves.

A major dilemma for facilitators whose non-facilitator FTE involved being a teacher at the school was finding the right balance between teaching and facilitator duties. Facilitators emphasised how important it was for the school's management team to understand this and allocate appropriate time for them to carry out their facilitator responsibilities. When high staff turnover occurred within the Facilitation team, this was considered a major barrier said to have a severe impact on programme implementation:

It doesn't help that we've had a different facilitation team every year for the last five years. There's been a high turnover in our Facilitator team, so we've had a new team and had to re-train the team every year.

A third issue is ensuring that facilitation teams have breadth of expertise across all subjects. As noted earlier, the facilitators were aware that their skills do not necessarily extend across all subjects taught in Years 9-10, and teacher interviews support the need for subject-focused as well as general pedagogical advice and support to demonstrate growth in the Effective Teaching Profile. The facilitation teams also acknowledged that some teachers at their schools were themselves "high implementers" and had developed a high level of mastery of the ETP.

A possible solution to some of these issues, which one of the teachers spoke to, is to rotate "high-implementers" onto teams for specific periods of time, particularly those in key subject areas for which the rest of the team lacks subject-matter expertise:

You can't develop a (inaudible) without having more people on board taking particular Facilitator positions, and so I guess it's kind of an informal approach to try and bring in people- like some of us for instance, you maybe able to take on a more of a (inaudible) kind of role, and so I think that fits as a possibility for it. Yeah I mean it depends on the funding and those kinds of things, doesn't it? I think it would be really useful, if you want to keep an eye on this project to make sure it gets embedded over time, I think that's something that you've got to look at doing. Not just crying literacy and some of these things, but something concrete, in writing to set it up. Because over time you are going to get people moving on, for instance, from one school to another. In my experience PD initiatives in the past, sometimes you lose momentum with things like

language across the curriculum and things like that, there are a lot of people getting professional development and then moving on to somewhere else.

The evaluation team suggests that facilitation teams move away from hiring part-time members that include people who work in more than one school, and toward a system of incorporating high implementer teachers into the team, especially to provide subject-specific advice and support. We see rich possibilities for developing teacher leadership by reconfiguring facilitation teams in this way.

Key findings: The Te Kotahitanga professional development model

- Across the board and with very few exceptions, teachers, principals, Boards of Trustees chairs, and facilitators were most enthusiastic about the Te Kotahitanga professional development model, viewing it as a sound and effective process for improving classroom teaching for Māori students.
- Teachers valued the interconnected parts of the model, voicing most enthusiasm for the classroom observations with feedback which they saw as not only improving their teaching but also improving their ability to reflect on their teaching. Co-construction meetings appeared most effective and useful when all teachers in the group were trained in Te Kotahitanga and problem-solving was based on student evidence provided to the group on a regular basis. The implementation of shadow coaching across Phase 3 and Phase 4 schools appeared variable. Data analysis indicated that some lead facilitators and facilitators were less knowledgeable and/or confident about the implementation of shadow-coaching in their school. Some teachers also indicated that they were unclear about the process of shadow-coaching, how it differed from other components of the PD model and/or its contribution to their ongoing professional development. More attention needs to be placed on facilitators' knowledge and use of shadow-coaching and the quality of its implementation within participating schools.
- Trained facilitators are critical to the success of this professional development model. Facilitators as well as teachers affirmed that the facilitator role required expertise in Māori culture and its relationship to culturally responsive classroom pedagogy; subject matter expertise that they can connect with culturally responsive pedagogy; and the process of working with teachers and other adult learners. This is not a role that can be shifted to other personnel in the school who have not developed this expertise.
- The Te Kotahitanga professional development model works best when: it has active support from the school's leadership team, particularly the principal and the other senior managers; the leadership team views it as an essential vehicle to improve academic achievement of Māori students; and there are effective communications between the school's senior management team and the lead facilitator. It also appears to function best when there is stability in the facilitation team; when most facilitators are based within the school thus connected to its school community; and either full-time or, if part-time, have a sufficiently flexible schedule for project responsibilities.
- The challenges for facilitators in providing effective professional development support for teachers included uneven availability of: curriculum expertise for ETP exemplars across different subject areas; timely student outcome data for feedback to teachers; and differentiated PD activities to accommodate teachers at different stages of implementation, expertise and cultural knowledge.

Chapter 4: Impact on Teachers' Classroom Practice

In this chapter, we synthesise what we learned about 'How well and in what ways does Te Kotahitanga work towards the goal of improving Māori achievement?' in relation to classroom teaching and learning. Teachers are central to the experiences of both Māori and non-Māori students in mainstream schools. The main purpose of the Te Kotahitanga project is to shift teachers' view of students away from a deficit view, and to shift classroom instruction from a transmission model to a more discursive, interactive model that also reflects culturally responsive practices.

Evidence presented in this chapter was gathered through in-class observations and interviews with different stakeholder groups across 12 Phase 3 and 10 Phase 4 schools. The interviews provided triangulation regarding the extent to which the classroom observations revealed changes in practice attributable to the professional development programme. In the first section of this chapter we identify patterns in what we observed. Results from observations indicated that the majority of teachers evidenced either moderate implementation or high implementation as assessed using criteria based on our observation measure for the Effective Teaching Profile⁴. More than one in five teachers is demonstrating a high level of implementation of the ETP. However, there was variability across subjects and schools in the quality of implementation.

The second half of this chapter presents an analysis of stakeholder interviews across Phase 3 and Phase 4 schools. This evidence helps us gauge the extent to which observed patterns in the classroom observations represent change resulting from the program. A crucial question is 'How do we know the extent to which these patterns presented a change in teaching practice over the last few years?' Interview analysis confirmed the value of relationship-based pedagogies and changes in teacher understandings and agency in terms of responding to Māori students' learning needs. However, teachers were divided over the extent to which the Effective Teaching Profile, with its explicit focus on culture, relationships, and interactions in a classroom, is different from "good teaching" generally.

Three key themes emerged from the final analysis of reported change in the classroom from the perspectives of different stakeholders: (a) change in teacher beliefs, expectations and understandings; (b) change in teacher agency and; (c) increased teacher job satisfaction, motivation and empowerment. Whilst these themes are reported separately, they are interrelated and multifaceted as well as providing elaboration of other evidence presented throughout this report, particularly with regard to the integrity of implementation of professional development activities (as discussed in Chapter 2) and existing school climate and culture (Chapter 5).

Teachers' engagement in the professional development programme was associated with positive change in both teaching practice and outcomes for students. However, participants also identified 'ongoing challenges' in their attempts to improve practice and outcomes for Māori students. The later part of this chapter discusses evidence related to 'a lack of change' in some teachers' classrooms. Teachers perceived as low-implementers represented a significant challenge to the reform process. Evidence related to this is discussed at the end of this chapter along with implications and recommendations.

⁴ Further data were collected from in-class observations in Phase 5 schools to determine a base-line of teachers' practice before teachers started the Te Kotahitanga professional development. These data have been gathered as part of a sub-contract with the University of Waikato Te Kotahitanga research project and, in addition to providing a baseline for the Phase 5 schools, could provide a most appropriate database of teaching practices prior to Te Kotahitanga teacher professional development in comparison to the data we gathered at the Phase 3 and Phase 4 schools following implementation.

Observations of ETP implementation

Over 330 classroom observations were conducted across curriculum subjects in Years 9 – 10 classrooms; a small number of these were teachers from Phase 4 schools who were not yet participants in the project (N=15). Data collection for the observations was guided by the overall evaluation research questions with a focus on teaching and learning activities generally as well as the extent to which these reflected dimensions of the Effective Teaching Profile (ETP) that are the focus of Te Kotahitanga professional development activities. Our data reveal that the majority of teachers observed across both Phase 3 and 4 schools evidenced either moderate implementation or high implementation as assessed using our observation measure for the Effective Teaching Profile. Table 4 highlights the results from Phase 3 schools and Table 5 from Phase 4 schools. Analysis indicated that nearly 3 out of 4 teachers in both Phase 3 and Phase 4 schools (74% of the 116 teachers in Phase 4 schools and 76% of 202 teachers at Phase 3 schools) evidenced either moderate implementation or high implementation. The difference between Phase 3 and Phase 4 schools is not statistically significant, and these findings indicate that the teachers we observed across the schools are operating at similar levels of the ETP in the second year of implementation (Phase 4) and after four years of implementation (Phase 3).

Table 4: Effective Teaching Profile (ETP) results at the 12 Phase 3 schools

School	Percentage of observations in each of the 3 ETP quality categories		
	Low Implementation	Implementation	High Implementation
A	12%	83%	8%
B	17%	61%	22%
C	29%	35%	35%
D	23.5%	56%	20.5%
E	46%	36%	18%
F	50%	50%	0%
G	0%	100%	0%
H	30%	10%	60%
I	17.5%	65%	17.5%
J	29%	50%	21%
K	24%	67%	9.5%
L	14%	72%	14%
Mean %	24%	57%	19%

Table 5: Effective Teaching Profile (ETP) results at 10 of the Phase 4 Schools^a

School (N of observations)	Percentage of Observations in each of the 3 ETP quality categories ^a		
	Low Implementation	Implementation	High Implementation
AA	33%	33%	33%
BB	31%	31%	38%
CC	43%	29%	29%
DD	20%	20%	60%
EE	0%	57%	43%
FF	33%	42%	25%
GG	29%	29%	43%
HH	33%	33%	33%
II	14%	43%	43%
JJ	21%	50%	29%
Mean %	26%	37%	37%

a Data for only those teachers participating in Te Kotahitanga are included in the above table. For 15 teachers not yet participating in the project, data are reported separately.

The classroom observations provide rich description of the kinds of exemplars demonstrated by teachers showing evidence of the different dimensions of the ETP. Teachers will have previously mastered some of these dimensions through good teaching as well as other professional development activities, so no attempt is made to attribute all good teaching to Te Kotahitanga. However, the higher levels of implementation and the richness of the examples emerging from our observational data suggest that Te Kotahitanga is associated with establishing strategies for teaching Māori students effectively. They demonstrate positive relationships, high expectations, and progress towards culturally responsive teaching. Our observations across both the Phase 3 and Phase 4 schools also suggest that perhaps as many as one in four teachers do not master these dimensions sufficiently and are not implementing the ETP according to the professional development activities provided. Given that this is a finding consistent across schools, it would appear that Te Kotahitanga alone is not sufficient to demonstrate the ETP for a minority of teachers (25%).

Tables 6 and 7 show an analysis of teachers' implementation of the ETP across different curriculum areas. In Phase 3 schools (Table 6) the highest percentage of High Implementation exemplars were observed in te reo Māori (50%), physical education/sport science (30%), social studies (32%), technology/IT/graphics (29%), and arts/drama/music/dance (25%). The highest percentages of Low Implementation occurred in business/commerce/super studies (50%), English (33%), and technology/IT/graphics (24%).

Table 6: Effective Teaching Profile (ETP) results by subject area across Phase 3 schools

Subject Area(s)	Total observations	Lesson numbers (and percentages) by quality category					
		Low Implementation		Implementation		High Implementation	
Arts, Drama, Music, Dance	20	4	(20%)	11	(55%)	5	(25%)
Business, Commerce, Super Studies	4	2	(50%)	2	(50%)	0	
English	43	14	(33%)	22	(51%)	7	(16%)
Health	4	0		4	(100%)	0	
Japanese	4	1	(25%)	2	(50%)	1	(25%)
Te reo Māori	4	0		2	(50%)	2	(50%)
Maths	29	4	(14%)	20	(72%)	5	(18%)
PE/Sports Science	20	4	(20%)	10	(50%)	6	(30%)
Science	32	7	(22%)	21	(65.5%)	4	(12.5%)
Social Studies	25	6	(24%)	11	(44%)	8	(32%)
Technology/IT/Graphics	17	4	(24%)	8	(47%)	5	(29%)
Totals	202	46	(24%)	113	(57%)	43	(19%)

In Phase 4 schools (Table 7) the highest percentage of High Implementation exemplars was again observed in te reo Māori (60%), although for a small sample of only 5 observations. With 16 observations in English, 50% of teachers were operating at the High Implementation Level. Both mathematics and social studies show positive patterns, with high percentages of teachers operating at both High Implementation and Moderate Implementation and only 11% in maths and 7% in social studies operating at the Low Implementation level. Science would appear to be an area where work still needs to be done in the Phase 4 schools, with 47% of the 16 lessons that were observed being rated as Low Implementation. Technology/woodworking/graphics were categorised as generally low, with 67% of 9 lessons rated as Low Implementation and only 1 lesson rated as High Implementation.

Table 7: Effective Teaching Profile (ETP) results by subject area across Phase 4 schools for teachers participating in Te Kotahitanga (N = 115) in October 2009

Subject Area(s)	Total observations N(% of Total)	Lesson numbers (and percentages within that subject) by quality of implementation category					
		Low Implementation		Implementation		High Implementation	
Arts, Drama, Music, & Dance	15 (13%)	3	(20%)	8	(53%)	4	(27%)
Business, Commerce	4 (3%)	1	(25%)	2	(50%)	1	(25%)
English	16 (14%)	4	(25%)	4	(25%)	8	(50%)
Health & Physical Education	14 (12%)	5	(36%)	5	(36%)	4	(29%)
Japanese & Spanish	3 (3%)	1	(33%)	1	(33%)	1	(33%)
Te reo Māori	5 (4%)	0	(0%)	2	(40%)	3	(60%)
Maths	19 (16%)	2	(11%)	9	(47%)	8	(42%)
Science	17 (15%)	8	(47%)	3	(18%)	6	(35%)
Social Studies	14 (12%)	1	(7%)	8	(57%)	5	(36%)
Technology, IT, Wood, & Graphics	9 (8%)	6	(67%)	2	(22%)	1	(11%)
Totals	116	31	(27%)	44	(38%)	41	(35%)

At each of the schools, a small number of the teachers we observed were identified as “non-participants” in Te Kotahitanga. For reasons discussed in the Methods chapter of this report, it would be inappropriate and even invalid to

compare data for observations of “non-participants” at the Phase 3 schools. Firstly, there were few non-participants at the Phase 3 schools, and those who were observed indicated they had had varying levels of experience with Te Kotahitanga. After over 4 years of participation in Te Kotahitanga, it was unlikely that a Phase 3 school teacher would not be influenced by the model. For the 15 non-participants at the Phase 4 schools whom we observed, there was a lower level of implementation of dimensions of the ETP overall, though nearly half of these teachers (47%) were rated as using a moderate level of the ETP dimensions; only two teachers in this group were rated as “high implementation.” However, this is a small and probably non-representative sample of teachers who were not participating in the model, so also does not provide an appropriate comparison group.

In October 2009, we were able to carry out 102 classroom observations in four “core” subject areas—English, mathematics, science and social studies—in 10 of the identified Phase 5 schools who had not yet begun the project at the time. This group does provide a valid and representative sample for comparison purposes, both for the Phase 3 and Phase 4 schools and as a baseline to assess growth on the ETP for the Phase 5 schools over time. Table 8 summarises the levels of implementation for the three groups of schools: These data include only the observations carried out in the four subject areas, hence include all valid observations from the Phase 5 schools but only the valid observations in English, mathematics, science and social studies in the Phase 3-4 schools.

Table 8: Effective Teaching Profile (ETP) evidence at schools in English, mathematics, science and social studies: Percentages and numbers of observations rated at different levels of implementation

Schools* Level of Implementation	Phase 3 4 Years Post (N = 129)		Phase 4 1 Year Post (N = 66)		Phase 5 Baseline (N = 98**)	
Low	24%	(31)	23%	(15)	47%	(46)
Moderate	57%	(74)	36%	(24)	48%	(47)
High	19%	(24)	41%	(27)	5%	(5)

* Numbers reflect observations conducted in only the 4 named subjects at these schools.

** Of the total of 102 observations at Phase 5 schools, 4 were invalid and could not be scored (e.g., test administration).

These data show significant differences in the percentages of teachers demonstrating high and low levels of implementation of the ETP. One in every 5 teachers in Phase 3 schools and over 40% of teachers in Phase 4 schools are “high implementers”, whereas approximately 1 in 4 teachers across these schools are “low implementers.” This contrasts sharply with nearly half of the teachers in these four subject areas demonstrating low implementation and only 5% demonstrating high implementation of the ETP prior to Te Kotahitanga activities in the Phase 5 schools.

For teachers judged to be low implementers of the ETP, many of the classrooms were characterised by challenges such as high levels of student disruption and off-task behaviour, and the teachers did not use positive classroom management strategies to meet those challenges. Nearly all of these teachers failed to state explicit learning objectives or outcomes, and hence also did not express high expectations for students on the task or even state the criteria for success. In most low implementation classes, there was little to no variety in how the topic was taught and the learning activities for students; discursive approaches were absent, and student experiences were not referenced in the approach to the lesson. In a few instances, teachers seemed unable to demonstrate both positive relationships with Māori students and maintain classroom discipline. In other words, the low implementation lessons were not otherwise exemplars of ‘good teaching’ lacking only culturally responsive pedagogies in the low implementation classrooms accompanied these other less than optimal classroom conditions. Our findings suggest that these needs extend beyond those that a project such as Te Kotahitanga could or should be expected to address:

I found too many teachers were trying to yell above the kids... there was too much noise and nobody was really listening, and not much learning.

We found the teacher who was avoiding confronting Māori students in her class. She didn't realise things had got out of control, she wasn't telling them off, and they were being naughty.

Nevertheless, more than three of every four teachers across these Phase 3 and Phase 4 schools were implementing Te Kotahitanga's Effective Teaching Profile at either a moderate or high level. This finding across the curriculum offers strong support for the effectiveness of Te Kotahitanga professional development activities following the model utilised during Phases 3 and 4 of the project, and the observations provide hundreds of lessons across different subjects that demonstrate the effectiveness of this approach to professional development. They also suggest that what teachers are doing as a result of Te Kotahitanga goes beyond what might be termed 'good teaching' expected to be evidenced at fairly similar levels across any sample of secondary schools (we discuss the issue of whether teachers and others viewed Te Kotahitanga as just 'good teaching' in the next section). Post-Te Kotahitanga observational analyses in the future could evaluate in future the effectiveness of implementation of the ETP in the Phase 5 schools.

Exemplars of implementation of the ETP

Our observations across a range of subjects in years 9-10 enables us to highlight exemplars occurring in secondary classrooms that illustrate aspects of the Effective Teaching Profile at the three different levels of implementation. Appendix 7 provides examples of different levels of implementation of the Effective Teaching Profile that we observed across the secondary curriculum in Years 9-10.

As we found some overlap in evidence of some of the dimensions of the ETP, we have listed our exemplars for the following four categories (rather than six):

- Manākitanga (caring for students as culturally located individuals)
- Wānanga (discursive teaching practices and student-student learning interactions) and Ako (range of strategies) combined
- Mana motuhake (high expectations for learning) and Kotahitanga (promote, monitor, and reflect on learning outcomes with students) combined
- Whakapiringatanga (managing the classroom for learning)

The examples illustrate the rich range of activities comprising the ETP and/or missed opportunities. The set of examples are not intended to be representative but based on purposive sampling of snapshots of teaching practice relevant to the purposes of Te Kotahitanga as a professional development programme. Ultimately, compiling subject focused illustrative exemplars such as these could provide teachers and schools with a resource enabling them to self-evaluate and to develop their own expertise by building on and learning from such examples.

Analysis of interview data: A focus on teachers and classrooms

The following section presents an analysis of stakeholder interviews across Phase 3 and Phase 4 schools. This evidence helps us gauge the extent to which the patterns in the observations presented earlier, represent change due to the program. The schools involved in Te Kotahitanga will also have been involved in various other initiatives during this time period. Hence, evidence of particular practices observed in classrooms may be associated with Te Kotahitanga professional development but cannot necessarily be attributed as having been caused by this particular programme. Thus, analysis of the interviews and other data can corroborate or refute claims that changes and improvements in

practice are due to Te Kotahitanga. While still associations and subject to alternative causal hypotheses, the perceptions of teachers and other participants as to whether Te Kotahitanga was a key factor affecting teaching and learning in the classroom are relevant and persuasive.

Interview analysis confirmed the valuing by teachers of relationship-based pedagogies. The majority of teachers believed that the Te Kotahitanga professional development had an impact in classrooms and in their schools. A sample of interviews selected for analysis from Phase 3 schools revealed that 57 of these 59 teachers referred to their own learning and how it was operationalised in their own or others classrooms. In addition, 70 out of the total of 76 teachers interviewed in Phase 4 schools highlighted the importance of positive relationships and interactions in the classroom/school environment if the goal was to improve Māori student achievement. Particular teaching strategies and methods that had a relational/interaction focus and were introduced as part of the Te Kotahitanga professional development were highlighted as being helpful in improving practice and outcomes for Māori students. Analysis of interview data also indicated that teachers held different beliefs about whether the Effective Teaching Profile was different from good teaching.

Three key themes emerged from the final analysis of reported change in the classroom. These included: a) change in teacher beliefs, expectations and understandings; b) change in teacher agency; and c) increased teacher job satisfaction, motivation and empowerment. Sub-themes associated with these included increased teacher experimentation and risk-taking in the classroom; increased understanding and awareness of Māori students needs such as valuing, respecting and including Māori students language and/or cultural knowledge; teacher repositioning, co-construction and power-sharing, teacher monitoring and related assessment activities; and satisfaction, motivation and empowerment as teachers experience success in the classroom.

As indicated in the introduction to this chapter these themes and sub-themes are closely related. For some teachers they believed the change in their own practice had been their repositioning, co-construction and power-sharing with students which had enabled them to ‘care for students as culturally located individuals’. This was how they demonstrated they valued, respected and included Māori student perspectives, knowledge and voice. It also demonstrated a respect for students as contributing to knowledge building in the classroom (reciprocal learning – Ako). For others a significant change was using and pronouncing Māori students’ names correctly in class and using te reo for simple class instructions. This was how they demonstrated in class that they cared for Māori students as culturally located individuals.

Most teachers did not talk explicitly about changing the pedagogical relationship of teaching toward a dialogical model and/or did not explicitly identify elements of the ETP such as:

- Manākitanga (caring for students as culturally located individuals)
- Wānanga (discursive teaching practices and student-student learning interactions) and Ako (range of strategies) combined
- Mana motuhake (high expectations for learning) and Kotahitanga (promote, monitor, and reflect on learning outcomes with students) combined
- Whakapiringatanga (managing the classroom for learning)

However, an analysis of reported change in the classroom demonstrates clear links to these concepts. Teachers associated change in their beliefs, expectations, understandings and efforts directly to their engagement in the Te Kotahitanga programme and its emphasis on challenging deficit thinking and developing collective teacher agency.

Although reported separately, themes of change are interrelated and multifaceted. Other key activities associated with each of these themes are related to other professional development activities including teacher visioning, examining evidence, reflection, planning and monitoring. Participants stressed over and over again that changes and progress in classrooms were the result of teacher engagement in Te Kotahitanga.

Teachers were clearly starting in different places in their knowledge of elements included in the Effective Teaching Profile. For some a major shift included being able to first identify their Māori students, taking a risk and using te reo in class and making a public and sometime embarrassing effort to pronounce Māori students names correctly. Other participant groups, such as lead facilitators and facilitators, stressed that teachers had different professional development needs:

One lady was studying the Bald Eagle, and we suggested that she change the content to look at the Kūkū, you know, something the kids could see. It was minor but it was a big difference to the connection that children had with the material (Lead facilitator).

Rather than de-valuing this shift in teaching practice, the facilitation team acknowledges that teachers are not all the same nor do they have the same starting point in developing culturally responsive pedagogies of relations—they are on a continuum of professional development strengths and challenges.

Māori students in the focus groups appreciated their teachers' efforts. When asked the question 'How do teachers show care for you as a Māori student?' They commented that many teachers' were now making an effort to use te reo in the classroom; they also reported enjoying learning and helping teachers to learn te reo. Students identified other changes including teachers using the Māori date and time, writing numbers, basic commands and greetings and saying students name correctly. They saw it as positive that teachers would use te reo in the classroom, and liked to help teachers with pronunciation. They also appreciated teachers efforts to move away from 'traditional chalk and talk' approaches and were able to identify specific classrooms where they now had a voice in learning activities and teachers were now developing more discursive teaching practices. Students were also able to describe adaptations that teachers had made to the curriculum, including incorporating knowledge from Te Ao Māori and knowledge of youth cultures.

Although participants emphasised positive change within classrooms, they also identified 'ongoing challenges' to improved practice and outcomes for Māori students. The latter part of this chapter discusses evidence related to 'a lack of change' in some teachers' classrooms. Teachers perceived as low-implementers presented a real challenge from the perspectives of different stakeholders. Participants were divided over why these teachers had not changed their practice, stating various possible reasons such as resistance to the professional development, a lack of ownership of the programme amongst some teachers within the school, and/or that teachers needed intensive, specific professional development and targeted resourcing particularly in certain subjects not encompassed by facilitators' curriculum expertise.

Teacher beliefs about the ETP and culturally responsive practices

Analysis of teacher interview data across Phase 3 and Phase 4 schools revealed that teachers held different beliefs regarding the extent to which the Effective Teaching Profile, with its explicit focus on culture, relationships and interactions in the classroom, was different from "good teaching" generally. The majority of teachers who were interviewed were positive and enthusiastic about the impact of Te Kotahitanga in classrooms and schools; this finding is highlighted in more depth in the following section of this chapter where we identify participants' perceptions of change. Some teachers, however, expressed concern over the programme's explicit focus on Māori students indicating they felt that the focus on Māori was unnecessary since they saw Te Kotahitanga as just basic good teaching:

I think it's the same with what would work for any student achievement: clear objectives, clear instructions, interesting subject content, and good relationship with the teacher, I think. I'd say it's the same for any pupil.

I think some people take umbrage with the kind of focus on one group over another, and the way I see it, it's good teaching practice and most people should do it.

I find it really hard that some of it is just so much damned commonsense that I would think I was doing normally. To have to put a label on it, that what I'm doing is part of the programme Te Kotahitanga then I have to struggle with well why wouldn't you learn everybody's names. I mean surely that's what you have to do but then that's what I get told is part of having a relationship with your students. But then I come across some teachers who don't know each student, so maybe I'm you know belittling the programme.

It is not a peculiarly Māori thing to be looking at Bloom's revised taxonomy on them it fits in with what we are trying to do, a high level of challenge so we are actually getting kids to think more independently, think more critically, and think more creatively, which is of course what the national curriculum is all about also. That can be done in a Māori friendly context and it works well for the Polynesian kids, it also works well for a lot of our white middle class kids too, because one of the findings in England was that, lo and behold, that white working class boys underachieving actually liked working with their peers and being in a team situation and not being sort of judged on their performance and rah rah rah, so, for a Decile 2 school this TK stuff has got lovely positive benefits for heaps of the kids. I think, to be honest, it could be used in a Decile 10 school also.

I'm going to say [what's] probably going to be a negative thing, I find it really hard that it's only for Māori students. And I do that for all my students, it doesn't matter if they're boys or girls, if they're Samoan, Tongan, Nuiean or Māori.

A few teachers were annoyed at the project's focus on Māori students, illustrated by the following view that all students should be 'treated the same':

I know the whole project is based around raising Māori achievement ... One of the things that annoyed me the most was all of the methodologies of the Kotahitanga. It was all about what I'd learned in my teacher training, which was about student achievement specialising in one culture. I found that very difficult to actually come to terms with I suppose, the fact that it's so necessary just to concentrate on one when the whole lot would actually benefit. And I have to say coming in as an outsider I don't know who you are. I don't know whether you're Māori, Pacific Islander, European, and there's so much intermingling anyway, for so many generations, that sometimes people don't look like what they assume you know they are. So it's that personal assumption from some of the students that you will treat them in a certain way because they are Māori. I don't see the colour of your skin or anything like that, I see you as a student in my classroom. But that goes against the principles of what the whole project is about.

Other teachers saw benefits for all students, even with the focus on Māori:

Teaching Science, the TK programme has been very helpful but I think it applies to all my students, every student in the class benefits from the same, um, improvement and self worth and concept of why they are at school and what is available to them.

When we start teaching who is Māori and non Māori and then everybody benefits, ok, and then the focus is there on Māori students and we recall the marks and see if they are improving and if there is any issue, we do focus on them but when we start teaching we forget who is Māori and all this and everybody is learning.

Another teacher described perceptions that the initial concerns expressed at the school about Te Kotahitanga's focus on Māori students and on culturally responsive pedagogies had changed over time:

A lot of people, especially initially, were concerned that it was positive discrimination of a nature that was going to not benefit others. But so many years down the track, I think the benefits from the small group that it's targeting is huge and there are the ramifications do spread out to the rest of the class and the school, ultimately.

The explicit focus of Te Kotahitanga relates to teacher beliefs, attitudes, and practices towards Māori students in their classrooms. Some teachers may have misconstrued this programme focus and expected outcomes as these related to overall school responsibility to support all students' achievement. A few teachers did appear to have misconceptions about culturally responsive pedagogies as related to the ETP. For example, the teacher quoted below seemed to believe that the programme required students to be grouped together on the basis of ethnicity or culture:

And as I alluded to earlier ... I can't see myself saying "I want you Māori students to sit there together in this group." It will always be, "now who is struggling with this idea, you, you and you now let's come over here" ... and it's learning needs, certainly in a maths classroom but I can envisage in another context where you'd say 'you people from that cultural background, you present something' but in mathematics it doesn't work that way. And I think it would be inappropriate almost to do it that way, because it highlights culture unnecessarily. It's not what the context or the importance is.

Another teacher did not believe that one could 'care for students as culturally located individuals' without being Māori oneself so cannot be expected to educate students to "be Māori". However, this teacher also expressed the view that students should be able to be who they are at school:

Well as I'm concerned it doesn't work [caring for students as culturally located individuals]. Because I'm not Māori, so I can hardly educate them to be Māori ... On the other hand I don't think it's correct for anyone, I don't care if they are Māori, Polynesian, European, whatever – to say leave who you are at the gate and we just start from fresh. I just think that is totally wrong.

Clearly, our analysis of the teacher interview data indicated that teachers were starting at different places with respect to their knowledge of culturally responsive pedagogies as expressed by the ETP.

Change in the classroom: Teacher repositioning, co-construction/power-sharing and student-focused classrooms

Many teachers talked about experimenting with new teaching strategies introduced to them as part of the Te Kotahitanga professional development programme. A key area of change related to teacher understandings about their role compared to the role of students in the teaching and learning process. Teachers talked about 'repositioning' themselves in the classroom. They described this process as a move away from the 'traditional' 'expert' whereby teachers were viewed as the 'font of all knowledge' and used 'chalk and talk methods' to convey knowledge to students. Across schools there was an increased attempt to actively involve students in the teaching and learning process. Whānau too identified such changes in teacher positioning, particularly the use of co-construction and increased negotiation with students in classrooms. At times they commented on the difference between the traditional classrooms that they had experienced and this new, increased focus on actively involving Māori students in learning tasks:

They (Māori students) have got a really strong relationship and the teachers are encouraging them. I don't think it's like in our days when you were just given a worksheet when you walked in a class; there you go sit

down do your worksheet, hand it in at the end of the lesson, and no communication happens. And now the kids are coming home and saying they've done this and they've done that and they're allowed to speak their mind to a certain extent. When I first heard a couple of things I thought well you know that's giving a bit too much leeway to the kids but you see it's developed in them. They've come a long way.

The teachers know they're not just sort of standing up at the front of the class and just writing up what they've got to do, [they're] kind of interacting a little bit more and getting the kids more involved. That's probably an easier way to learn than just trying to fill them full of information and not really tell them what it's all about. Just teaching te kotahitanga, teaching the teachers to teach our Māori students and be more sympathetic, sensitive to their need, to their learning.

Students were also able to articulate changes that they had experienced and seen in the teachers since the beginning of the Te Kotahitanga programme. A particular noted change was teachers who had moved from the traditional chalk and talk method to more interactive approaches:

My teacher Mr B he was like, just writing hard out, writing hard out and we were like, he'd write it down and it's like all of a sudden he starts being real cool. Laid back and started interacting with us....over a period of time he's become more cool....more interactive with the students. (Māori student)

According to different groups who had observed such changes, teacher repositioning involved negotiation and co-construction of learning and behaviour strategies, whereby student voice was welcomed and acknowledged. There was an attempt by teachers to develop more discursive teaching approaches, necessary to enhance student motivation, engagement and achievement. Others emphasised the shift to more 'student focused' classrooms whereby students were expected to take responsibility for their own and others' learning and behaviour. Teachers spoke about experimentation with paired, group and cooperative learning activities. A common report was that teachers learned through such experiences that students were often 'the best teachers' for their peers, and many school personnel described this process as a profound change:

I was a traditional classroom teacher, forever, from way back. My job was to provide knowledge for the students. Their job was to use that knowledge in a wise way, but the whole exposure to Te Kotahitanga makes you question what you're doing in the classroom. That shift to the discursive rather than traditional has actually opened a whole lot of doors, in terms of what you can do in the classroom, started to question the whole foundation on which you built your concept of teaching. And that in itself has been a valuable experience [particularly] in light of the new curriculum coming in, which actually supports much of the fundamentals of Te Kotahitanga. If our staff were fully there, it'd be absolutely fantastic, but it's a progression, a progressive process. (Deputy Principal)

It was a paradigm shift between what you (as a teacher) perceive as power or control or authority in the classroom, you don't lose that by sharing it, and I think that was a major paradigm shift. You don't actually become weaker, you become a stronger teacher by sharing it [power with students]. (Head of Department)

The whole process has been good for me... Getting me to reflect on my teaching and the learning that is happening in my classes. That reflection and time given to that is important and I think that is embedded in the Te Kotahitanga programme. So... things like teacher positioning in the classroom... to the type of questions that I ask ... how to stimulate student interest and questioning ... it's all good. I think it gives teachers tools to add to their kete. (Teacher)

Teachers also talked about the importance of co-construction approaches, negotiating with students to get their input into processes used in the classroom. Teachers discussed this as a strategy for engaging and motivating Māori students.

Using the process and the culture, like in our behaviour rules that we co-construct. One of the things that we've done for this term, which has come from one of my year tens boys who is Māori, is that we've negotiated to take our shoes off at the door before we walk in. So our shoes stay outside.

We did health promotion in term three, and I didn't pick the topic, all I said was "we as a group are going to pick an issue that affects your local community and we are going to go out and do something about it. We are going to go out and physically promote the issue and we are going to make a difference. We don't have to change the world, but we are going to make a difference." And so this was over a term. The girls decided that the issue affecting health, and it was not really necessarily physical health, but social well being and mental health and spiritual health. Was the graffiti around [the school]. And so we did some promotion in assembly about how tagging had that affect. And then we actually went out on a class trip and we actually painted the fences at the local park with the tag out trust. And they loved it, and they worked so hard... And not only have they got a sense of what people can do, that there are these community trusts working in our area and stuff. But a sense that now they can make a difference, or they can change something if they don't like it... so that would be something directly linked to their world and their community.

I think it's important that students have that input into their own learning and we've done a project based on a Māori sculptor. And part of that project, I integrated the Māori students into helping me to come up with that project and asking them, what would be really a good project for you to do that would be interesting for you? And I think it was one of the most successful projects that we've done this year, and that came from the students.

Reciprocity, with teachers sharing their own lives and interests, was also considered important in establishing positive trusting relationships in the classroom, according to several teachers. Again this was viewed as a form of teacher repositioning--as moving away from *'the traditional teacher who did not smile until Easter'*. In this way students could also reciprocate by letting the teacher know more about their lives and interests outside of the classroom. This was considered useful knowledge in creating learning activities that were relevant to Māori students:

it's also about sharing a bit of me as the teacher... so that they feel comfortable sharing some of their own knowledge and experiences from outside of the classroom with me... and that's important knowledge to have because I can use that in my teaching to link into things that they are familiar with, and their prior knowledge. So it's also creating learning contexts that they are familiar with. (Teacher)

Many participants explained the difference that engaging in the Te Kotahitanga professional development had made to teachers' practice, with a focus on creating more student-focused classrooms. A key strategy for developing such a classroom climate was through paired activities and cooperative/group learning. Developing more cooperative classrooms meant that students had to take responsibility for their own and others learning and behaviour. Through describing changes in their classroom practice, teachers also emphasised that they had learned about the value of structuring learning activities whereby students were expected to learn off each other. At times this had been an uneasy process of some teachers, who had not previously seen the value of such approaches:

I used to be very put off by doing group work, because I was much more goal-orientated, and holding individuals accountable for what I wanted done now, and I push my thing from the front. Working in groups didn't gel for me in terms of the kinds of things I was stressing about. And as soon as I found out about it I thought, oh, this is going to be a huge waste of my time, having to sit back, and structure groups, and then

allow them to work in groups, and provide them with some resource material, maybe assistance, just facilitate for them, but leave them to it, to a much greater extent than I normally would. I would want to be intervening there, much more. And I found the fact that I could actually leave, that—well, for me personally—that I could change my methodology. But then, to see them respond, and then later when I look at the results and the work, you know, even when we do pieces of individual work further down the line and I then I go back and I say well, this is great, where did you get this from, and they said oh, it came out in the discussion, during that day when we were working in groups. (Teacher)

...I think its [the Te Kotahitanga professional development] making the classroom less teacher focused and more students focused... in the past I was very business focused... come on in and do this and this... whereas now I trying different techniques, like the group work or think-pair-share so that the kids can talk about their own ideas or share their own experiences... and those discussions are valuable... and I think I've grown as teacher through the Te Kotahitanga programme... because it's made me aware much more of the students' own perspectives, and what they are interested in and their skills and abilities which I can use in the classroom. (Teacher)

I used to have my desks in rows. And I've only just this year put them into groups,I love kids sharing ideas..... it enables them to share You know, you can learn from each other... so I will use them a lot more. (Teacher)

Students were able to identify and describe teaching methods that they preferred. They appreciated their teacher's efforts to improve classroom practice and outcomes for Māori students. Changes that they identified included group arrangements for learning, positive social relationships in the classroom, peer teaching activities, self assessment and added resources such as coloured cards and activity cards. Several student groups specifically stated that they had seen some teachers changing their teaching at school:

It's because she is fun, she makes it interactive and it's like you learn more, and we do book work but not all the time. She's on our level, and it's as though she is one of us, not like a teacher, she's like real cool and will get in there with you. Not like other teachers, here's book work go and do it, she'll give us mean activities to do, like fun and you can work with your whole class instead of just like this ... like our whole classroom does it together and then we can do it in groups, it real cool, and she does positive learning tips at the start, you're not allowed to be negative, no putdowns... commitment and respect, it's real cool.

Practical methods like doing things or working in groups and always that whole class not so much individual. You can find out, like help each other; each other's opinions.... I find that working in here is really good because it's a comfortable environment.

Changes in teacher beliefs, expectations and understandings

A major theme emerging across Phase 3 and Phase 4 interviews was the extent to which participants believed the professional development had changed teachers' existing beliefs, expectations and understandings about Māori students and how to best cater for their learning needs in the classroom. Teachers and other school personnel reported significant shifts in teacher understandings of the importance of relationship-based pedagogies and policies for supporting Māori student achievement. Many participants emphasised this change:

At the start I wasn't aware that the learning method, the social method would be widely advantageous to them; the style of learning would be culturally bound. But once you're made aware of that, and you think about it, you practice it a bit, and you look at it—you know what I mean? And yes, I can see the change, and

I can understand it. I found it inspirational, because when you get to my age, we've been through so many educational changes. (Teacher)

The message that they [the teachers] could get their heads around was that relationships were not scary, and they unpacked relationships. The relationship word had a much deeper meaning for them by the end of that first hui. I believe we are in a better place in terms of professional development than we have ever been. We have a level of pedagogy, discussion and language view that is way ahead of where it was 4 years ago. (Lead facilitator)

I had [a teacher] come in one day and say, 'I can see what you guys are saying now, the relationships with my students is so important.' Whereas before they were stand-offish and cold. [The teacher said she] just didn't know that just relating to kids could make such a difference. Most teachers now know who their Māori students are. (Lead facilitator)

A common report was how the professional development had raised teachers' 'consciousness' of Māori students and their learning needs in the classroom. Teacher reflection on existing biases and assumptions, particularly in relation to low expectations of their Māori students, was a fundamental change:

Expectation, definitely. Because before Te Kotahitanga, I did drop into that trap of thinking, "Oh, these difficult Māori students, I'll just never get through to them. Whatever am I going to do with them?" I didn't give up on them, but I did develop this view just not to expect as much from them as I would from other students, and that has changed. I do now have the same expectations of them as of the other ones. Sometimes I have to work a little harder to get there with them, but it certainly makes a big difference. (Teacher)

As indicated in the quote above, it was not enough to simply raise awareness of deficit thinking. Participants emphasised that teachers' collective effort and agency were considered essential if positive changes were to be made to teacher behaviour and Māori student outcomes. In describing amendments to teaching practice, participants expressed explicit awareness that teachers' expectations for Māori students had changed and that an enhanced sense of agency meant that they now worked harder to get results:

I've been really impressed by the way teachers are relating to kids. That's been the most powerful thing that I've really seen. The way in which they interact with students—the relationships, the caring thing, the high expectations... The idea of standing up in front of [the students], the traditional teacher, that's been the biggest change. (Lead facilitator)

I'm trying to push that along too now, to where they take responsibility for their own learning. (Teacher)

Māori students were clearly aware of and sensitive to teacher expectations. As indicated elsewhere in this report, they appreciated the efforts of teachers who drove them to achieve at their personal best at school:

Like some teachers will push you to what, the level you should be at and some will push you to go further and it's better because like, yeah they make you feel like a better person.

Some teachers did discuss lags or gaps in Māori students' achievement or confidence. Despite general statements that expectations should be equally high for all students and a commitment to preparing students to do well, many teachers were not specific about their academic expectations. Instead, they focused on wanting students to learn more in general, pass particular modules in their classes, or attain only NCEA Level 1 rather than aiming for higher level NCEA certificates. Encouraging students to complete at least Level 1 or Level 2 before leaving school could have actually have

a negative impact if interpreted as evidence of low expectations. The teachers who made the following statements may not have realised this implication of what they clearly saw as encouragement:

So what I keep telling year 11s is you must leave with at least your level 1 certificate, NCEA.

I think today what's important is that they can achieve to get level 1, level 2 NCEA at a minimum, and guiding them so that they taking subjects where they are going to be able to achieve. So not throwing them in where it's too deep and they're not going to cope perhaps.

Expectations communicated can, paradoxically, carry quite negative messages that could make students wonder why they should bother:

You must leave with at least your level 1 certificate, NCEA. Because you can't even get a job at Pack and Save without that. So that's the most important thing, for Māori students, because the statistics are so awful, but the knock on effect is for all the other students as well.

Early in the development of the NCEA, attaining the Level 1 Certificate may have been considered an achievement for some students. Expectations nationally have shifted to a higher level, and the educational priorities in New Zealand for 2009-2014 now include the expectation that students leave school with no less than a Level 2 Certificate (Ministry of Education, 2009).

Change in teacher agency

Improved teacher agency was considered an identifiable outcome of teachers' engagement in the Te Kotahitanga professional development programme. Participants identified specific changes in teachers' efforts as they took on responsibility for improving practice and outcomes for Māori students. Teachers were challenged to learn and experiment with different approaches in their classrooms. A key change appeared to be how teachers worked to get to know their Māori students as individuals and their interests and experiences outside of the classroom:

I think ... [the] big key thing that I've noticed is that I really make an effort, is trying to make a relationship with the Māori students in class, to show that you're interested in them and you care about them, not just in your subject but other things ... I always try and make an effort in my other year 10 class as well which has got quite a lot of Māori students ... I ask what they've been up to in the weekend. I ask how ... does this relate to, you know, things that you've done before. And what kind of things can you do in the future because of who you are to help you in this kind of area. And... just basically taking an interest in them I think is the biggest, biggest ... and make you know that ... make them know that we care about their learning. (Teacher)

Most definitely it's looking at the relationships of kids. Now I'm always going to say when the kids come in "g'day g'day, how are you?" but just take it that extra step further, like... "oh how'd the weekend go?" or "whereabouts have you come from?" just building that relationship..... And then I can take it a step further, "oh what did you do on the weekend? Did you catch any fish?" you get to know the different kids and what they do on the weekend. Someone who likes hunting or surfing or whatever they like, and you can ask a specific question. (Teacher)

The number one thing I've seen is teachers do talk to students. I know it sounds strange, but actually converse with students rather than just talk at them, to see students as individuals and see them as people who bring all sorts of things to their classrooms [including] their own ideas about the world and the way they see themselves in it and how they are going to use that within their class, to affirm it and to also support students in their learning. (Lead facilitator)

Māori students appreciated the efforts that their teachers were making that demonstrated teachers valuing student knowledge and which communicated respect for students' ideas and prior knowledge. Students spoke positively about teachers who helped them in class, made them 'use their brains' and monitored their progress while also emphasising respect and caring:

If you tell them what you want to learn, they'll incorporate it, let you choose what you want to learn.

They respect us as Māori.

Whānau also reported that they had noticed changes in the school and the teachers. Many commented on the importance of strong teacher-student relationships and teacher's encouragement of Māori students and their achievement. They appreciated the effort that teachers made as they worked to improve practice and outcomes for rangitahi:

Some of the teachers have clearly changed and they're really come on board, I'm not sure about all of them, but that's a start, at least that's a start.

I also feel that the teachers that are involved in this programme, you know, they're special within themselves, and they actually sort of exert themselves more I'll say, by taking an interest in the Māori students and they're not just a number, okay. They sort of have a more personal interest in the students and their ability, and they try and get them to excel to their highest, and I think without that, a lot of them would sort of not be where they are.

Any programme that that this school thinks that will help our Māori students, they're willing to look at. And even for the teachers: I mean, I've just started here as kaiawhina, and I've been listening to their staff briefings, and you know the teacher standing up, te maire, you know even if they can't pronounce it they're still giving it a go.

Change in teacher efforts, understandings and practices: Valuing, respecting and including Māori students language and/or cultural knowledge

Many participants emphasised that an important part of establishing and maintaining positive relationships with Māori students involved the ways in which teachers valued, respected and included Māori students' cultural knowledge in the classroom. This meant teachers learning to use a variety of concepts and materials that students could relate to and that were familiar to them.

[It is most important] In my subject relating, using what they have got, for example in this community using Māori knowledge and resources to reinforce concept. For example in level 1 NCEA when we did transformation, rotation, reflecting—and I used a Māori design—kids love drawing Māori design, they did research around Māori design—had to relate them to transformation, reflection, rotation. Using what they have at home—using their knowledge they're really into it. As a result 95% of them passed the assessment. (Teacher)

For me, I think the teacher-student relationship is one of the most critical things. As [another Facilitator] was just saying, we're seeing a huge improvement in our school. But the other thing that we are seeing a lot more of is relevance to the student, trying to apply the work in a way that's relevant to them. So that's sort of our big C little c, in involving their own culture. Whether that's their Māori culture or their youth culture or whatever type of culture they bring to the classroom, letting you use that in the classroom and it's appreciated. (Facilitator)

Definitely putting things in context so if I was to do a Maths example I would try and put it in either a Māori context, so if I'm doing a word question I would try and do it so that they were measuring the floor

square of a marae. Or if we were doing geometry we'd be doing something like this. Probability we'll start, we'll put it in context and we'll use names or we use Pacific Island names so as opposed to the Jack and the Bill and the Jane and all of that sort of thing. (Teacher)

Teachers' efforts to include more Māori concepts were recognised by these Māori students:

The teachers always tell us like how Māori were the first people to come to NZ from Hawaiiki.

In Science, (the teacher) told us about the water cycle, when it rains it's Rangi, he was crying for Papatuanuku.

Science, we're learning about living things—she did like all these flax things and had to find all the Māori names and things.

In art, we are doing a project that involves all different cultures, Māori, Pacific Island. She gets involved with Māori stuff. For example, we did an ink print that used an organic shape, and involved Māori and Pacific Island patterns, Even though it was art, we learned protocol, like how to cut and work with flax.

Māori students appreciated their teachers' attempts to learn about what interested them:

She brings us into the conversation she asks questions like why they came and how they came, when I first came and why I am doing this—I don't know about the migration story, I've learnt stuff about Māori migration that I didn't know.

Its fun, you get to teach them.

Some teachers talked about personal learning in relation to Māori concepts like mana and manākitanga and their relevance to teacher-student relationships within the classroom.

Just to take on board the big Māori concepts, I think looking after the mana of the student in particular. ... I also think one of the things that I'm certainly learning over the process is ... that attitude as a teacher ... to learn how to engage in conversations with your students is really important. It's probably one of the most valuable things that I've been getting out of the process. 'How am I going to take the students forward while maintaining- the mana of that student.... I've found it really important to personally take on some of the Māori terminology and the mana framework... And I also think that when I'm engaging with particular students, those central Māori concepts ... things like manākitanga, how am I actually-? So ... you are going right back to the Treaty in the sense that you've got both the European and the Māori framework operating side by side....And just and awareness of the fact that Māori students are tangata te whenua and ... the way that I'd approach them. So increasingly I'm finding myself thinking in that kind of bicultural way while still carrying on a lot of the practices. But it's kind of got a focus and a clarity to it that I wouldn't have necessarily had before

Teachers discussed trialing new strategies in an attempt to encourage and build relationships with students, such as recognising the importance of students' culture, using te reo, taking the time and making the effort to take an interest in individuals, sharing decision-making power with students, remembering names, and using correct pronunciation of Māori names and words:

Using Māori greetings. Saying 'Kia ora' to the kids as they come into the class. For me that has been a very new thing, and I've found it quite challenging because my pronunciation is not that great... it's improving and the kids are happy to give me feedback... I think it helps to build that relationship with the kids.

What have I learnt from TK I suppose some of the structure initially I suppose there's having power sharing or whatever, sharing intentions but trying a variety of activities but still structured so that the learning [takes place] in a caring environment, sort of structured caring environment with expectations at the same time. I guess that's very much having things like 'Do Now' so the set up is there but also trying to make things accessible for the kids as well by types of questions and how you structure those in.

I go into a classroom and I say "Kia ora" and the response is brilliant, you know they go "kia ora Miss" and I would never have done that before and it's just made me think. I think it just taught me basic words to use and you know they appreciate that, they really appreciate that and I guess I wouldn't have necessarily done that beforehand.

Māori students in the focus groups were able to describe teachers' efforts to use te reo in the classroom; they reported enjoying learning and helping teachers to learn te reo. Students identified teachers using the Māori date and time, writing numbers, basic commands and greetings and saying names correctly. They saw it as positive that teachers would use Māori in the classroom, and liked to help teachers with pronunciation.

Some try to talk Māori. They ask you Māori words. I appreciate it when they do that.

Mr B, he gets up and does a whaikorere and tried to learn our karakia that we do.

If she's reading a story and it's got some Māori words in it she'll look to us and then be like 'Is that OK? Is that how I say it? And she includes us in everything.

Yeah we help them out, we felt really cool that they actually try and give it a go.

Changes in the classroom: Teacher monitoring and related assessment activities

Another key change identified by many participants related to teachers' increased monitoring of Māori students' on-task behaviour and their use of new assessment activities, such as explicit use of learning intentions, feedback and feed-forward. Related to this sub-theme is the activity of teachers being better able to identify their Māori students in class. Many times participants told us that before teachers had been part of the Te Kotahitanga programme, many did not know who their Māori students were and/or how they were doing in classrooms. Participants talked about being able to better identify their Māori students; this was a key expectation of their engagement in the professional development programme. Being able to identify Māori students in class was essential and linked to broader monitoring and related assessment activities. For example, teachers were seen to be circulating more around the classroom in order to monitor better Māori students' work and engagement. Participants explained that teachers made more of an effort to clarify the learning and achievement focus for students.

Being aware of making the students more aware of what they're learning, so, hence the learning intentions. But my success criteria don't come from myself, I'm more um about the kids so I try to get "well, how are we going to learn this?" and they usually come up with it. (Teacher)

So coming today we were looking at a formative assessment. There are summative assessments still about four weeks away. But we needed to them to find out [how they're doing] now. And what they need to work on before that summative assessment. They knew that before the class and they'd been preparing for it and

were quite excited about it. The task then was for each of these small groups within the class to come up with their personal style on delivering the same script which was the chorus piece from Romeo and Juliet right at the beginning of the play. To focus them, we had a recap, to make sure that everybody was on board, knew exactly what had been done up to that point. (Teacher)

Relationships (have improved), and I think too the way [we are using] a lot more peer cooperative group type work. Teachers circulating [around] the classroom a lot more. I think too a lot of staff have actually worked quite hard to clarify the learning within the class by basics like learning intentions, success criteria. (Lead facilitator)

Learning to interact differently with students by focusing on teacher questioning and using feed forward was an important goal for many teachers.

I know the thing I've had to work really hard on has been using ... Feed forward, questioning, and that kind of thing. Because we [teachers] know the knowledge, and as an adult who knows the knowledge it is so hard not to go "it's this, lets move on."

Teachers discussed their realisation that Māori students would achieve if classroom instruction is engaging, and that through Te Kotahitanga they became aware that they have power to make instruction more engaging:

Student engagement is at the core of the observation. I mean, there's the vast array of things that is observed, but student engagement is probably the one you focus very much on. In a way, starting with the student as opposed to what the teacher does, it's pretty hard to argue with that, if they're not engaged they're not going to learn, so they're not going to achieve so in a way it is starting with the student and then working backwards, 'how are we [going to] engage them more' as opposed to saying 'here's a brilliant idea lets all go and do.'

Increased job satisfaction, motivation and empowerment for teachers

Many participants interviewed across Phase 3 and Phase 4 schools believed that other major changes they attributed to Te Kotahitanga was increased job satisfaction, motivation and empowerment. Teachers who experienced success with new approaches in the classroom were now perceived to be more satisfied, energised and motivated. Teachers often described their engagement in the professional development programme as stimulating; something which brought a new vigour to their teaching. Others were enthusiastic about teachers experiencing success in the classrooms, particularly as they trialled new teaching approaches. Many perceived that a key change was increased satisfaction, motivation and empowerment for teachers:

I thought it was great because I was a new teacher and it was giving me all these strategies and keeping me motivated and, um, giving me constant feedback... (Dean)

I feel passionate for what it does for teachers in terms of their practice and their job satisfaction. It's fabulous to come out of a classroom and to have students who have done well and who enjoyed themselves, you know, it is also that same buzz from seeing a teacher who comes out of a classroom and the class has gone well and the students have learned something, they enjoyed a laugh, they feel as though they have gone somewhere together and the teacher said 'Wow, is this what teaching is about?' Rather than, you know: My gosh, I need a glass of wine. (Lead facilitator)

So you know this is it's a fantastic thing for a teacher, particularly you know, for a middle aged teacher like myself, being able to get that opportunity to grow and develop. (Head of Department)

One of the main benefits of Te Kotahitanga for me is that I feel as though it empowers teachers. Before Te Kotahitanga here we got lots of people talking about, you know, those kids—their homes are awful, this is bad, I can't do anything with them. I'm a realist and that does still happen. There's a lot more talk about what's happening in the class, what can I do sort of thing. We can do something while those kids are here. (Lead facilitator)

The quality of the professional development was appreciated by many participants. Teachers were motivated by seeing change in their classrooms and across their schools and being part of a process which emphasised collective agency:

I don't think in all my years of teaching I've come across a programme that focused the way Te Kotahitanga does on relationships and then making other things fall into place as a result of that.

I just think it's been a really positive thing. In a way, sometimes I look at some students and think has this really made a difference to you, but I think for myself I've gained heaps through changing my teaching practice, that's the one thing that it's really done for me. More than any other sort of initiative, I guess, this initiative has had an effect on [me] so that when I go into the classroom or before, in my planning, I really spend a lot of time thinking, what can I do to make this [work].

Working together, with the students, with the families, with the other teachers in your cluster, to achieve those goals. And using all those strategies that we've been taught: the feed-forward and the feed-back and the big C and the little c, and all those things. It definitely is working.

Ongoing challenges—A lack of change in some classrooms

Teachers' engagement in the professional development programme was perceived to have enabled positive change in both practice and outcomes for Māori students across Phase 3 and 4 schools. Nevertheless, participants also identified 'ongoing challenges' in the attempt to improve practice and outcomes for Māori students. A key challenge was how to overcome a lack of change in the classrooms, particularly for teachers who were perceived as 'low implementers' across schools. Results from our analysis of classroom observations indicated that as many as one in four teachers did not master the dimensions of the ETP sufficiently and were not implementing the ETP according to the professional development activities provided.

Participants believed that a number of different factors contributed to this lack of change in some teachers' classrooms. For example, some participants believed that teachers were just very resistant to the professional development programme. This is covered again in more detail in chapter 5 'Impact on schools' and relates to issues of ownership in the reform programme. Other participants perceived that the professional development programme did not cater for teachers at different ends of the improvement continuum. They believed there was a need for specific, targeted professional development and resourcing. Specific areas of perceived need included teachers' ability: to acknowledge and apply relationship-based pedagogies; to have high expectations; and effective classroom management. Finally, some teachers who were interviewed believed that they needed further professional development, support and/or access to resources if the goal were to continue to improve practice and outcomes for Māori students.

Some participants acknowledged that there were groups of teachers who struggled to understand the importance and impact of relationship-based pedagogies for Māori students:

And there are some people who still can't get their head around this whakawhanaungatanga. There's teachers here that still can't get their head around that. (Lead facilitator)

The teacher in science like she's really old school and she just writes and writes (on the board) and I don't understand anything. (Māori student)

Working with teachers who struggled with major classroom management issues was particularly challenging for facilitators:

Acknowledging that there are some situations that are above you (as a Facilitator), like major classroom management issues. (Facilitator)

This teacher acknowledged that in an attempt to share more power with their students, he had tried to negotiate everything including behavioural expectations:

I really lost control of the classroom and I had to work hard with the lead facilitator to get it back... I just went overboard with it. (Teacher)

Whilst it was considered important that teachers made the effort to get to know their Māori students, several participants emphasised that this could not be at the expense of teachers' high expectations. It was seen as important that teachers were challenged to develop high expectations alongside positive relationships. Students needed to develop a responsibility for their own and others learning and behaviour if all were to achieve, and this required teachers to set 'non-negotiables' in the classroom:

Sure if you have a positive working relationship it helps... but you need to, as the teacheryou ... need to have clear and high expectations for the kids... don't threaten things that you're not going to follow up on... you need to have clear consequences for things.. and that's not just for Māori kids that' for all kids... you need to recognise and celebrate their achievements... and you need to challenge them to 'step up' and if you set that challenge for them and help them they will do it... they can achieve... I'm quite tough on my kids... I set up my classroom so that they have to take responsibility for themselves but also the others in the group... We have rules and guidelines for working in this class... and there are also clear consequences if those rules are broken ... if kids are off-task and distracting their mates then that affects the learning for all... so it's not all luvy, duvy... (Teacher)

Māori students also believed teachers needed a clear sense of challenge in the classroom, associated with high expectations and positive classroom management. They expressed frustrated when their learning was interrupted by the misbehaviour of their peers and/or the teacher's inability to deal positively and firmly with students' disruptive behaviour:

Sometimes when students, they distract the class, it stops the teacher so he or she can't carry on. Like the whole lesson is planned out. And it can't carry on because a group of students are disruptive. (Māori student)

Some days, like in my class, and some day actually like, mostly every day, every class, is really—is really hard to learn because there is always a front group of guys that are always talking away, just throwing stuff at the teacher and stuff, and they don't care, you know? (Māori student)

Several teachers who were interviewed believed that they needed further professional development, support and/or access to resources if the goal were to continue to improve practice and outcomes for Māori students. A particular challenge appeared to be related to the teaching of specific curriculum areas and the resources available to them as they worked to develop more culturally responsive pedagogies:

I need to bring more cultural aspects into my teaching. You know look for things that could apply, which is not always easy, because sometimes I go in the chemistry route in the senior years, it's just trying to find some good cultural [resources].... And to quite academic subjects, like when you are doing construction of the atom and you are doing protons, electrons and neutrons, it gets quite hard. (Teacher)

(Asking them about their culture and sharing with the class) ... One of the things we were, among ourselves talking about, is how helpful it would be for somehow, either the subject area professional associations or something, help on the website or in books or something, so teachers could see subject specific ways.... I would also like to see more people in my area of region taking part in TK so we can meet and share ideas, just to get it a bit more established as well, and ideas flowing. And then obviously I wouldn't have the issue I have with my mentors at the moment which is a bit of a subject barrier. (Teacher)

Other participants expressed beliefs that it was 'tricky' or 'difficult' to relate to Māori students' culture and cultural knowledge if they were teaching particular subjects.

Well you just have to be understanding of their culture, so if you are a non-Māori teacher you need to learn about it and then you need to be able to link with them somehow, and there is always a way, with their culture. And include that somehow in your lesson. Which is tricky for me for French. ... Caring for students...I guess you are inclusive of their culture which is bringing it back into the classroom. Asking them about their culture and sharing with the class, So I'm sort of trying to compare with New Zealand, but then with the Māori as well against French, so that makes it a little bit tricky. (Teacher)

That is what has been so difficult in science, bringing the cultural perspective into science. It's quite difficult, depending on what topic you are teaching and how are you going to get the cultural perspective into science. It's quite difficult there. (Teacher)

There is a difference in being a PE teacher [to] other classes [where] kids have to sit at desks ...[in PE] ... we can have kids interacting and participating. It's a challenge for the other teachers to get kids engaged and how they do it for such a long time. (Teacher)

Yeah, in maths it's difficult [to integrate culturally responsive pedagogies]. (Teacher)

Different teachers and facilitators across schools also perceived that if facilitators had specific expertise and previous teaching experience associated with the teacher's own curriculum area, there was a better chance of making progress in the classroom. This issue is also identified and discussed within the chapter on professional development.

Key findings: Impact on teachers' classroom practice

- Classroom observation results indicate that the majority of teachers (approximately 75%) evidenced either moderate or high implementation according to objective assessment using criteria based on the Effective Teaching Profile.
- More than one in five teachers demonstrated a high level of implementation of the Effective Teaching Profile in Year 9-10 classrooms across subjects and schools.
- Major changes reported by teachers who were interviewed which they attributed to Te Kotahitanga professional development were: (a) change in teacher beliefs, expectations and understandings; (b) change in teacher agency, and (c) increased teacher job satisfaction, motivation and empowerment.

-
- Sub-themes associated with these changes included increased teacher experimentation and risk-taking in the classroom; increased understanding and awareness of Māori students' needs such as valuing, respecting and including Māori students language and/or cultural knowledge; teacher repositioning, co-construction, power-sharing and student-focused classrooms; group work and cooperative learning approaches; teacher monitoring and related assessment activities; and an increase in teacher satisfaction, motivation and empowerment.
 - Interview analysis confirmed that teachers valued relationship-based pedagogies, and the majority of teachers affirmed that Te Kotahitanga professional development had an impact on classroom instruction leading to enhanced outcomes for Māori students as well as for all students. Teachers held varied beliefs about the extent to which the ETP differed from good teaching generally.
 - Most teachers were able to highlight particular teaching strategies and methods in their subjects introduced by Te Kotahitanga that had a relational/interaction focus towards improving practice and outcomes for Māori students.
 - Observational data indicate variability across subjects and schools in the quality of implementation. On average, one in four teachers was not observed to be implementing key features of the Effective Teaching Profile. In addition to an absence of mastery of culturally responsive pedagogies of relations, students in these classrooms experienced an absence of explicit learning outcomes, criteria for success and high expectations, along with high levels of off-task and disruptive behaviour at levels likely to interfere with learning. The PD needs associated with low implementation of the ETP go beyond factors that are the responsibility of Te Kotahitanga and would seem to indicate the need for good teaching support generally.
 - Interview analysis identified ongoing challenges in the attempt to improve practice and outcomes for Māori students. A key challenge was how to overcome a lack of change in some classrooms, particularly for teachers shown and perceived to be low implementers.

Chapter 5: Impact on Students

The overarching question for the Te Kotahitanga evaluation research is: *How well and in what ways does Te Kotahitanga work toward the goal of improving Māori student achievement?* To evaluate the impact of Te Kotahitanga professional development for teachers on outcomes for students, three broad categories of student outcomes for Māori (as well as for all students) are relevant: student achievement, student behaviour, and student attitudes about their learning. We investigate the perspectives of teachers, principals and other school leaders, Te Kotahitanga facilitators, family/whānau, BOT chairs, and Māori students regarding outcomes for Māori students including their achievement. We also report available data on achievement and achievement-related behaviour sourced from schools, the Ministry of Education, and the NZQA to investigate for changes over time associated with implementation of Te Kotahitanga.

Te Kotahitanga is focused on teacher professional development for the purpose of enhancing Māori student achievement. Nevertheless, there is a risk associated with any initiative to raise student achievement if deficit theorising is allowed and legitimised as the explanation for lower achievement outcomes. The messages associated with Te Kotahitanga are not deficit oriented: Instead, the emphasis is upon the acquisition of new skills and understandings by school personnel so that teachers and schools are culturally responsive to Māori as the primary approach to enhancing Māori achievement. Whānau put it best:

When Te Kotahitanga was first introduced at this school—I think some of the kids got the wrong message, because it was like Māoris[sic] aren't brainy enough and that is why we need this programme. So that has been an assumption, and unfortunately some of our kids have picked up on that stereotype of Māoris[sic] are underachievers, and they have lost that connection to our tipuna then they don't know about how clever as a people we are, our links back, our tipuna were creators, composers of kapahaka, moe te te (mōteatea), artists, navigators, entrepreneurs, business people, chiefs—so my question is back to the school—How is being Māori valued here at the school? What messages are kids picking up?

The extent to which schools become culturally responsive for Māori is the first step on the road to enhanced educational outcomes. Teachers are challenged to assume agency for Māori student achievement in striving for culturally responsive pedagogies and must confront deficit thinking rather than seeing underachievement as primarily a student or family problem. Hence, we introduce this chapter on student outcomes with perceptions regarding the place of Māori identity in Te Kotahitanga schools.

Learning and belonging as Māori

Educationalists emphasise that a sense of belonging and feeling valued are key to student engagement in school leading to enhanced achievement outcomes. As one teacher put it:

For me it's I like the inclusiveness of it, me being included in their world as much as them in this world. But for me that's the neat thing about Te Kotahitanga is the inclusiveness of them in the classroom too ... the manakitanga concept that we've all wanted to have ... in the classroom. Where everyone feels that they are cared for and they are acknowledged and that they look after others.

The cultural features of schools can “match” the cultural identities of some students but represent a mismatch for others. Ironically, New Zealand schools can be a mismatch for Māori who are the tangata whenua of Aotearoa, such that the cultural identity of schools as social systems, the cultural foundations of mainstream curricula, and the majority of school personnel all differ in crucial ways for Māori. School achievement is not simply an academic matter, but is a composite of multiple influences and outcomes for children and their communities.

School personnel on Māori student identity

Facilitators emphasised the importance of creating schools that are safe environments for all students to learn, where all students feel they belong, and where students can bring valued experiences to the learning process. They perceived that cultural safety had not been a common experience for Māori students in the past. As one facilitator put it:

I think the most important thing is for teachers to create an atmosphere in their classroom where the students feel safe and comfortable and is an environment in which they can learn. Because I think in the past there have been a lot of students, Māori students, have not felt comfortable. They have not had good relationships with the teachers and I think this programme is helping the teachers to build good relationships and therefore create that safe environment.

Although many teachers noted the relevance of culture to teaching and learning, few discussed specifically the development of a culturally-grounded identity as an educational outcome for students. Most teachers seemed to view “caring for students as culturally located individuals” as walking a line between acknowledging culture and stereotyping cultural characteristics. Some teachers did give examples, however, of how the programme had made them aware of cultural identities and what it meant to students to be able to learn as Māori:

I think it's important that Māori students feel comfortable coming into my room... that they can be themselves... and that also means that I show respect for their language and their culture ... so little things like using Māori phrases, working hard to get my pronunciation right... but also that I show that respect for all the different ethnicities in my classroom... Classrooms shouldn't be monocultural... that's one thing that I picked up from the TK PD... that you do as a teacher make an effort... I'm a New Zealand European and I think before this programme I never really thought about kids' culture or their background, whereas now I make more of an effort with establishing relationships.

Teachers were also able to express the importance of acknowledging Māori students as Māori as integral to promoting Māori student achievement:

That's ... the beginning of promoting Māori achievement. Know them as Māori and respect them for that, and also that it's an honour to be Māori and be proud of your culture.

School leaders such as Deans, Deputy Principals and Heads of Departments at the Phase 3 schools in particular included cultural identity as an important student outcome they hoped would be promoted by teachers as a result of their Te Kotahitanga professional development activities. Among the varied and multiple benefits they saw for students as a result of the programme, these professionals wanted students to perceive that their Māori culture was valued and respected. They also expected there would be specific evidence of these values and respect, which we discuss in more detail in the chapters on the impact of the programme on the classroom and on the school.

Student perspectives on learning as Māori

Students discussed what it meant to be Māori at school:

To me, it means expressing the culture of being a Māori and not being afraid or shy to show it.

I'm tangata whenua, I can carry my Māori culture to the next generation.

Students were also able to discuss ways in which schools and teachers did or did not enable them to be Māori at school:

Nothing makes me personally feel like I shouldn't be Māori, because that's just who I am and they can't change that. Some things like with the teachers it feels like they're targeting us and its like oh, is it because I'm Māori? Or is it because of the people I'm hanging out with that are also Māori?

The Māori teachers they always encourage you to take Māori and they say 'You should be involved for NCEA'. It's good because the Māori teachers they encourage you so you don't lose your culture.

In several student focus groups, students discussed how teachers attempted to speak te reo Māori in the classroom:

Our maths teacher she always tried to speak Māori which is very cool because she like write the date up in Māori for our class. She tried to say some instructions in Māori like what she does, so yes we found it pretty cool how some of our teachers try to [speak Māori].

Yeah he's learning he's on the same road as us. Yes we always learn, we teach him new things and he like tries to talk to us in Māori and he says what's this or what's the Māori name for this and then says it all the time. But he's learnt heaps, like when he first came into our class he didn't know any Māori, didn't know how to say things and we just teach him now.

Students appreciated teachers who tried to understand and acknowledge the experiences of being Māori and use Māori culture and/or language in their classrooms:

Ms C speaks to us in Māori and sometimes she says the numbers in Māori, the countdown—she comes to the Marae and the wananga a lot and when we have visitors she comes and listens to the whaikorero.

In dance and drama, on a wall there are all these Māori words. Every day she picks a different way to say Good Morning in Māori.

Whānau perspectives on Māori identity

As had the students and school personnel, whānau also emphasised that enhanced achievement outcomes required environments where students' socio-emotional and cultural lives within the school were nurtured as a cultural context. One parent explained:

Well what I think it [Te Kotahitanga] is, it's a programme that's aimed at our Māori students, mainly but not specifically. It's also for the rest of the school, but to bring their achievement up for our Māori children, to make them also feel that they're part of the school system, that their language and their culture can be integrated into the classroom. That it's not something to be ashamed of. I think it enhances more of the Māoritanga, Māori tikanga in the classrooms, [where] the teachers are making their lessons with the Māori kind of flavour to it.

Parents commented that New Zealand schools were not really designed for Māori nor did they reflect Māori values and experiences, thus entailing a "mainstream" that is disempowering for Māori students:

I can see from the teachers there is rejection. It's a new programme, but the problem is that we're still in the colonial system, it's not just the teachers, the system needs to change, there is work that needs to be done, because we (the whānau) can see problems.

I agree the principal is supportive but in the mainstream curriculum how much is directly about Māori history, entrepreneurs... Māori role models.. that to me is directly linked to the value of Māori in the school. It is a sad thing to hear my children say "Why do they say Māori don't attend school?" Because my kids

always attend, they go to school. So it's about the messages the kids get about being Māori in the mainstream. That's why you have to look at the system; otherwise Te Kotahitanga is a Māori concept trying to work in a non-Māori environment.

For whānau, achievement goes beyond the formal curriculum and includes cultural knowledge and experiences for their children. They feel strongly that these should also be engendered as part of their children's education:

My dream for my child, my children, is something that I've not been able to give them because I didn't learn te reo Māori, tikanga Māori all those things. I'd be so proud to see my son standing and doing the paepae, doing the whaikorero, that sort of thing. Our Māori culture is not something that is easy to learn somewhere else, and if they can do it now, it's going to go with them for the rest of his life. That's my dream for him.

For me achievement is my son having more sort of involvement and wanting to learn more Māori more tikanga, more te reo, just being involved because there's not a lot out there, and this is one of the only places where they're able to get it while they're growing up if they're not living back on the marae.

Whānau were pleased that Te Kotahitanga, in their view, supported students culturally and instilled in them increased pride in being Māori along with increased interest in being part of their school. They perceived that their children were more willing to participate in the marae at their school as part of this change:

Our tamariki thought the only time you could go to the marae was if you were in the kapahaka. Now more Māori children are going to the marae.

High expectations for achievement

Having high expectations for learning and behaviour is essential to enhancing outcomes for Māori students. Teachers generally expressed that expectations should be high for all students and that this was important for their own classrooms, though there was a lack of clarity regarding what high expectations means for Māori students. Teachers discussed their expectations for students mainly in relationship to academic attainment; several teachers linked academics with broader life options, life-long learning, or development of academic self-confidence. Most teachers discussed academic achievement in terms of student attainment of NCEA qualifications, sometimes tied to university preparation.

Teachers expressed high expectations for Māori, regardless of their evaluation of "ability", and were able to explain why it was important to strive for higher levels:

For me it's about choices ... I agree so it's about giving them the knowledge, tools, skills to be the very best to go on and achieve in anything they want to do ... but also that they know they have a choice to go to university, polytech or go out and get a job ... whatever they want to do... I think the school tries really hard to promote that and communicate that to the students.

For the average Māori girl coming in here, she should be capable of leaving with her level three. And I'd hope that she'd at least have the choice to go to university, if university wasn't for her, that at least she'd have that choice.

There were non-specific discussions of achievement or outcomes such as improved attendance and classroom behaviour which could reflect ambivalence when students arrive in their classes with low achievement levels:

I think the most important outcome is that they feel like they are a success and they feel like they've done their best. Irregardless of where they end up, whether they end up at university, or become mothers or

whatever they end up doing, to feel confident and successful and that they have achieved something and they've done their best. It's different for everyone. Māori /non-Māori, in this class that I'm struggling with, it's a mixed ability class and there are some kids in that class that are really, really struggling, and so my expectations for them are obviously to do their best. Well their best is lower than my expectations for someone who is able to achieve more.

Some teachers may also have given up on some students, and streaming was related to negative attitudes that may affect both teachers and students, despite original intentions that streamed groups provide acceptable structures for teaching and learning:

I think all students should at least get level one NCEA if they can. The reality is that, I guess at the age of 16 if they want to come back, then they will probably be able to do it. If they want to do it. But as a teacher, I'm a teacher of a year 12 lower ability class, they all would be over 16 and have come back. They don't really want to, they aren't trying, they don't want to do it.

Teachers also talked about setting an appropriate level of challenge for students:

You need to, as the teacher, make that effort... You also need to have clear and high expectations for the kids ... don't threaten things that you're not going to follow up on. You need to have clear consequences for things, and that's not just for Māori kids, that's for all kids. You need to recognise and celebrate their achievements ... and you need to challenge them to 'step up' and if you set that challenge for them and help them they will do it. They can achieve. You have to know your Māori kids in your classes, but you still need to expect them to learn, let them know that they can do it. They can do well in class academically.

Finally, teachers were able to articulate lifelong learning goals for their students, including the need to instil self-confidence that students could reach their goals:

The thing that I find with the Māori students in particular, but across the board also, is the confidence. If I can get my students to leave here with the confidence to move forward and to have some strategies to deal with things. And a lot of them too, to have that self-esteem lifted, which will give them that confidence to say "Yeah, I'm going to have a go at that. Yes, I am good at that." It is a lot across the board too, but I do find that there are a lot of Māori students who are reluctant to acknowledge their talents. And I'd like to see that brought out, and I actually feel that we are doing alright with that.

Confidence in their own ability, opening their eyes to what they can actually achieve. They are not closed off in a little box and they are not coming to school because they've got to jump through hoops and then when the students are 15 or whatever age they can go. It's kind of 'right you didn't know this and now you do know this and what you can do with it.

Principals described their conviction that discussions among teachers had changed regarding expectations for Māori students, and teachers were seen as being more focused on their agency for promoting learning rather than seeing students as unable to learn. They emphasised how teacher conversations had shifted from deficit theorising to taking responsibility for supporting higher achievement:

Yeah, "let's talk about achievement. Let's talk about learning. And let's talk about needs of students." As opposed to "They can't, they shouldn't, they won't be able to" type of deficit stuff... You move away from that and start talking about learning, and it's encouraging.

Well the one thing, again it's changed [is] this whole deficit theorising. You know teachers have always been very good about "Well if Wally would only put his shoes on to come to school" or whatever it is that is going to make him learn better. What can you expect when he comes from that family?" and so on. A lot of that talk has gone away, and I suppose that has been the training, making them aware that they had been deficit theorising in the past.

Principals appreciated that the programme required the school and its teachers to become more aware of Māori students and how they were doing in school:

Valuable outcomes for students? I think that there is more attention, and teachers are more aware of their Māori students in their class, and that the trying or implementation of new strategies or ideas is [happening], and that Māori students are feeling more valued in particular, I can only talk about my classes, but [there is] just more inclusiveness and more activities aimed for their achievement. (Head of Department)

Whānau too noticed how expectations changed students' attitudes towards school. One parent felt that the fact that a science teacher was himself Māori had a great deal to do with student engagement:

For the first time in science, they have had a Māori teacher and it is amazing the impact of that. They are encouraged and pushed by their science teacher, and my kids are so excited about science. That has never happened before, at home they come together and they help each other, that is amazing... and I think it's the comparison of having a Māori teacher compared with a non-Māori teacher. It's natural, he identifies with them, and for me as a parent he is very considerate. When I had my interview with him and he talked to me about my kids' work, he didn't talk down to me. I notice with my kids in science that he pushed them to do their best, he pushes that responsibility onto them for their learning, but he supports them too.

Impact on attendance, engagement, and retention

Ultimately, Te Kotahitanga seeks to enhance Māori student achievement through teacher professional development towards culturally responsive schools and classrooms. Enhanced achievement requires, of course, that students attend school, participate in classroom and assessment activities, and engage as active learners. Interviewees most often discussed the impact of Te Kotahitanga on these achievement-related behaviours more so than the specifics of achievement test scores or NCEA results.

The many Māori students with whom we met affirmed that those teachers who cared about them as learners had an impact on their performance in school and in their classes. Students identified teachers who demonstrated caring, listened to them and took the time to help them at school. These relational aspects were seen as important parts of respecting and understanding students as Māori. Students stated they were more likely to work harder if they had a positive relationship with their teacher:

He teaches heaps, shows us what to do, explains this. Makes it interesting by letting us find out how to do it, by making us use our brain.

I think it varies on like the class you're in and the relationship you have with your teacher. If you get along with the teacher, then they're more likely to help you and push you. Like they will come to you individually, if they're trying to help you, they'll come to you individually and make sure you understand the work and understand what you're doing. But if they're not, if they don't really pay attention to you, they'll just ignore [you]. They'll just leave you where you're sitting.

School personnel were emphatic about the importance of engaging students in the teaching and learning process as fundamental to any improvements in achievement. One teacher elaborated on improved attendance. She perceived that Māori students were now coming to her classes as a result of the change in relationships and the additional efforts she made to find out about her students, demonstrating caring and a real interest in their achievement:

At the beginning of the year there were quite a few that were truant, and not bringing their gear, but now they all participate [because] I got to know them better. I gave them some questionnaires to ask them about themselves and told them a bit about me, and we just got a relationship where they know I care that they are not participating or not in my class and they know I'll find them around the school or when I see them I'll ask them where they were... So they know they just thought it was easier to come to class, or they started enjoying our lessons. Because a lot of them didn't know each other at the start, and a lot of the activities that we did got them to know each other a bit better. So I think they were happier to work together and to be in the class... And a couple of them I put a lot of time in outside of class. I've fought for them to not be into special measures because they weren't coming to class. Because they were coming to my class and succeeding in my class it showed they were okay, they could be good in their other classes.

Many other teachers commented about the direct relationship between attendance and achievement:

The valuable outcome for students would be higher achievement. Less truancy, [so] that those students who avoid school will attend regularly. That as teachers we don't focus on things that we can't control, like what's going on at home, or whatever, that we just focus on what's going on in our classroom. So at the end of the day, better results and higher retention rates.

I think the most important thing is attendance at school, and for them to attend school regularly, and attend all their classes [and] would be feeling comfortable in the classroom. And the key thing for the teacher to do is to make those students feel comfortable in the classroom.

Most teacher comments were about socio-emotional outcomes and the extent to which students were made to feel comfortable in school so that they could learn:

Valuable outcome for students is they must be happy, and if they are happy they will be in class, and if they are learning they will be in class, they don't see that as a waste of time. For teachers, student achievement, when your student achieves, you know you are doing a good job, right, academically.

We're after achievement which can be interpreted in many ways but step one is them wanting to be here, and being in a classroom environment where they feel comfortable and they will come more days than they would otherwise.

Te Kotahitanga professional development is really linked into increasing student achievement and increasing student attendance by creating an environment that they are actually going to be more comfortable within that they will actually feel that it is more a school that they want to be a part of and attend and participate in and thereby raise their educational standards because attendance is a huge part of achieving that goal.

Teachers discussed how Māori students would achieve if classroom instruction is engaging. They attributed a growing awareness that teachers have the power to make instruction more engaging to Te Kotahitanga and took responsibility for making this happen:

I would say the engagement levels and the participation levels are much higher. For myself, within the project, my expectations now are of a hundred percent participation and a hundred percent engagement.

Principals had a great deal to say about achievement-related factors. Across the 22 Phase 3 and Phase 4 schools site-visited by the evaluation team, principals affirmed overwhelmingly that the project had made a difference to Māori student achievement through changes in the factors that led to enhanced outcomes. They saw Te Kotahitanga as an unqualified success in changing the climate of their schools for Māori students and teacher-student relationships in particular. They felt strongly that the project had resulted in changes in teachers as well as improvements in a range of socio-emotional, behavioural and achievement outcomes. Thus, principals attributed the improvements in achievement to changes in teacher behaviour that, in turn, led to increased student engagement in learning activities which then resulted in higher academic performance.

Principals discussed how achievement began with enhanced attendance and engagement, and they overwhelmingly perceived that Te Kotahitanga had led to changes in Māori student engagement, attendance and discipline:

[Te Kotahitanga also] looks at actual engagement within the classroom—the type of interaction with the teacher, the attendance, those sorts of things, the ability to compare attendance in different classes. One of the biggest issues identified is the selection of students to attend classes. They'll go to this teacher, this teacher's stuffed, that one, this one, and this one... really brought that into sharp focus. And that evidence when it's been shared in the co-construction [meeting], it has been "Oh!"

Look at this group of boys here—they were engaged for three-fourths of the lesson.

Principals recognised that engagement and attendance are key factors for achievement and maintained that Te Kotahitanga had had a major impact on whether students came to school and participated in learning:

What I'd like to hope will happen is that the Māori kids in particular—I was just about to say engage a bit—but instead that they are comfortable in the learning environment that we have, and it's not something that's foreign to them. Our classrooms have to be diverse by nature of our school population. We are very diverse. I'd like to feel that within each classroom at some stage, within each period where there are Māori kids, that there is something there that gives them a bit of flavour that "Hey we belong here" and that there is something for them, PI kids and Asian kids and so on.

I think that to be comfortable in school, and to want to come to school, to enjoy what is happening at school, to know that the teacher respects me, he wants me to achieve, he's going to go crook at me if I do something wrong but it will be at my behaviour and not at me that he's critical of. That's the vision I see. And whilst that's for Māori kids, I want it to be the same for all of them as well. Every kid that comes here I want them to feel comfortable in the place.

They concurred with the project focus on achievement of Māori students while emphasising their conviction that educational improvements for Māori led to and was associated with improvements for all students and for the entire school. They pointed out that Te Kotahitanga was actually a tool for having a positive impact on all students:

I don't hear any conversations of "why should we do this for Māori? I'm teaching a whole class." That kind of discussion I don't hear anymore, so I think that people have understood through TK what we are trying to achieve here. And feel comfortable that what they are doing is going to benefit other students in the class anyways.

School leaders talked about changes in retention that they attributed to Te Kotahitanga:

One of the things we've seen over the last few years is a change in the retention of Māori kids in school, and coming back for Year 12 and Year 13. We used to have a lot of those that would come back because they had nothing, and then they'd only need to survive a short period of time in Year 12 and then disappear. These students [now] tend to be staying right through, and when you talk to them now...they're staying.... For a lot of kids, [school] is probably the most stable environment that they're in. (Principal)

Particularly notable was the strong support for Te Kotahitanga from the Māori families at both Phase 3 and Phase 4 project schools who shared their views with us. This strong support was evident despite what they described as limited engagement with the school around Te Kotahitanga and varied levels of knowledge about what the programme is. Whānau contrasted their children's love for school and attending school against their own memories of schools as places where they had not been made to feel welcome:

Some of our whānau ...they are whakamā about coming into school. School wasn't great for them.

I can see teachers who want to do well but are struggling in the classroom, but I see parents too, families who are struggling in other ways, low income, solo parents, pressure just over the fence... so there are other influences that we need to consider when we think about parents and whānau being involved. Some families don't feel comfortable coming into school, if they didn't do well. So how do we pull them in, that is where whānau can help and having more Māori faces in the school?

One mother described her personal struggles at school and how this affected her dealings with the school regarding her own tamariki:

Cause of the angers that I have from when I was going to school come back at you. That same time where I think nothing has changed; teachers are still the same, the principals, I mean that's the stuff that I was aware of. But when I come into a school I'm terrified, I mean it's really stressful for me. It's a lot different now, because I've got a different relationship with the teacher here, but [it's been] hugely stressful, and that's because when I come into school its because I've got to deal with this disciplinary problem, I've got to deal with bad behaviour, with possible suspension, expulsion, it's hugely stressful, and the impact of that reality is that parents don't know how to support their tamariki. You know, I'm talking about Māori parents [who] don't know how to support their children.

Generally, parents talked about the school and the teachers in extremely positive ways, and they were convinced that Te Kotahitanga was having a positive impact on their children's social and educational outcomes in comparison to previous practices:

I can see, you know, him moving on to stay to year 13, just purely because of that support and that work that's here. And the role models you know the people that they put in front of them, this is what you can achieve.

They have got a really strong relationship and the teachers are encouraging them. I don't think it's like in our days when you were just given a worksheet when you walked in a class; there you go sit down do your worksheet, hand it in at the end of the lesson, and no communication happens. And now the kids are coming home and saying they've done this and they've done that and they're allowed to speak their mind to a certain extent. When I first heard a couple of things I thought well you know that's giving a bit too much leeway to the kids but you see it's developed in them. They've come a long way.

One mother said that although she did not know a great deal about Te Kotahitanga, she had seen a big change in her daughter's attitude towards school in comparison with previous years:

[My] daughter didn't used to like coming to school, not interesting subjects. She used to say "Why can't teachers teach us something really outside in the world, not just in here, not teach the same old thing". She found it much more interesting this year, her grades have shot up. She used not to be interested, now she's one of the top students in her class. She can see results—certificates in year 11.

Finally, all the Chairs of the Boards of Trustees who were interviewed were enthusiastic about and committed to Te Kotahitanga as an approach to enhance Māori social and educational outcomes that was at the same time beneficial for all students—Māori and non-Māori. Two BOT Chairs commented on the extent to which there was systematic sharing of evidence about student achievement with the school community:

It would be good if we had feedback perhaps from this project or from Te Kotahitanga progress that was aimed at lay people, Board lay people, to reassure ourselves and reformed advocates about 'Yes it is making a difference, these are the moves bit by bit.

[Evidence] might be something that the lead facilitator has, and perhaps we would not get on a regular basis, but I have seen there has been data since the programme has been in place. It would be interesting to see, though, perhaps comparisons, just very rough comparisons to the other schools that have been involved. But I do have an idea that there is some of that information available already.

Data on achievement-related behavioural factors

Various achievement-related behaviours that could be influenced by Te Kotahitanga are explicitly referenced as part of Goal Setting in the Te Kotahitanga GEPRISP model. Anecdotally, school personnel, students, and whānau alike provided numerous examples of how these kinds of factors had been influenced for the benefit of Māori students. In particular, the following factors might be recorded systematically in future for Māori and other students in order to assess levels of student engagement and/or teacher expectations objectively:

- (a) Attendance, showing decreases over time in unexcused absences from school;
- (b) Retention, showing increased percentage of students returning to school the year following attainment of their 16th birthday, the time when they may legally leave school, as well as the numbers and proportion of Māori students at Year 13 compared to Year 11;
- (c) Streaming placement, showing increased percentage representation in high and decreased percentage representation in low ability/achievement bands over time as such placements are affected not only by academic ability but also by teacher/school expectations and judgements about behaviour;
- (d) Disciplinary statistics, showing decreases in number and percentages for stand-downs, suspensions, and exclusions.

We determined that these data were not available from either the Ministry of Education or the project so requested these data directly from the 12 Phase 3 schools for the 2004 and 2007 school years. With some exceptions, the schools were unable to provide us with these comparative statistics. One difficulty was that some data required particular capacity in the school's Student Management System (SMS): KAMAR can accommodate these data but was not implemented until fairly recently into these schools, replacing previous SMS systems that were apparently unable to accommodate the

necessary data. According to milestone reports submitted to the Ministry by the schools, at least some of the Phase 3 schools still had not succeeded in establishing the necessary databases by 2008.

Similarly, attendance data were provided by only a handful of the schools, and most indicated that their previous SMS did not have the capacity for such data whereas KAMAR would now make it feasible to keep these data for evaluation across years. One school which has done this comparison reported that Māori attendance was at 82% for 2007; however, 2004 data could not be reported. The data reported for another school for both 2004 and 2007 were virtually identical for Year 10 students and showed a slight decrease in 2007 for Year 9 (with Māori student absences increasing from slightly fewer than 10% in 2004 to just over 13% in 2007).

Providing data on the percentage of Māori students in the highest and lowest ability and achievement bands proved equally problematic. One school indicated verbally that this comparison was available, but the information was not received despite our requests. The few schools that did respond were able to provide current data only. In one school, however, Māori students comprised 23% of the top stream in Year 9 and 18% of the top stream in Year 10 in 2004, whereas in 2007 Māori comprised 33% of the top stream in Year 9 and 21% of the top stream in Year 10.

Most schools were not able to provide us with a compilation of the percentage of Māori students who returned to school in the year following reaching their 16th birthday for 2004 and/or 2007.

Interventions other than Te Kotahitanga may also have had an influence on some of these data. For example, several schools initiated restorative justice programmes and other strategies to reduce the number of stand-downs, suspensions and exclusions from 2004 levels to 2007. At one school, a total of 97 stand-downs, suspensions and exclusions in 2004 was reduced to 11 across the three types by 2007; Māori students accounted for 100% of the disciplinary actions in 2007 in contrast to nearly 90% of the actions in 2004, but the reductions in numbers of students affected in each category was dramatic. Rather than 66 stand-down incidents in 2004, there were only 2 in all of 2007, for example. In two other schools, one school decreased these disciplinary actions from 43 in 2004 (of which 86% were Māori) to 30 in 2007 (of which 57% were Māori), while another school decreased disciplinary actions from 90 in 2004 (of which 47% were Māori) to 57 in 2007 (of which 43% were Māori). A fourth school was able to provide the comparison for stand-downs only from 2004 to 2007, not for suspensions and exclusions. The other Phase 3 schools did not provide these data within the evaluation timeframe.

These are the kinds of behavioural data that might be influenced by Te Kotahitanga. Although we were unable to assess these factors, they could be evaluated in future through systematic record-keeping in a consistent format across schools.

School reports on achievement outcomes

School personnel, family/whānau, and the students themselves discussed extensively their perceptions of the major impact that Te Kotahitanga activities had and continued to have on student achievement outcomes. They often referred to data shared with them at school level and also noted presentations by the Waikato research team that included information on changes in student achievement. Family members and BOT chairs had generally heard about achievement outcomes through a project newsletter distributed by the school to homes or at a meeting where the principal, lead facilitator and/or other school personnel shared success stories as well as specific achievement information on assessments and/or the NCEA.

School leader reports on achievement

All principals affirmed the importance of improving Māori student outcomes. They stressed that they had been motivated to participate in Te Kotahitanga from the beginning because of their personal concerns that Māori student aspirations were not being met in comparison to outcomes for other, non-Māori students at the school and nationally.

Secondly, while they recognised and valued the focus of Te Kotahitanga on improving outcomes for Māori students and determined to keep that focus, they acknowledged that the programme also had a positive impact on outcomes for all students. Principals gave examples of changes they attributed to Te Kotahitanga:

We are seeing an improvement in that over the last three years, the percentage of Māori students achieving NCEA level 1 is now equivalent to the percentage of Māori students in that year group. (Principal)

In 2002, with our leaver data, 1 in 3 of our Māori students left with no formal qualification. In the 2006 data, we had not one Māori student who left in that category. Not one. And we're very, very proud of that. (Principal)

Since we've had Te Kotahitanga, over the last three years there's been less than five stand-downs or suspensions as a result of in-class behaviour. (Deputy Principal)

Similarly, other school leaders talked about changes to Māori student achievement:

If you have a look at 2004 I mean this is level one [of NCEA], this is the percentage, there's a big gain there. (Deputy Principal)

Principals varied in the extent to which they were able to provide student outcome data about the benefits of Te Kotahitanga for Māori students and for all students. Some emphasised that it was really 'early days' for student achievement changes to be evident, given that full implementation was still a work in progress at many schools and Māori students were being taught by both Te Kotahitanga and non-Te Kotahitanga teachers:

I believe it will all happen, but it is going to be—in talking with the Phase 3 schools—it has been not until the third year that they are getting any real significant change.

The limited achievement outcome data available may have been partly influenced by their reliance on a designated Deputy Principal whose position profile generally included responsibility for data collection, reporting and summaries provided to the Ministry of Education and for other purposes. Some principals also expressed frustration with data management system challenges that complicated their efforts to summarise data they did have so that it could be returned to the facilitation team and teachers in a timely way. These are clearly issues that would need to be addressed not only for this project, but for any initiative designed to enhance achievement and relying on assessment results to document effects.

At the Phase 4 schools as many as one-half to one-third of the teachers were still awaiting Te Kotahitanga training, thus it is perhaps not surprising that most principals focused their comments about student achievement outcomes for Māori on attitude shifts in the school rather than assessment results or other data on achievement. They mentioned assessments but in the context of changing expectations by school staff—especially teachers—rather than actual changes in student scores on particular assessments:

I've only been here, just coming up on three years, and we've been using asTTle data to share with staff. But it wasn't until the end of last year that I would say that most staff took cognisance of it. They had to use it at the beginning of last year, but they've done nothing with it. They just as much ranked or rated or verified their own stereotypes. [Teachers said things like] "Can't do anything with these kids" "Look at them! They're dumb!" "It's a waste of time, it's all their fault". While we were starting from of position of, here's the data and it's empowering them and all that, they still haven't changed their mind frames.

It wasn't until the end of last year, where the continual use of Te Kotahitanga that sometimes these pennies dropped. And I would say now most of the staff value that data as a part of what student's don't know and therefore what they need to know—as opposed to a justification for their achievement.

Principals saw major changes in how many teachers viewed Māori students and the expectations they had for them:

Yeah, “let's talk about achievement. Let's talk about learning. And let's talk about needs of students.” As opposed to “They can't, they shouldn't, they won't be able to” type of deficit stuff. And all credit [is due] to Russell there, because he initiated that idea of the removal of the deficit theorising. It's very easy to fall into that, and just say “Oh they can't.” You move away from that and start talking about learning, and it's encouraging.

And so I suppose in terms of our thinking- over this year for me, personally it may have started off as a project, but I gradually came to realise how very important it is. It's the best tool or best set of approaches for raising Māori student achievement that I've seen.

The importance of gathering data systematically on student achievement outcomes in a manner that enables teachers to use those data to enhance teaching and learning was high on the agenda of principals even where this was still a work in progress:

Sometimes, especially around the data, I think [teachers] were left to their own devices a bit too much. There was these expectations around about data that needed to be provided and I feel as though not enough support was given to them to lead that process.

It's no use introducing it here unless you think it's going to have some way of meeting the needs of Māori or being appropriate or whatever. So we've always looked at that data. But as a result of being on Te Kotahitanga, the data we are going to collect and analyse now for our junior kids is going to be better data, rather than broad brush stuff.

These principals were clear about the kinds of achievement and other outcomes they expected to attain for Māori students in the future:

I'd have to say student [outcomes] is the most important. That's what drives me, I want to see every student leave the school with a qualification, feeling confident in who she is and knowing what her next step is going to be out in the big world.

Well I'd like to see a lot more Māori students staying on, so retention is an important thing. We've got a pattern of Māori students—no matter what level they are at when they come in at year nine, whether they are in our top- high motivation class, or they have special learning needs—it seems that very few remain until [NCEA] level 3, to the end.

At the Phase 3 schools, where the project had a longer history and the vast majority of teachers had become full participants in Te Kotahitanga by 2006, principals and deputy principals also varied in the extent to which they could provide student outcome data about the benefits of the project for Māori and for all students. Some of the changes discussed by principals included behaviours associated with achievement:

One of the things we've seen over the last few years is a change in the retention of Māori kids in school, and coming back for Year 12 and Year 13. We used to have a lot of those that would come back because they had

nothing, and then they'd only need to survive a short period of time in Year 12 and then disappear. These students [now] tend to be staying right through, and when you talk to them now...they're staying. For a lot of kids, [school] is probably the most stable environment that they're in. (Principal)

Since we've had Te Kotahitanga, over the last three years there's been less than five stand-downs or suspensions as a result of in-class behaviour. (Deputy Principal)

The Phase 3 school leaders were also clear, however, that their schools had been and were involved in various initiatives to enhance achievement, in addition to Te Kotahitanga, thus it was not really possible to attribute changes in student outcomes to any one particular programme:

The school was on a journey anyway, and Te Kotahitanga was just one tool of perhaps a number of different other projects that were also running, so it's not like the outcomes were a result of Te Kotahitanga—Te Kotahitanga has been a tool, but you've been on that journey... Te Kotahitanga was just one of those [initiatives] hanging off the umbrella. But without it, it certainly would have been longer. (Principal)

The Ministry is so disorganized in terms of what they're thrusting at the school like a lolly parade that you're almost in a protection position as a principal. You know it's really good that the numeracy and Te Kotahitanga, there's really good synergy between them, because it's cooperative learning strategies, it's data driven. (Principal)

There was discussion about how various initiatives were contributing to better outcomes:

We can't say that we're attributing this purely to Te Kotahitanga, because as a researcher you know that, but we've got academic counseling in this school in a big way, we've got what we call 'Restorative Thinking' for students whose behaviour has sort of, takes a bit of a dive occasionally--a whole programme around that--and we've got Te Kotahitanga. So we feel, or I feel, that those three programmes impact. Also we've got the bilingual unit, so that has to play a part in it. (Principal)

Another criticism was the fact that the initial successes of Te Kotahitanga in terms of literacy, for example, were linked specifically to Te Kotahitanga, but in fact during that time we had several strategies, several initiatives running in the school, and that was a combination of things. One of things [teachers] objected to is that it was tied specifically to Te Kotahitanga. (Deputy Principal)

Nevertheless, principals saw changes overall in aspirations, expectations and achievement outcomes for Māori students resulting either directly or indirectly from their schools' participation in Te Kotahitanga:

We are seeing an improvement in that over the last three years, the percentage of Māori students achieving NCEA level 1 is now equivalent to the percentage of Māori students in that year group.

In 2002, with our leaver data, 1 in 3 of our Māori students left with no formal qualification. In the 2006 data, we had not one Māori student who left in that category. Not one. And we're very, very proud of that.

Teacher and facilitator reports on achievement

Few teachers at either Phase 3 or Phase 4 schools referred to school-wide data as evidence on increased student achievement, and results of the teacher interviews suggest that schools were only just beginning to engage in data-based school-wide discussions of student outcomes. At Phase 4 schools, there was general awareness of NCEA achievement patterns at their schools and goals for improvement:

We have to get to an acceptable level of Level 1—figures should be 70% for the whole school. For Māori, I think it's really low—the Level 1 for whole the school is 51 % and 52%—when compared to others of the same decile its good, but overall not good—it's lower again for Māori students. I think its about mid 20%, very hard to accept as a teacher.

There were, however, more comments from teachers about student achievement outcomes and using data to inform teaching and learning at the Phase 3 schools:

Te Kotahitanga means to me, firstly, as individual teachers and as a school we have a collective vision to improve the academic results and emphasis, I think, on the results on paper of our Māori students. So, improve their learning experience, yes, sure, but ultimately at the end of the day the results on paper—that hard and fast statistics is, I guess ultimately, what it is about.

Facilitators and lead facilitators generally struggled with how to make the teacher professional development activities and feedback more data-based in providing teachers with timely data on student achievement that could be used to inform future teaching and learning activities. They considered that most data were primarily anecdotal, rather than based on evidence of impact on Māori student achievement; partly, this was the result of having only limited data on achievement available as part of the process:

Anecdotally we've got a lot of really good evidence here. The data is coming through. It's just slowly coming through. But I don't actually think we'll see an effective change through the data, we've got some time.

Evidence [was a challenge]. So what was the evidence that our teachers were bringing to co-construction, because we thought that that was pretty useless, some of the evidence, and we wanted more, meatier evidence to help our kids.

Some facilitators reported that some teachers were reluctant to share their own classroom assessment data:

My own experiences as a facilitator were that we had a real reluctance for teachers to share data. In that they tended to share impressions initially. They tended to share anecdotal, off the cuff; I'll talk while I'm at the table kind of conversations. Which were still useful in the initial stages, in that we were talking about people who basically had nobody asking any questions about what was happening in their classroom.

Missing across all schools was a regular and systematic achievement data feedback loop between the deputy principal responsible for these data and the facilitation team who might then be able to use the data in their work with teachers:

Data [are a challenge and we need] some system, perhaps from Waikato, on what we can do, how we can work with the data, collect it all. I'm not sure. I know we have to do that ourselves, but some direction would be helpful.

Facilitators explained that teachers did bring different types of assessment results and/or evidence of Māori student achievement to co-construction meetings:

At a co-construction meeting, the teachers are bringing their assessment results, what level the students are at. They're comparing; they might even look at students' books or projects or whatever, and so one teacher might bring the books and they might look perfect and another one is sitting across the table going "Oh my goodness ... how do you get them...? You know, what strategies do you use to get them to, to do that work?"

We started to talk about, ‘OK so how do we know that we are adding value? How do we know that where those students start and where the students end up in terms of the teaching and learning that’s gone on?’ [A science teacher] made the decision through the feedback meeting process that she wanted to implement pre-testing get a sense of where students were at. She started with the pre-test and the post-test and then she started to desegregate the scores so she was looking at, in terms of the teaching and learning that goes on in the classroom, how effective am I being with the Māori students? So what’re the gain scores for Māori students and for non-Māori students? And does that tell me anything different? She then also looked at individual students and where she might have to provide additional support. And the other thing that she was doing was that at the end, after each pre test those results were shared with students, so the pre test results were shared with students and she would then identify the core pieces of work that needed to be done in terms of the learning outcomes from that unit. So it was very much that the pre test data was used to inform both teachers and students. And then the post test data, so students knew what their gain scores were because prior to that the culture in the classroom had been, the best marks was the best achievement. And she was shifting it from the gain from where you were to where you are now is what matters.

Assessment data on student achievement

Table 9 summarises available information [Phase 3] encompassing each of two major student groups—the Year 9-10 students currently involved in Te Kotahitanga and the Year 11-13 students who complete NCEA following instruction in both Years 9-10 by teachers participating in the Te Kotahitanga model. Our evaluation project was not contracted to conduct assessments of Year 9-10 student achievement. However, the results of two student achievement measures have been analysed for Year 9-10 students by the University of Waikato Te Kotahitanga research team, and preliminary results have been reported by the project for the Essential Skills Achievement (ESA) measure in 2004 and 2005 and for the asTTle measure for 2005 (Bishop, Berryman, Cavanagh & Teddy, 2007; Bishop et al., 2009). AsTTle data have also been reported in Waikato milestone reports up to 2008 at 8 of the original 12 Phase 3 schools; difficulties with their student management systems have interfered with the ability of 4 of these schools to record and submit asTTle results across this timeframe.

The ultimate goal of work carried out through Te Kotahitanga is to enhance Māori student achievement. Hence, it is relevant to investigate Year 11-13 NCEA achievement by Māori students as a function of project involvement during Years 9-10. Enhanced NCEA achievement would be expected if: (a) Māori students’ achievement were positively affected by their learning experiences in the earlier Years 9-10; and (b) teachers transferred discursive and culturally responsive practices into their teaching in the senior school. There is no evidence regarding (b), but (a) can be evaluated at Phase 3 schools only. Specifically, analyses of longer term outcomes on the NCEA for students in Years 11-13 (levels 1-3 of the NCEA) require data from 2009 NCEA achievement as the first cohort of students experiencing full implementation of Te Kotahitanga starting in Year 9 could be completing Year 13.

Table 9: Measures available from Te Kotahitanga or other data bases (e.g., NZQA, MOE, schools) that can be analysed for project impact on student achievement

	Measurement Type	Description	Year Groups
Year 9-10 Achievement (Te Kotahitanga measure) ^a	<i>Essential Skills Assessment (ESA)</i>	Information Skills, Finding Information in Prose Text (Secondary)	Pretest and posttest reported: 2004: 8 schools 2005: 6 schools
	<i>Assessment Tool for Teaching and Learning (asTTle)</i>	Numeracy	Pretest and posttest reported: 2005: 6 schools
Year 11-13 Achievement (NCEA data from NZQA & MOE Benchmarks) ^b	NCEA attainment of 40+ credits in Year 11	Percentage of all Year 11 students who attained at least 40 credits at NCEA Level 1 or higher	Results can be reported across 2005-2008, recognising that 2008 is the first year in which Year 9 students exposed to full implementation in 2006 could have reached Year 11
	NCEA Level 1 in Year 11 NCEA Level 1 Literacy & Numeracy requirements in Year 11	Percentage of Year 9 students who attain NCEA Level 1 in Year 11 Percentage of Year 11 students who met both requirements and number/percentage of Māori & non-Māori students who met Literacy & Numeracy requirements	Results can be reported across 2005-2008, recognising that 2008 is the first year in which Year 9 students exposed to full implementation in 2006 could have reached Year 11 Results can be reported across 2005-2008, recognising that 2008 is the first year in which Year 9 students exposed to full implementation in 2006 could have reached Year 11
	Mean # NCEA Level 1 credits in selected subjects in Year 11	English Mathematics Chemistry Science Geography History Economics Physics	Results can be reported across 2005-2008, recognising that 2008 is the first year in which Year 9 students exposed to full implementation in 2006 would have reached Year 11
	NCEA attainment of 30+ credits in Year 12	Percentage of all Year 12 students who attained at least 30 credits at NCEA Level 2 or higher	Results can be reported across 2005-2008 prior to full implementation, but 2009 data needed as date by which Year 9 students exposed to full implementation in 2006 could reach Year 12
	NCEA attainment of 30+ credits in Year 13	Percentage of all Year 13 students who attained at least 30 credits at NCEA Level 3 or higher on the framework	Results can be reported across 2005-2008 prior to full implementation, but 2010 data needed as date by which Year 9 students exposed to full implementation in 2006 could reach Year 13
	University Entrance (UE)	Percentage of Year 13 students who gained UE with required 42 NCEA credits comprised of at least 14 in each of three subject/s.	Results can be reported across 2005-2008 prior to full implementation, but 2010 data needed as date by which Year 9 students exposed to full implementation in 2006 could reach Year 13

Measurement Type	Description	Year Groups
Year of Attainment of NCEA Level Qualification	NCEA Levels 1, 2 and 3 Certificate attainment in follow up years as a percentage of school roll in Year 9 when each year group enters school—2-4 years later for Level 1, 3-4 years later for Level 2, and 4 years later for Level 3.	Results can be reported for Year 9 entrants in 2002-2006 as of 2008 benchmarks data, providing complete data only for 2002 and 2003 “baseline” year 9 entrant groups; 2004 and 2005 cycles not yet complete, and it's too early for the 2006 Year 9 entrants to be followed, which requires data from 2008 to 2010.
Highest Qualification Attained by School Leavers	Percentage of students leaving school who have attained a Year 12 qualification or higher, including NCEA Levels 2-3, CIE, IB, Accelerated Christian Exam, or other overseas awards	Results can be reported across 2005-2008 prior to full implementation, but 2009 data needed as date by which Year 9 students exposed to full implementation in 2006 could have reached age 16+ when they may legally leave school.

a Can be carried out at both Phase 3 and Phase 4 schools

b Can be investigated only at Phase 3 schools

Year 9-10 student achievement outcomes

Limited data are available regarding current achievement outcomes for Year 9-10 students whose teachers at the 12 Phase 3 schools have been involved in Te Kotahitanga since the training years 2004-2005 and what we would regard as full implementation years 2005-2006. The first teacher cohort received their first full year of training in 2004, so can be considered to be engaged in full implementation of the model in 2005. The second teacher cohort received their first full year of training in 2005, so can be considered to be engaged in full implementation of the model in 2006. By 2006, then, one might expect evidence of enhanced student achievement for Year 9 and Year 10 students. To measure Year 9 and Year 10 student achievement, Te Kotahitanga adopted the *Assessment Tool for Teaching and Learning* (asTTle) for use from 2005 onwards, and the agreement between the project and each school specifies use of this measure accordingly.

Achievement data using an agreed assessment should be reported by all project schools, but there have been difficulties in the adoption of asTTle as a standard measure across schools. Bishop and his colleagues note that there were “teething problems” with the introduction of asTTle testing (2007, p 173). Our review of a large sample of school milestone reports submitted to the Ministry supports this: Some Phase 3 project schools still had not implemented asTTle numeracy assessments in 2008. There has been criticism that the data reported to date may not be representative as they were from some of the Phase 3 schools only. Whether or not measures were implemented, assessments carried out, and data reported do not appear to have been influenced by the project or the Waikato research team, but instead appears to have varied as a function of school policies and administrative issues that are not project-related. According to milestone reports to the Ministry, some Phase 3 and Phase 4 schools were still struggling with their Student Management Systems (SMS) in 2008, including having made recent major shifts from one system to another (e.g., from MUSAC to KAMAR).

This is an issue that goes beyond Te Kotahitanga specifically, and the challenge is not unique to New Zealand secondary schools. Schools could benefit from systematic strategies and mechanisms at school level for feeding information on student outcomes into PD processes at the school; at present, most data systems are structured instead around Ministry of Education reporting purposes and needs.

Longer-term student achievement outcomes: Years 11-13

Te Kotahitanga is focused on professional development for teachers who are teaching Years 9 and 10. However, the majority of teachers who teach year 9-10 classes are also involved in teaching senior secondary subjects across Years 11-13. Thus, one might expect teachers to extend their understandings of culturally responsive pedagogies and effective teaching dimensions to how they approach teaching older students as well. However, whether or not teachers generalise new learnings to teaching practice in the senior secondary school is not within the scope of our evaluation project. Nevertheless, the students who attend Te Kotahitanga project schools for Years 9-10 could be expected to show the impact of Te Kotahitanga on their achievement later, when they move on to Years 11-13 and begin participation in the NCEA. To what extent is this kind of transfer realistic, and when might we expect it to become evident? For the first Te Kotahitanga cohort—the Phase 3 schools—2004 and 2005 were the first two training years for teachers involved in the model.

Even for the first wave of Phase 3 schools, it was not until 2006 that all teachers interested in doing had been trained and were participating fully in Te Kotahitanga. This would mean that students starting Year 9 in 2006 would be the first student cohort experiencing full implementation of Te Kotahitanga at their schools that year and in the following year as Year 10 students in 2007. These students would commence NCEA Level 1 in Year 11 (2008) continuing onto NCEA Level 2 as early as Year 12 (2009) followed by NCEA Level 3 in Year 13 (2010) (see also Table 9).

Any investigation of the impact of Te Kotahitanga on long-term achievement outcomes must take these implementation timelines into consideration (see also Table 1 in chapter 1). The data reported here are preliminary, and we consider that further NCEA achievement analyses should await results from the 2009 and 2010 NCEA achievement data; this is particularly important as many students across New Zealand are currently completing NCEA Level 1 across both Years 11-12 rather than only in Year 11.

Furthermore, any results based on outcomes in years 11-13 must be qualified given the absence of direct evidence that teaching and learning in the senior subjects and years 11-13 reflect Te Kotahitanga practices: instead, teaching activities in these senior subject classes could reflect traditional practices and be driven by perceptions of the demands of the NCEA rather than modifications occurring as a result of direct intervention from Te Kotahitanga facilitation and co-construction teams.

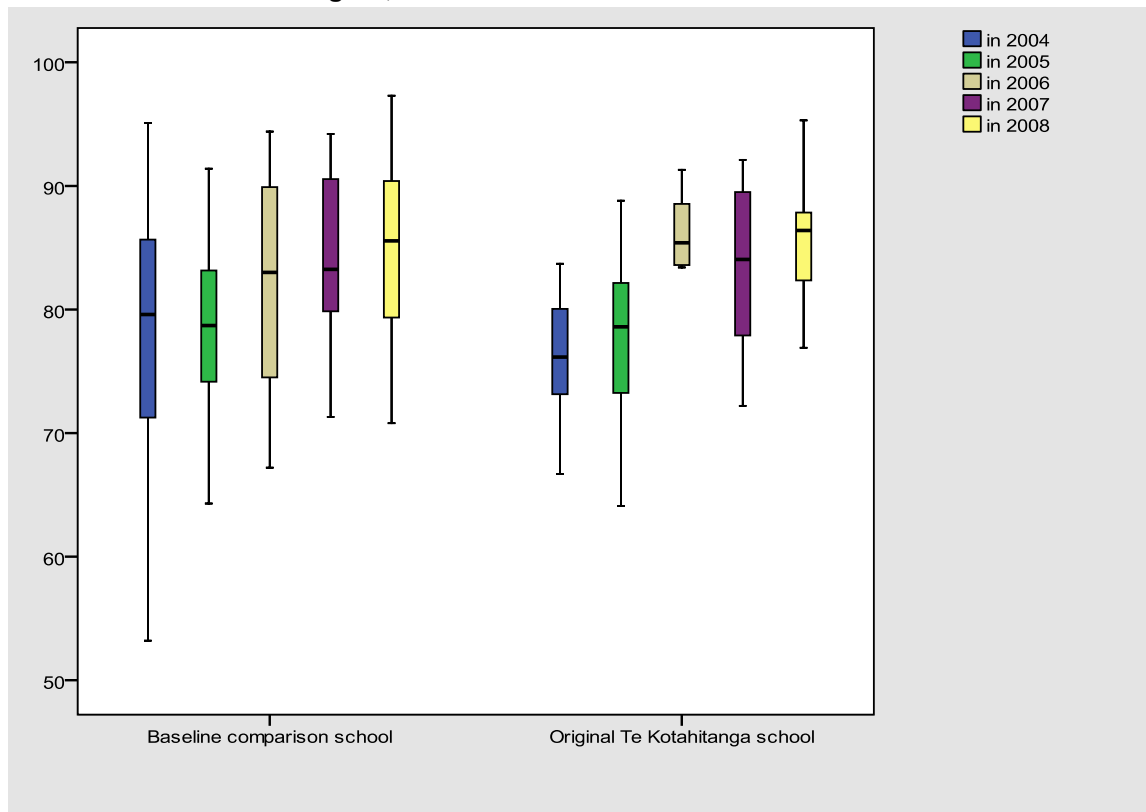
Total credits attained by Year 11 students

The Benchmark Indicators provide an individual school report of the percentage of Year 11 students enrolled at that school who attained at least 40 NCEA credits at Level 1 or higher on the framework for each of the relevant years 2004-2007. Table 10 and Figure 1 show the results of a comparison between the 12 Te Kotahitanga and 12 comparison schools in each of these four years.

Table 10: Percentage of all year 11 students attaining 40 or more credits at Level 1 or higher, 2004–2008

	12 Te Kotahitanga schools				12 comparison schools			
	Mean	Median	SD	SE mean	Mean	Median	SD	SE mean
Year 11 in 2004	76.1	76.2	9.2	2.7	77.7	79.6	11.5	3.3
Year 11 in 2005	77.6	78.6	7.5	2.2	78.4	78.7	7.5	2.2
Year 11 in 2006	84.4	85.4	6.2	1.8	82.1	83.0	9.4	2.7
Year 11 in 2007	83.6	84.1	6.5	1.9	84.2	83.2	6.8	1.7
Year 11 in 2008	85.3	86.4	5.2	1.5	84.5	85.6	7.8	2.3

Figure 1: Percentage of all year 11 students attaining 40 or more credits at Level 1 or higher, 2004–2008



Overall, Year 11 students at the Te Kotahitanga schools were performing slightly but not significantly below those at the comparison schools in 2004, with the percentage of students attaining 40 or more credits rising gradually for all students; in 2008, this percentage is slightly higher at Te Kotahitanga schools. None of these differences are statistically significant.⁵ Again, these analyses represent all students, Māori and non-Māori, at the schools, as data in the benchmarks indicators do not include a breakdown by ethnicity.

Table 11 and Figure 2 illustrate the percentage of all Year 9 entrants who attained NCEA Level 1 in Year 11 in each year from 2004 – 2008. These data show that the percentage of Year 9 entrants from 2002 who attained NCEA Level 1 in 2004 at 38.1% at the Te Kotahitanga schools was lower than the percentage in the comparison school sample at 43%. By 2008, however, when one would expect to see the impact of Te Kotahitanga, NCEA Level 1 attainment at the Te Kotahitanga schools showed a greater gain in the percentage increase across these years, so that the two sets of schools are nearly identical in Year 11 student performance with respect to gaining NCEA Level 1 (51.6% versus 52.6%). These data are not disaggregated by ethnicity in the Ministry of Education Benchmarks database, so we are unable to analyse this outcome for Māori students only to compare the two school cohorts.

Note also that during this same timeframe, the national average of Year 9 entrants attaining NCEA Level 1 in Year 11 shows an gain of 6.7%, at 48.9% in 2004 to 55.6% in 2008. The 2008 overall percentage is slightly higher nationally than for the 24 Te Kotahitanga and comparison schools, but the national percentage gain across these years (6.7%) is lower than the percentage gain shown at the 12 comparison schools (9.6%) and only half the percentage gain across these years at the 12 Te Kotahitanga schools (13.5%). Thus, these data indicate that overall student achievement is

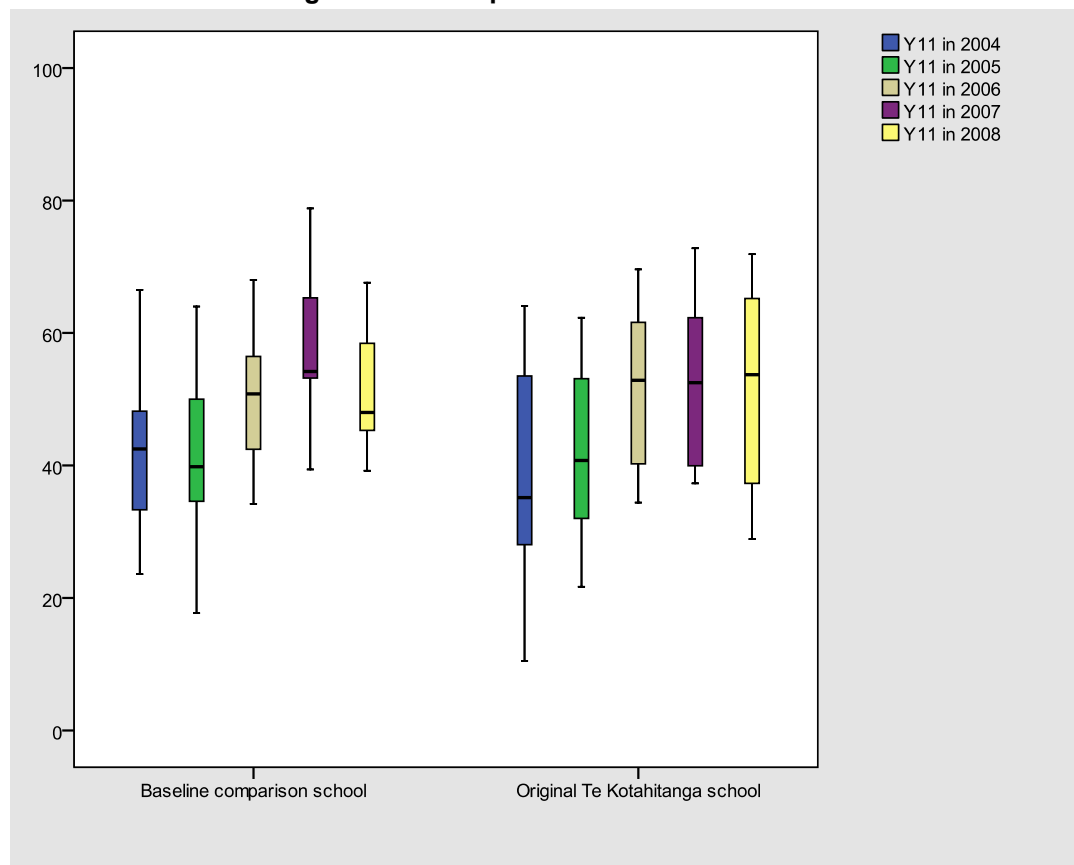
⁵ Note, however, that these analyses are for two sample sizes of 12 that are quite small, hence achieving statistical significance would require greater numerical mean differences than would be the case with a larger sample.

being affected at the Te Kotahitanga schools beyond what is otherwise happening in schools nationally and provide support for the claim that what is good for Māori students is good for all students.

Table 11: Year 11 students' attainment of NCEA Certificates at Level 1 as a percentage of Year 9 entrants two years earlier

	12 Te Kotahitanga schools				12 Comparison schools			
	Mean	Median	SD	SE mean	Mean	Median	SD	SE mean
Year 11 in 2004 as % of Year 9 entrants in <u>2002</u>	38.1	35.2	15.4	4.5	43.0	42.5	15.2	4.6
Year 11 in 2005 as % of Year 9 entrants in <u>2003</u>	42.5	40.8	12.7	3.7	43.3	39.8	16.0	4.8
Year 11 in 2006 as % of Year 9 entrants in <u>2004</u>	51.4	52.9	12.3	3.5	51.7	49.5	14.1	4.1
Year 11 in 2007 as % of Year 9 entrants in <u>2005</u>	51.8	52.5	12.3	3.5	57.5	54.1	15.7	4.5
Year 11 in 2008 as % of Year 9 entrants in <u>2006</u>	51.6	53.7	15.6	4.5	52.6	47.8	15.2	4.4

Figure 2: Percentage of Year 9 entrants achieving NCEA Level 1 in Year 11 at 12 Phase 3 Te Kotahitanga and 12 comparison schools



It is relevant to note that 2005-2006 was a major professional development (PD) year for the NCEA in New Zealand secondary schools, and it is likely that this initiative with additional funding provided for school-specific activities would also have an impact on teachers and, in turn, student NCEA performance (Starkey, Yates, Meyer, Hall, Taylor, Stevens, & Toia, 2009).

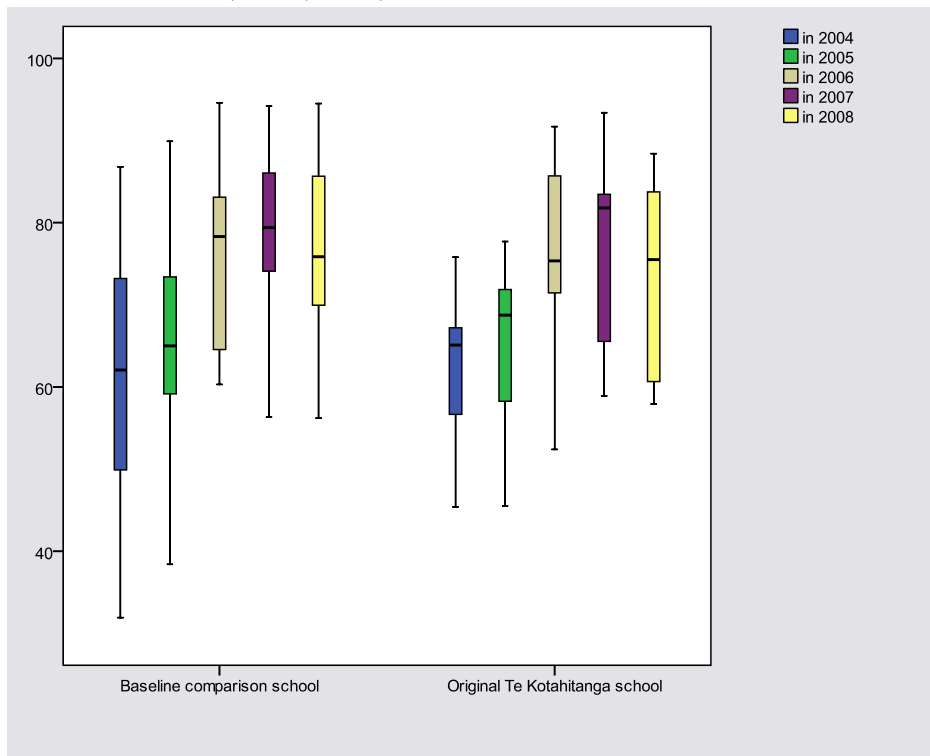
Level 1 NCEA Literacy and Numeracy attainment in Year 11

Another source of information on student achievement in Year 11 at Level 1 of the NCEA provided by the benchmark indicators is the percentage of all Year 11 students who met both the NCEA Level 1 Literacy and Numeracy requirements in that year. Table 12 and Figure 3 show the results of these analyses across the same 2004-2008 years. As with the previous data, these analyses represent all students, Māori and non-Māori, at the schools, as no breakdown by ethnicity for these statistics is available in the benchmark reports.

Table 12: Year 11 students who met Year 11 Literacy and Numeracy requirements in 2004, 2005, 2006, 2007 and 2008

	12 Te Kotahitanga schools				12 comparison schools			
	Min	Max	Mean range	Z-scores range	Min	Max	Mean range	Z-scores range
Year 11 in 2004	32.4	75.8	43.4	-2.37–1.23	31.9	86.8	54.9	-1.74–1.54
Year 11 in 2005	37.3	77.7	40.4	-2.18–1.13	38.4	89.9	51.5	-1.98–1.74
Year 11 in 2006	52.4	91.7	39.3	-2.11–1.41	60.3	75.4	34.3	-1.31–1.68
Year 11 in 2007	58.9	93.4	34.5	-1.68–1.49	56.3	94.2	37.9	-2.19–1.43
Year 11 in 2008	57.9	88.4	30.5	-1.31–1.27	56.2	94.5	38.3	-1.86–1.60

Interestingly, two of the Phase 3 schools showed significant decline on this variable from 2007-2008; a small school declined from over 80% to just under 60%, and a large school declined from nearly 85% to under 60% as well. Clearly results at these two schools are affecting the 2008 average Literacy and Numeracy achievement in Year 11. For project purposes, it would be important to identify factors associated with drops such as these. While the overall percentage also declined in 2008 at comparison schools, this change was more consistent across schools rather than reflecting extreme drops at only some schools.

Figure 3: Percentage of all Year 11 students who met Year 11 Literacy and Numeracy requirements in 2004, 2005, 2006, 2007 and 2008

In addition to these aggregated data summaries available from the Ministry of Education benchmark indicators, we obtained directly from NZQA the data on attainment of both Level 1 Literacy and Level 1 Numeracy separately for Māori and New Zealand European students, for the years 2005-2008 (see Tables 13-14).

Table 13: Comparison of Literacy L1 attainment by year 11 students for 2005–2008

	NZ European students			Māori students		
	Total N	Number attaining level 1	%	Total N	Number attaining level 1	%
2005						
Te Kotahitanga	590	554	93.9%	376	276	73.4%
Comparison	590	558	94.6%	336	268	79.8%
2006						
Te Kotahitanga	674	637	94.5%	398	325	81.7%
Comparison	646	625	96.7%	332	283	85.2%
2007						
Te Kotahitanga	919	834	90.8%	728	563	77.3%
Comparison	863	821	95.1%	577	478	82.8%
2008						
Te Kotahitanga	1,127	960	85.2%	996	618	62.0%
Comparison	1,023	899	87.9%	797	577	72.4%

In 2005, a slightly lower percentage of Māori students were meeting the literacy requirement in Year 11 compared to those attending the comparison schools. All schools show a slight increase in NCEA Level 1 performance for both Māori and New Zealand European students in 2006, then a decline in 2007 and again in 2008.

Interestingly, these data also reveal dramatic increases in the numbers of students enrolled in Year 11 and those attaining NCEA Level 1 in Year 11 from 2006-2008 at these schools—reflecting retention at secondary level. For European students, the Year 11 numbers increased from 590 in 2005 to over 1,000 in 2008. Both the Te Kotahitanga and comparison schools show a numerical increase, but the increased retention of students in year 11 is proportionately highest across both student groups at the Te Kotahitanga schools.

The contrast is particularly evident for Māori students at the Te Kotahitanga schools. In terms of real numbers, there is an average increase in the Year 11 Māori student enrolment of approximately 250% across this 4 year period, with the number of Māori students enrolled (or retained) in Year 11 increasing from 2005 numbers of 376 at the Te Kotahitanga schools and 336 at the comparison schools to 996 and 797, respectively, at these schools in 2008.

These data suggest that a broader range of students were being retained at all schools rather than revealing a pattern whereby lower achieving students left school without attaining this benchmark.

As for literacy, the increase in numbers of students in both groups attaining numeracy L1 is very large, so these results overall are extremely positive, showing considerable improvement in student achievement across 2005-2008. There is a decrease in the percentage of Māori students meeting the numeracy L1 requirements at both the Te Kotahitanga and non-Kotahitanga comparison schools. For NZ European students, there is virtually no change across this time period for the percentage attaining numeracy L1 at the Te Kotahitanga schools compared to a slight decrease for the non-Te Kotahitanga schools.

Table 14: Comparison of Numeracy L1 attainment by year 11 students for 2005–2008

	European students			Māori students only		
	Total N	Number attaining level 1	%	Total N	Number attaining level 1	%
2005						
Te Kotahitanga	590	522	88.5%	376	333	88.6%
Comparison	590	565	95.8%	336	297	88.4%
2006						
Te Kotahitanga	674	610	90.5%	398	357	89.7%
Comparison	646	627	97.1%	332	304	91.6%
2007						
Te Kotahitanga	919	799	86.9%	728	649	89.1%
Comparison	863	830	96.2%	577	527	91.3%
2008						
Te Kotahitanga	1127	984	87.3%	996	778	78.1%
Comparison	1023	913	89.2%	797	643	80.7%

NCEA level 1 credits attained in selected subjects by year 11 students

We also examined the mean number of NCEA credits attained by Māori and non-Māori students in selected Year 11 subjects, including three core subjects—English, Mathematics, and Science—taken by all students. Outcomes for two elective (non-required) subjects—History and Physics—are also reported. Tables 15 and 16 report the results of these analyses, including statistical tests for significance of differences possible as these data from NZQA are based on individual student numbers.

These results reveal considerable variation across subjects. Both Māori and European students showed a small decline across the 2005-2008 years in attainment of credits in English, with no significant differences between Te Kotahitanga

and comparison schools in 2008. There were differences in Mathematics in 2008 favouring the Te Kotahitanga Phase 3 project schools; there were also significant differences in the first year of implementation 2005 though the significance level favouring the Te Kotahitanga schools increases over time. Achievement in Science was significantly lower for Māori students in the Te Kotahitanga schools than in the comparison schools in 2005. But by 2008 this pattern had reversed, with Māori students achieving significantly more credits in Science in the Te Kotahitanga schools than in the comparison schools.

In the elective subject of History, European students at Te Kotahitanga schools achieved more credits than their counterparts at non-Te Kotahitanga schools, but there were no significant differences for Māori students in this subject at follow-up. In the elective subject of Physics, both Māori and European students are achieving significantly more credits at the Te Kotahitanga schools. These findings could reflect rising expectations whereby students are being encouraged to sample widely across the curriculum when they reach NCEA subjects in Year 11.

Table 15: Mean number of credits in compulsory subjects attained by Year 11 students

Subject	Year/ Group	European students					Māori students only				
		N	M	SD	t-value	p-value	N	M	SD	t-value	p-value
English	2005										
	Te Kotahitanga	582	19.97	7.13	3.32	< .01	360	15.29	7.54	-.48	n.s.
	Comparison	587	18.71	5.74			314	15.56	7.01		
	2006										
	Te Kotahitanga	662	20.08	6.68	.24	n.s.	381	16.97	7.18	-.11	n.s.
	Comparison	641	19.99	5.77			323	17.03	6.90		
	2007										
	Te Kotahitanga	912	18.67	7.00	-1.74	n.s.	700	15.41	7.29	-.90	n.s.
	Comparison	855	19.22	6.26			554	15.78	6.93		
	2008										
	Te Kotahitanga	1,081	17.63	7.03	-.76	n.s.	863	13.10	6.84	-1.80	n.s.
	Comparison	978	17.87	7.03			700	13.73	6.97		
Mathematics	2005										
	Te Kotahitanga	585	23.23	7.95	3.47	< .01	373	19.54	9.11	3.42	< .01
	Comparison	586	21.66	7.53			331	17.36	7.87		
	2006										
	Te Kotahitanga	670	26.90	9.81	3.44	< .01	393	22.66	11.59	3.69	< .001
	Comparison	644	25.12	8.88			325	19.85	8.84		
	2007										
	Te Kotahitanga	912	25.03	9.32	2.86	< .01	716	21.03	10.50	4.26	< .001
	Comparison	860	23.76	9.34			571	18.73	8.87		
	2008										
	Te Kotahitanga	1,118	23.93	10.61	8.37	< .001	953	17.26	10.50	4.20	< .001
	Comparison	1,015	20.37	9.03			759	15.37	8.10		
Science	2005										
	Te Kotahitanga	429	12.66	7.56	-.89	n.s.	228	8.84	6.49	-2.70	< .01
	Comparison	491	13.09	6.84			224	10.54	6.89		
	2006										
	Te Kotahitanga	525	15.86	7.68	-.72	n.s.	277	12.93	7.47	1.60	n.s.
	Comparison	592	16.18	7.62			251	11.90	7.24		
	2007										
	Te Kotahitanga	685	12.75	7.14	-3.93	< .001	505	11.16	7.01	-1.65	n.s.
	Comparison	724	14.20	6.70			406	11.92	6.69		
	2008										
	Te Kotahitanga	822	13.09	7.89	3.16	< .01	639	9.92	6.44	2.64	< .01
	Comparison	820	13.80	8.22			516	8.96	5.87		

Table 16: Mean number of credits in selected elective subjects attained by Year 11 students

Subject	Year/ Group	European students					Māori students only				
		N	M	SD	t-value	p-value	N	M	SD	t-value	p-value
History	2005 Te Kotahitanga Comparison	117 139	18.74 16.12	6.80 5.84	3.32	< .01	40 52	14.60 12.38	7.11 5.67	1.62	n.s.
	2006 Te Kotahitanga Comparison	118 141	18.85 16.09	7.34 6.74	3.16	< .01	41 45	14.05 13.16	8.25 7.22	.54	n.s.
	2007 Te Kotahitanga Comparison	158 193	18.92 16.92	7.79 7.24	2.41	< .05	76 77	16.42 13.92	8.78 7.33	1.91	= .058
	2008 Te Kotahitanga Comparison	169 194	19.29 14.99	9.64 6.84	4.83	< .001	93 107	12.26 12.26	7.97 7.17	-.00	n.s.
Physics	2005 Te Kotahitanga Comparison	201 172	6.17 4.65	4.22 2.71	4.22	< .001	97 81	5.23 3.70	3.64 2.44	3.32	< .01
	2006 Te Kotahitanga Comparison	243 203	7.80 5.18	6.17 3.79	5.50	< .001	69 70	5.91 4.34	5.16 2.89	2.21	< .05
	2007 Te Kotahitanga Comparison	203 222	8.08 5.82	6.33 3.78	4.43	< .001	72 81	7.32 5.35	5.85 3.19	2.55	< .05
	2008 Te Kotahitanga Comparison	202 252	8.09 4.63	4.79 2.93	9.00	< .001	65 86	6.18 4.60	3.88 3.32	2.69	< .01

All Year 11 achievement analyses assume that teachers and students have ongoing impact from what they experienced in Years 9-10. There is of course no evidence that this is so, which would require gathering data in the senior school which is outside the scope of our contract.

Attainment of University Entrance in Year 13

As noted throughout the report, it is too early for the direct impact of Te Kotahitanga on Māori students in Year 13 to be evaluated; this could only be done once the initial student cohorts have completed their secondary education. Nevertheless, we include in our report information on the attainment of University Entrance (UE) at Te Kotahitanga schools in comparison to the comparison schools in order to provide evidence regarding whether or not it could be claimed that the presence of this project in schools was associated with either enhanced or depressed performance at graduation, across all students. Furthermore, achieving UE is widely regarded as a sign of enhanced student outcomes. As one principal put it:

The thing is, Māori students are just like any other group of students, they are perfectly capable of getting Level 3 and going to university. So I would like to see a lot more of University Entrance happening.

Under NCEA, the granting of UE is automatic based on student results in Year 13, rather than being dependent on individual intentions to enter university as was previously the case under New Zealand Bursary. Thus, the proportion of students attaining UE over time can provide a measure of progress on overall student achievement after the final year of schooling.

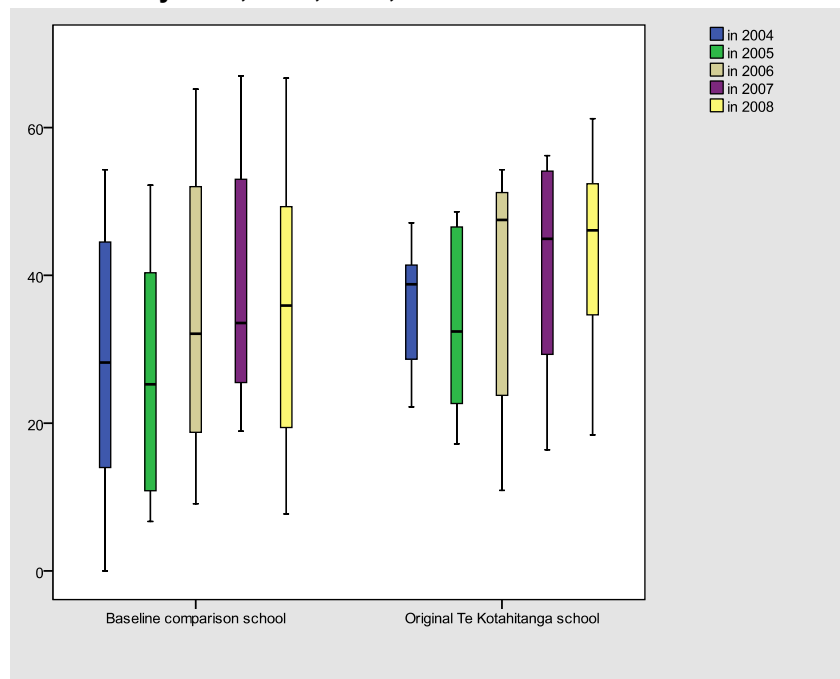
In order to gain UE, a student must pass a minimum of 42 credits overall at Level 3 or above comprising at least 14 credits each in two subjects approved for university entrance and 14 credits in a third approved subject or interdisciplinary cluster of subjects; students must also attain the requisite number of literacy and numeracy credits. Because of different patterns of study, a candidate can gain NCEA Level 3 without gaining University Entrance and vice versa by meeting alternative qualification requirements. Table 17 and Figure 4 present the mean percentage of Year 13 students who gained University Entrance (UE) from the total Year 13 roll in Te Kotahitanga versus the comparison schools from 2004 to 2008.

Table 17: The mean percentage of Year 13 students gaining University Entrance in 2004–2008

	12 Te Kotahitanga schools				12 comparison schools			
	Mean	Median	SD	SE mean	Mean	Median	SD	SE mean
Year 13 in 2004	37.1	38.8	10.9	3.15	28.9	28.2	18.5	5.4
Year 13 in 2005	33.9	32.4	12.7	3.67	27.4	25.3	16.2	4.7
Year 13 in 2006	38.9	47.5	15.8	4.55	35.0	32.1	20.1	5.8
Year 13 in 2007	41.4	44.9	15.0	4.34	37.8	33.6	16.1	4.6
Year 13 in 2008	43.1	46.1	12.7	3.68	35.3	35.9	19.4	5.6

* At one of the comparison schools, no student attained UE hence the overall mean was 0% thus increasing the standard deviation accordingly.

Figure 4: Percentage of all Year 13 candidates to gain University Entrance by 2004, 2005, 2006, 2007 or 2008



As with other Year 13 achievement results, these results are affected by the overall Year 13 student roll and students who have left school prior to Year 13. In the case of University Entrance, students less likely to be completing requirements towards gaining UE are those mostly likely to have left school by the final year—hence resulting in an *increase* in the proportion of Year 13 students gaining university entrance. These data reveal that the percentage of Year 13 students gaining UE increased from 2004-2008 in all 24 schools, following a slight decline from 2004 to 2005. Z-tests using differences of proportions revealed statistically significant differences, with a significantly higher percentage of students attaining UE each year from 2004-2008 at the Te Kotahitanga schools. Results for the Te Kotahitanga

student cohorts in 2009-2010 are needed to examine specific effects associated with the programme. Interestingly, the national percentages of Year 13 students gaining UE across all secondary schools was 36.9% in 2004 and 43.6% in 2008, a gain of 6.7%, only slightly higher than that achieved by the Te Kotahitanga schools across this same four year time period (6%).

In summary, our evaluation has been able to examine Year 11 student outcomes associated with full implementation of the model at Phase 3 schools. While important as a first step, improvement in Year 11 outcomes is not sufficient. Future achievement goals for all students, including Māori, include at least the attainment of a Year 12 qualification (Ministry of Education, 2009). Further, the ultimate goal reflecting high expectations must encompass NCEA level 3 attainment or its equivalent.

Key findings: Impact on students

- Students reported enhanced valuing of their identity as Māori learners and increases in culturally responsive practices at most schools, and the perceptions of school personnel and whānau provide additional support for growing appreciation for Māori cultural identity in schools. Māori students were proud of Māori culture and identity and felt that, on the whole and in most schools, they were able to “be Māori” in school rather than having to leave that identity outside the school entrance in order to succeed academically.
- Students were able to articulate how teachers showed they valued them as learners and as Māori, and they were able to discuss how teachers had changed in establishing positive relationships with them as learners. They emphasised the importance of teachers’ caring about them as persons to support their learning. They commented on how difficult it was for them to care about how well they did and do the work in classes where teachers made it clear they did not. However, there were still perceptions among Māori students in a few schools that a ‘double standard’ continued to exist whereby Māori students were singled out and disciplined for behaviour ignored for students from other cultural groups.
- Students discussed ways in which the school as a whole either did or did not demonstrate valuing of Māori culture and language. They gave examples such as use of powhiri, kapahaka and waiata, and they were able to define places and people—such as the Te Kotahitanga room, the marae, and Māori teachers—who helped them to ‘feel Māori’ at school in a positive way.
- Interviews with whānau affirmed that their children view school positively, loved coming to school, and had greatly improved their attendance and participation, which many contrasted with their own more negative memories of schools and schooling.
- Teachers, principals and other school leaders affirmed that their own expectations had been raised for and relationships improved with Māori students, and they attributed this shift to Te Kotahitanga rather than to the ETP specifically. Teachers generally did not use the language of the ETP when they discussed Māori learners, expectations, relationships and pedagogy in the classroom. While they noted the relevance of culture to teaching and learning, few discussed specifically that the development of a culturally-grounded identity was an educational outcome for students. The work of facilitators with teachers may require more explicit focus on culturally responsive pedagogies and how to support learning grounded in students’ Māori identity towards adding to and enhancing existing conceptions of good teaching. This will also require more dialogue with the Māori community.
- Teachers, facilitators, principals and other school leaders reported improvements in student attendance, participation, motivation, and engagement in school and classroom learning activities which they attributed to Te Kotahitanga.

-
- There is numerical evidence of enhanced student retention and increases in Māori student enrolment in the senior school and NCEA credit attainment at Year 11 for Phase 3 schools in comparison to 12 matched comparison schools.
 - Systematic comparisons of Year 11 student performance between the 12 Te Kotahitanga Phase 3 and 12 matched schools reveal higher increases (gain) across 2004-2008 in the percentage of Year 9 entrants attaining NCEA Level 1 in Year 11; Te Kotahitanga schools also evidenced twice the increase in this percentage gain than the average gain nationally. Comparisons also reveal lower achievement outcomes for literacy and similar achievement outcomes for numeracy at NCEA level 1 in 2008.
 - Systematic comparisons of Māori student NCEA achievement at Te Kotahitanga Phase 3 schools compared to matched schools reveal statistically significant differences favouring the Te Kotahitanga schools in mathematics, physics and science, and no differences across the two groups of schools in English and history.
 - Te Kotahitanga schools were associated with a statistically significant higher mean percentage of the total school population at Year 13 who gained University Entrance in comparison with the 12 matched comparison schools.

Chapter 6: Impact on Schools

This chapter addresses the impact of the Te Kotahitanga Professional Development programme on schools, both intentional and incidental. The data used to draw the conclusion for this chapter come from Phase 3 and 4 schools, principals, facilitators, students and whānau. The intention of the chapter is to demonstrate the impact the professional development programme has had on the school as an institution from the perspective of all those involved.

As might be expected the cultural responsiveness of schools toward their Māori students varied along a continuum with at one end, schools being highly responsive to things Māori while at the other end of the continuum, minimally responsive to their Māori students' cultural backgrounds. It is possible to trace this continuum using a variety of Māori cultural criteria such as the display of Māori cultural artefacts, use of te reo Māori across campus, familiarity of teachers with the local Māori landscape, and the socio-cultural awareness of teachers with their Māori students. Although all of these criteria are important in building up a culturally responsive school Te Kotahitanga focuses on the last of these criteria, that is, the socio-cultural awareness of teachers of the Māori students in their classes in the pedagogical relationship. Some schools were 'champing at the bit' to get involved while others were keen but nervous; some felt they were professionally ready to engage with the programme while a few felt a more deliberate, phased approach to the intervention with more time dedicated to convincing teachers and informing parents. No school felt Te Kotahitanga was a waste of time and energy. On the contrary, they all wanted to ensure the programme's continuance into the future.

As is well recognised, schools are busy institutions and classrooms are complex social organisations. The secondary schools and the classrooms we visited were testimony to these truisms. Yet, schools welcomed our intrusion into their daily lives, opened their classes for our observations, and grasped the opportunities to participate in our interviews. Such was the enthusiasm we encountered in almost every school and classroom we visited. It would be overstating the case to suggest that an intervention like the Te Kotahitanga Professional Development Programme was responsible in itself for the positive school climate but the data offer strong support for the impact of Te Kotahitanga on schools that have been implementing the Effective Teaching Profile (ETP) as part of the project with the Waikato research team.

Culturally responsive schools

Bishop and Berryman (2006) express being culturally responsive as recognising Māori student's culture and taking cognisance of Māori cultural aspirations and notions of belonging. Developing culturally responsive relationships requires schools to build appropriate and responsive pedagogies into their curriculum and programmes (p.201). Bishop and Berryman expand on this notion by stating teachers create a culturally appropriate and responsive learning context, where young people can engage in learning by bringing their prior cultural knowledge and experiences to classroom interactions, which legitimate these, instead of ignoring or rejecting them (pp. 264-265).

Bishop, O'Sullivan, and Berryman (2010) outline seven specific indicators of a culturally responsive school. The indicators are interrelated and interdependent. These are introduced in earlier Te Kotahitanga documents as the GPILSEO model (Bishop, Berryman, Cavanagh, Teddy, & Clapman, 2006) and updated in Bishop et al. (2008, p. 126) including:

1. **Goal:** The focus on improving Māori student participation and achievement.
2. **Pedagogy:** A culturally responsive pedagogy of relations developed across all classrooms, which is used to inform relations and interactions at all levels within the school and community.

3. **Institutions:** Creating time and space for the development of new institutions within the school, and establishing structures such as timetables, staffing and organisational structures need to support this reform.
4. **Leadership:** Leadership that is responsive to the needs of reform, proactive in setting targets and goals, and distributed to allow power sharing.
5. **Spreading:** A means whereby all staff can join the reform, and parents and community are included.
6. **Evaluation:** A means whereby in-school facilitators, researchers and teachers are able to use appropriate instruments to monitor the implementation of the reform to provide data for formative and summative purposes.
7. **Ownership:** A means whereby the whole school, including the board of trustees, takes ownership of the reform.

The schools in this evaluation varied in their implementation of the Te Kotahitanga GPILSEO framework and how this might be assessed, using the Bishop et al. definitions, on a continuum of low to high implementers. Those schools that were considered high implementers rated highly in all areas; moderate implementers demonstrated that they had made significant gains in almost all of the points above, with aspects still requiring change and attention; and the low implementers, of which there were few, had not made significant gains in many of the aspects above.

The following sections address the seven points considered to be necessary for culturally responsive schools according to the GPILSEO framework. These categories emerged naturally out of the interview and observational data and offer evidence that, overall, the Te Kotahitanga programme is helping to bring about these aspects in schools with varying degrees of success.

Goal: A focus on improving outcomes for Māori students including participation and achievement

Across all schools principals, teachers, students and whānau were mindful of the need to raise achievement for Māori students, as has been documented elsewhere in this report. However, schools varied in their ability to articulate clearly what this meant to all staff, to students and to whānau. In some schools it was noted that the emphasis on raising achievement for Māori appeared to have been misinterpreted by students and whānau in particular. The research team noted that the messages associated any initiative to raise student achievement could be misinterpreted as deficit theorising in the absence of clear understandings that schools and teachers must be culturally responsive to Māori as a primary approach to enhancing Māori achievement. There is a risk that an alternative, negative message may be communicated that reinforces deficit theorising, blaming Māori for school outcomes in a system that is not responsive to Māori. Whānau put it best:

I do agree that teachers do need to look at the experiences that the kids are bringing in. But it is more than that, one concern that I have is again that label ‘underachievers’ they’re looking at underachievers, that is the focus so how can we fix that? Why is it that we focus on the things that we don’t have confidence in? We should be focusing on success, we need to celebrate the kids’ success in all areas, so that they can be proud achievers, passionate and have that confidence. Why do we focus on the weakness?

School leaders need clear direction regarding the messages they communicate throughout the school and the community when discussing targeted achievement. In schools where this was done successfully, students and whānau were clear that the programme was to improve teaching and learning activities in classrooms and in the school.

Schools varied in their collection of achievement data and ability to analyse and use achievement data to plan ahead. Teaching staff maintained that gains had been made but tended to do so through social indicators such as systems and structures that demonstrated that Māori achievement had risen, for example, change of demographics within streaming,

choice options in senior subjects, and so on. Some teachers made the case that social indicators were significant and were valued by teachers as the first step in addressing underachievement. As an example, this teacher suggested that as a result of the programme students enjoyed working together and showed an interest in learning and that this in turn flowed on to an improvement in cognition and the quality of the work produced:

I have seen a measurable change in the students' cognitive levels and [in] their abilities. That is because all of the students and all of the teachers who are in the English department participate in the programme everyday. And as a department, we're quite happy [with reviewing] the work and the way that we teach, and so most of the students are getting the same kind of teaching. And there's a huge jump, I think, in the ability of the students. And the results are jumping.

In high implementing schools, students were aware of the high expectations held by teachers. As described in the chapter on student outcomes, students were able to articulate shared goals with teachers towards higher aspirations, using phrases like, "*They expect bigger and better things everyday*".

However, there was evidence that the focus on achievement in some schools was placed on Māori students who were already experiencing success at school. In several student focus groups and whānau meetings concerns were expressed regarding students who were not experiencing success at school and felt 'left behind'. These reports were substantiated by the classroom observations that tended to show a lack of differentiation in many classrooms, for learners who may be struggling with the content. Students described this best:

Some teachers prefer to focus on the flashiest, like to try and improve them and then we're kind of left on the side to help ourselves.

Some teachers treat the Māori students, like how they give good points to all the top scholars in the class and just leave the Māori students at the bottom.

Yeah, (teachers need to) just like look at the wider picture and ... Sometimes you can just see it. Like you see in your class there're some students that aren't coping and just ... you've got to do something about it, because if you just leave them until they come up to you ... they're just going to fall behind.

The interview data highlight the need for setting targets for all Māori students—high achievers, low achievers, and those with special educational needs. In some schools achievement targets need to be set for Māori students and communicated to staff, and in all schools whānau need to be incorporated in planning for achievement. As whānau expressed concern for some of their tamariki who were struggling at school it became apparent that schools need to demonstrate to whānau that all students are the focus of achievement targets, regardless of current achievement.

Pedagogy: A Culturally responsive pedagogy of relations across all classrooms that is used to inform relations and interactions at all levels within the school and community

The culturally responsive pedagogy of relations was evident in the data as seen in the chapter on the impact on classrooms. Teachers were able to articulate that a primary component of the programme was about improving relationships and interactions in the classroom. All teachers interviewed were able to discuss the importance and impact of developing positive relationships with students. This message is communicated clearly and reinforced through the ongoing professional development programme. Students reiterated the importance of relationships with teachers.

Yeah, Mr. He's a Pākehā but he's a Māori hard-out, he's like, hard out into it. And he was our Te Kotahitanga tutor, or something, he's our watcher, he acknowledges us. He's bringing us together and stuff,

like he sorted out trips and all that, He took us out, he teaches us new stuff, how to be better in class and all that; how to keep your nose clean.

Several students were able to articulate changes in the relationships that they had with some teachers since the beginning of the Te Kotahitanga programme. This was seen as evidence that the programme had in fact changed the behaviour of teachers in the classroom. Rather than just comment that teachers were more ‘friendly’ students were able to describe features of the relationships that were valued by students, such as equity, interest in student lives and fun.

The whole atmosphere around here is so much better because the teachers they actually... not only just teach but they also get to know the students and they develop a relationship with them ... and the stuff they do is just unique to this school and other schools have never heard or done anything like it. They’re, like the math’s department (teacher) was starting up freaky Fridays where every Friday they just dress as outrageous as they can.

Well like they actually take time to talk to you and like just act as if they weren’t a teacher or I mean they get on your level and talk to you as just an equal person.

As noted earlier in the Student outcomes chapter, teachers and school leaders reported that a strong measure of the impact of Te Kotahitanga and improved relationships was attendance—that is, students wanting to be at school. Although some teachers and school leaders did not attribute this solely to Te Kotahitanga, they noted an improvement in engagement and attendance since implementation. Many schools had evidenced this change with a decrease in truancy, an increase in attendance and decreases in disciplinary procedures such as stand downs. Several teachers in particular credited this to the improvement in relationships within the classroom and a more caring environment.

However fostering positive relationships with students is clearly not enough to ensure that students achieve at school, but rather, it is the impact of these relationships on the learning and interactions within the classroom that makes the difference. Interestingly, in all schools, school leaders and teachers reported that the change in the nature of the relationships had resulted in teachers and students changing their perception of learning. Some teachers were able to articulate the importance of the relationships between the students in learning, although the data indicate that this is an area that could be explored further in the professional development. As an example, teachers reported a general observation in several schools that students were more engaged when working together and that this in turn had changed the tone of the school.

I think I’ve seen a change in the school, a change for the better. One of the big changes would be that it’s looking at good engagement, good achievement of Māori students and others, that is the measure where initially there was a lot of emphasis on collaborative work and students would be working collaboratively a lot of teachers energies and the expectations and pressure they felt was to have collaborative groups working well in class where there seems to be greater recognition now that that is one means to an end.

Changing the pedagogical relationship of teaching toward a dialogical model had been noted by some school leaders as contributing to the change in the power relationships that exist within the school. However, classroom observations indicate that examples of very strong dialogic teaching were limited to high implementers indicating that this is a higher order skill that takes time to develop through the programme. A good example given by a facilitator demonstrates how the tone of teaching had changed in the school.

I saw a really good example with a DP the other day taking a maths class. He sat down next to somebody and that kid said, “Oh, I don’t know how to do this.” And the teacher said “Well, neither do I.” So he said,

“Where do you think we might like to start?” It was just such a nice little interaction and he was sitting down next to him, and this is the DP at school. That would be totally unheard of a few years ago.

These changing dynamics in relationships within the classroom reportedly improved the climate of the whole school. Not only the improvement in relationships between staff and students, but also amongst staff and between students, resulted in creating a safer and more comfortable environment for everyone.

I feel personally as a teacher here that this is a very, very comfortable and supportive and safe school to work in. In my 4 years I’ve been teaching here now, I have not witnessed one violent event personally, although I mean I’m doing duty as everybody else does twice a week, um, I know events have taken place, but, you know, the fact that I haven’t actually been able to see one, or haven’t seen one, is indicative of the fact that that incidence level must be really low. And I think, you know, this has some part to play in all of that, that the students are comfortable in this environment, that they are, um, they feel that it is an environment where it actually matches up with their culture and that they are culturally at home in this school and they can relate to teachers very positively in most circumstances.

[It’s] made the students more positive, in that their attitude has changed. And we’re not talking about small [things] like saying the wrong name, not pronouncing Rawiri or Tamaki or whatever, Tamati... you know, is it Tamati or Taamati. It’s just [making those] small changes, but they’re not necessarily the most important [but] the students are happier. They’ve enjoyed what they’re learning. And the way that they’re learning it is [through] interaction with each other. Whereas in the past it was talk and talk ... quiet, don’t do that.

Several teachers and principals reported that the change in school tone was not isolated to Māori students but had changed the environment for everyone. Several teachers noted that other cultures, including Pasifika students benefited from the improvement in general tone and relationships within the school.

There’s no way that this is only helping Māori. This has huge positive impacts on all students, and that’s part of that school tone thing. It was never just the Māori kids who were naughty, it was never just them, who were being excluded and suspended. It has had a big impact on kids in general.

A common report from school staff was that the change in school tone and improvement in relationships across the school was brought about directly as a result of the change in deficit attitudes. As a result of the changing of teacher attitudes toward Māori through the Te Kotahitanga professional development model teachers were more likely to be solution focused and positive about student achievement. Teachers, school leaders and facilitators from all schools discussed how changing the deficit views of teachers had an effect on the whole school tone. Teachers reported that the talk in the staffroom ceased, teachers were open to more positive discussions about students and were less likely to attribute student difficulties to the individual or home.

Te Kotahitanga is fabulous. It needed to happen. [It’s] fantastic to hear the conversations that are happening now around our Māori students. That would never have happened. Seeing some of them, the red-necked views that there are. At least they’re coming out. At least it’s not just happening behind the closed doors of a classroom. And they can be challenged and spoken about and I think it just breaks down. You can break down barriers. So many things, with my colleagues here, with their perception of things Māori, it was misunderstanding.

I think the other good thing that has come out of it, is not only that, it’s that the talk in the staff room- you’d go in for morning tea and all you’d hear is “Oh that Wally swore at me again in the classroom” or “he

wouldn't get his books out" or whatever. The talk isn't so much about behaviour, the talk is actually about, "Hey, I had a really good science lesson today; Wally actually completed his homework for me."

Despite school leaders and teachers reporting a change of attitudes, students in focus groups reported incidences of racism at school. These reports appeared to be concerning isolated teachers and dependent on the context of the school, and they were more likely to appear in low implementing schools. In one example a student spoke of having a tāonga confiscated as part of the school rules which they considered disrespectful. For many Māori students, racism is an issue they still face at school. This demonstrates that addressing deficit and racist attitudes is at the core of a culturally responsive pedagogy of relations; relationships are unable to develop positively when teachers hold deficit views:

My science teacher is real picky about who she (calls on). There is a whole group of us we have our hands up and everything and we know we know the answer but she'll go to the Pākehā—and I'm not being like racist—she'll go straight to the Pākehās because this guy who is playing around, and we are all right, we know the answer but she won't like give us time. Like the Pākehā before the Māori, like we're second class. It is really annoying though because she's just always like them —hello! That's why Māori get so frustrated with teachers because they are like—this is our race, Pākehā are upper class and Māori are just down here, you know?

Mr, he's got a whole draw full of tāonga that he confiscated and so we find that pretty disrespectful and the teachers, the Māori teachers can't actually do something about it because it's a school rulethat's a really big issue.

In contrast, focus group students from another school stated that there was no racism in their school. The interviews from whānau, teachers and school leaders demonstrated that this particular school had given Te Kotahitanga prominence in the school and had implemented policies such as restorative justice to complement the Te Kotahitanga programme. The relationships in the school were positive as school leaders, staff and support staff all modelled culturally responsive relationships with each other and students.

I think that there is no racism hereThere are other schools round here that you can get quite a negative racist thing like that and I feel like at this school, I don't think you do.

A clear omission in the data was evidence that schools have developed close relations and interactions with whānau, nor did whānau whom we interviewed feel that they had any significant role or input into school policy or practices. Very few schools have extended the principles of Te Kotahitanga into examining their relationship with their community. The emphasis on relationships with whānau and developing the whānau community within the school is an aspect which requires attention in most schools.

Institutions: Capacity for new institutions and structures within the school, including time and space, staffing and organisational structures to support reform

The Te Kotahitanga programme has a physical impact on schools as space and organisational systems and structures require adaptation for the programme to be implemented successfully. Interviews with school leaders demonstrated that many had given physical resourcing much consideration as they realised the impact of placement on the success of the programme. This space often dictated the profile the programme was given in the school;

Giving it a profile was something that initially I struggled with. Physical resources; the need to have a room where staff were able to do the stuff which is aboutthe physical resourcing of it was important. Hence I'm in this room. Now I moved out of my office, because it seemed to me that the best place was my old principal's office, so I moved out of there and said; "Okay, let's set it up and call it whatever you want to call

it.” And now we call it Te Rūma. ... And that’s where all that stuff happens. And people know that when they go in there, this is about focusing on learning. So that’s really good. The second thing we had to do was to try and create a space for the facilitation team, and prior to them moving they were working out of classrooms. And that wasn’t satisfactory. So they needed to be high profile, in the admin area, near the staff room and near Te Rūma. That meant quite a shift around in what was happening in a traditional, rabbit warren office area.

Several school leaders were cognisant of the impact the physical placement of the programme would have on the school and staff. They viewed the placement as communicating to staff that the programme was important to the school, would be ongoing and required accommodating within school.

So people were shifted and people were restructured internally without pulling walls down. So that made it high profile and the staff knew that “okay, this is important because everyone is moving out to make way for TK.” So don’t ignore it, it’s not just something that is going to go away, it’s here.

In one school the introduction of Te Kotahitanga had also brought about the creation of a department and a position that attracted management units. This teacher felt that these developments assisted to normalise things ‘Māori’ and bring about an acknowledgment that the school valued Māori culture.

By the school setting up a, a faculty Māori and by creating a position such as director of Māori achievement was like putting Māori things out there, like normalising Māori things instead of making it a “too scary to go there zone”... It has also helped moving the where into the middle of the school, where everyone can see it.

Discussion around the initiation of the programme focused on the timing with which the programme was implemented and the preparation needed by the school and staff for change. Several school leaders reported that they would have liked more time to prepare the staff and school with one school reporting that they were pleased they were in the Phase 4 as they were more prepared. In particular schools acknowledged the adaptations that needed to be made to space, time tables and staff in order for the programme to run smoothly in the school.

But my general advice would be, it’s a great program, but you’ve got to know where your staff is at. I mean it’s nothing that would work if you said “right this is what we’re doing and you guys are all in.” You’ve got to be in a certain place and I was quite pleased that we didn’t kick up too much a stink about (not) getting involved the first time around. I just think that we were better placed as a result of other stuff that we were doing. Talking about teacher resilience and the importance of relationships, and adjusting some of our behaviour management stuff so there is a bit more responsibility on the teacher about trying to solve that problem. And then I think that we were just a bit better placed by the time we did get in.

In particular one school leader articulated the need for a ‘transition’ type year to adapt programmes, employ and train facilitators to precede the implementation of the programme in the school.

The ideal would be a two year lead in, not a one year lead in. The ideal would be that you get the call saying “you’re in luck, you are in the project” and if it is 2008 in 2010 you will be in the project. In 2009 you will pick your facilitators and your key people that you want to be the seeds, the people that will help this whole thing grow. We will come to the hui, we will engage in the PD but as observers and learners and listeners and there will be a little bit of release time for them to go to the schools where it is already working and have that other interface with the practicalities of it. That would then allow those people in the later stages of that first year to engage in the staff school wide, ‘this is what we’ve done, this is what we’ve found’ and then go in with a cohort.

Further planning, one principal contended, would allow the school to accommodate the timetable to suit the programme. The principal felt that the school had a difficult year managing the programme within a timetable that was already predetermined.

For us the timing that we're accepted into TK, our timetable for the following year had been pretty much strung. So there wasn't that opportunity. If you had the luxury of time, certainly, I would say do that. Spend time constructing your timetables so that your cohorts can be together. But we didn't have that luxury. And it's better this year; it'll be fine next year.

All schools had multiple professional development initiatives and varying school and community based programmes occurring simultaneously with the implementation of Te Kotahitanga. In schools with multiple initiatives, we tried to ascertain the extent to which these were conceptualised as interconnected or as separate, as well as the extent to which school improvement could be attributed to Te Kotahitanga. Furthermore we asked how the school envisioned Te Kotahitanga 'fitted' with these programmes and vice versa. The implication here is that schools need to plan how Te Kotahitanga might fit within the structure of what they currently do and what they might do in the future.

Thus, we specifically asked Principals how Te Kotahitanga fit alongside other initiatives at their school. Most said that it was the driving initiative that had enabled them to re-focus how all the "different" projects operating at their school fit together. One principal expressed such a vision that directly connects school initiatives to one another:

How does this fit with what we are trying to do? I think it fits very well with whanaungatanga, because it's modelling that. So we are not saying everything we do is bound by this. But [Te Kotahitanga] is certainly becoming the umbrella along with two other key things: the New Zealand curriculum and [something] is happening in this district called the [regional] achievement initiative. They've all dovetailed. All those things are the umbrella under which we work at this school.

One of the things that really excited me and other people is the change in discussion, in the language that teachers use, and the discussion just in the staffroom for example. Through the achievement of the Waitangi initiative, we quickly realised it's not a question of teaching teachers strategies to improve literacy. It was a whole pedagogical shift that we needed in terms of getting that literacy and numeracy being taught better for students. And what we found was Te Kotahitanga just really pushed that whole pedagogical shift along and things improved suddenly and in great strides. That's what really interested me.

Some of the other Principals were planning professional development initiatives in terms of how they complemented the work done through Te Kotahitanga. One, for example, explained that Te Kotahitanga was in the process of becoming "*the pillar, the back bone of which the other PD will hang off.*" In a few of the schools, teachers discussed connections between Te Kotahitanga professional development and other forms of professional development in which they participate, such as Gifted and Talented, Reading, Formative Assessment, or Restorative Justice. For example:

Reading is also another important skill some of the students their reading skills are not very good so that is equally important to all this TK, so what we do is we try to (inaudible), you know, and exactly what I do is to see where it can fit in especially the (classrooms) is what I did, ok. So we put the reading strategies and the group work, you know, its was a form of puzzle so that was Te Kotahitanga and the reading thing it is all going hand in hand and we have practicals, our own practicals, science practicals when they work in groups. So there is a lot of group work, they are learning, yeah, so it is all going hand in hand and there is no segregation as of what I feel everything is going together it is blending in very well.

A teacher speaking to the relationship between numeracy professional development and Te Kotahitanga:

I think six years ago, the government put a lot of funding into what was called the numeracy project. It started at primary schools and slowly filtered through. We were one of the first pilot schools to enter the numeracy project four years ago. We acted as a pilot school for two years and got funding and facilitation and all that support- mostly through school support services. So when TK came along, I was interested to hear from school support services that many of the aims and the objectives overlapped. In other words, the numeracy project was directed for maths teachers, it was a PD programme for mathematics teachers to improve their teaching of mathematics and better meet students' needs. And to look at the way maths is taught, their approaches, group work was one of them that was heavily emphasised at one stage. And one of the reasons that we in maths were a little bit slow to engage in TK initially, was because we were still in the pilot project, the aims were similar because we wanted to do good teaching practice and we saw that overlap.

While connecting professional development initiatives makes sense, some of the lead facilitators expressed concern that the focus on enhanced student outcomes for Māori students would be watered down if Te Kotahitanga was connected with initiatives that focused on improved teaching of "all" students. They expressed concern that it would perhaps be too easy for the programme to be hijacked by issues focused on teacher professional development that was not for the purposes of student achievement outcomes:

One of the pieces of feedback that often we'll get from staff after an initial hui whakarewa is that 'Oh we've got much better relationships between staff in the school. There is greater collegiality, there is greater sharing across departments, and we are de-privatising practice.' Those things are fabulous. But if those things don't lead to an impact on outcomes for Māori students, then for me they are not actually going anywhere. Because if we are just making professionals' lives better or more comfortable or more collegial, then why would we bother to do that when our explicit goal is the focus and outcomes for Māori students? So whilst there are some really important things happening, I believe, along the way, if they don't lead to outcomes for Māori students, then why would they be part of what we are doing?

Because some of the schools were working to connect multiple professional development initiatives, Principals acknowledged that positive student outcomes would therefore be the results of a combination of initiatives, and they saw that it would be difficult to attribute change to just one project including Te Kotahitanga. For example:

I had been responsible as DP for designing the punitive discipline system that had to get stronger and stronger and stronger to cope with the same issues that kids have brought to school forever and ever. So I started exploring other alternatives, and yeah- we've had one suspension in the last two and a half years, and I hope we don't have to have another one. It [restorative justice] links really strongly with what Te Kotahitanga is all about.

I get the feeling that our Māori boys are more engaged. I certainly think some of the stats have come through in terms of attendance and that is showing. But in terms of being really definitive- and the other thing too, is that you've got other initiatives going on and how much impact they are having is hard to gauge.

Not all programmes within schools complemented the Te Kotahitanga professional development. In particular some teachers commented that school policy and requirements for assessment and streaming work at cross-purposes to Te Kotahitanga. It appears that the individualism of assessment requirements in senior school and the selectiveness of streaming are counter to collaborative and power sharing relationships as described in the Te Kotahitanga programme.

We encourage the group work, the working together, especially in year nine and ten. Um, however once we hit NCEA year eleven, all of a sudden I think that focus shifts. And the assessment brings it back to being

very individualised. So it almost seems as though, you know, in one side of the programme the teaching is collectiveness, but as soon as we get to actually assessing them it's back to individually.

I would say that I've quite dramatically changed my approaches, my teaching approaches, especially at the junior level. Not so much at senior level, simply because we seem to be more constricted... restricted by NCEA, and the curriculum.

I've reservations about the use of streaming in our school, and of course the red shirts show the tracking of streaming, does no favours for the kids in the bottom sets where all kinds of reasons, as has been known for a very long time, but many schools persist in tracking.

Planning for the implementation of Te Kotahitanga is crucial to the success of the programme as new staff needed to be employed, provision to timetables needed to be made and physical space appropriated. The interview data show that the physical space given to the programme demonstrates the importance and permanence of programme to staff and students. There is the potential in many schools to use spaces more effectively and to improve the use of the Marae and facilities. Some schools indicated that the lead up to implementation is pressured and creates some challenges for schools as they are required to make changes to systems and structures that would accommodate the programme. Schools need to consider planning for the place of other initiatives in the school and how systems and policies fit with Te Kotahitanga. Future planning and resourcing by the Ministry may require more notification in preparation for implementation.

Leadership: Leadership responsive to reform needs and proactive in setting targets and goals as well as distributed to allow power sharing

The Te Kotahitanga programme has played a role in enhancing leadership capability and capacity in schools. Through creating new positions in the school, Te Kotahitanga has created opportunities for some teachers to move into facilitation roles and develop their mentoring skills. Principals particularly commented on the increase of the leadership capability amongst staff, through the professional development and opportunities given to the facilitators to take a leadership role.

Well I'll tell you, (the facilitator), she has blossomed into a great leader on the staff. And this will be a channel for her moving into senior leadership I'm sure. She's really developed.

This is an indirect benefit for teacher leadership resulting from Te Kotahitanga participation, but appears serendipitous rather than systematic. If, for example, teachers who demonstrated mastery of the ETP had access to mentoring and even formal facilitation duties more broadly integrated into the school, this could enhance curriculum leadership further particularly with regard to culturally responsive pedagogies across different subjects.

Several principals and school leaders commented that they had developed knowledge of Tikanga and te reo through the programme. In one high implementing school, students spoke of how the principal started assemblies with a mihi and a karakia. Similarly students in another school commented how proud they felt when visitors to the school were welcomed by the principal in te reo.

Five years ago, would you have expected a white middle class Deputy Principal to be talking Kaupapa and talking things like that to you? You know, it's just that there are all these subtle changes that go on... And we are bicultural.

In some schools, leadership had been extended to Māori students through the creation of head prefect positions and youth mentoring roles. It would seem with the aims of the programme that increasing the capacity for Māori leadership

both in staff mentorship roles and for students should be a priority. According to the Bishop et al. (2010) definition, leadership within the school should be ‘distributed to allow power sharing’. Further examination of opportunities to create leadership opportunities for Māori students and share power with them could be explored by schools. The data from students and teacher interviews indicated that seeing Māori students in leadership positions was viewed as a measure of the success of the programme, for example:

It’s just a mark of how far we’ve come. This year we’ve got a head boy who is tangata whenua, and a head girl You know, five years ago that would not happen in [this school].

All principals believed in the capability of the programme to improve achievement for Māori. Across schools Principals varied in their responsiveness to the reforms and setting appropriate goals and targets. In several schools, principals were able to articulate their vision for the school and how Te Kotahitanga was placed within the overall aim of school improvement. A good example shared by one principal demonstrates this:

At the start the visioning thing that we touched on before and which I do at the start of every year. I present a ‘this is what our school is about’ session. And it has these four pieces of the jigsaw puzzle in it, which shows that these are the four things that if we get right will make our school effective. In my view they are; managing behaviour correctly, good pedagogy, relevant curriculum and an espousing a great set of values. And so then I go down one step into that and just say “for managing kids correctly in our school we are nailing our flag to the restorative practices mast. We are looking at some innovative curriculum. We are running a cornerstone values programme. And for our pedagogy it’s around about Te Kotahitanga.

Although principals often emphasised the importance of a visioning process as being a step towards schools becoming more responsive to Māori students, there were gaps in the data on how much this process was ‘shared’ with staff, students and whānau. At times the emphasis appeared to be the focus on improving teachers’ classroom practice without thought to the overall structure and culture of the school. Often school leaders described how they had set the overall agenda for school change. The involvement and commitment of senior management was central to the effectiveness of the reform process. However it was not always clear how or to what extent the school’s senior management explicitly involved teaching staff as well as whānau and Māori students. There were gaps in the data on how the improvement and leadership process had been shared and distributed across the school community. As indicated earlier whānau and students appeared to largely sit outside the reform programme. Implicit in this omission lies the possibility of a deficit view of the contributions of all stakeholders towards the improvement process.

Interviews with Deans and Heads of Departments indicated that these school leaders largely viewed the central responsibility for reform as resting on the shoulders of classroom teachers. We were surprised in particular that the 19 Heads of Departments we interviewed generally did not highlight or elaborate their own role in the leadership and improvement process. As indicated earlier, Bishop and his colleagues (2010) emphasise the place of distributed leadership whereby all stakeholder groups are represented in the leadership community and that all can play an active role in the improvement journey. There is an opportunity for schools to consider the way in which they distribute leadership within schools; the opportunities that might exist for Māori students; and the way in which visioning and associated activities of planning, acting and evaluation are shared with students, whānau and staff.

Spreading: Inclusion in reform whereby all staff can join the reform, and parents and community are included

The issue of distributed leadership and inclusion in reform are closely related. Our data revealed that the rate of change and the level of implementation were variable across schools, but some degree of change within the school was reported without exception. When school leaders talked about change, they also frequently talked about readiness for change,

resistance to change and embedding change. While including all staff is important, it can also be problematic at least initially.

Several school leaders and teachers referred to unrest amongst staff during the implementation phase of Te Kotahitanga; in fact in one school, there was significant resistance by some teachers to participate in the programme. It appeared that this unrest had settled in the Phase 3 schools, as most Phase 3 school leaders spoke of the turbulent change as something that they had overcome. One school leader in particular talked about challenging and changing the core beliefs of staff as a part of the process of implementation. The programme had challenged staff values and beliefs, a process that some teachers found unsettling and initially resisted: over time, their resistance appeared to dissipate as they became more included in the programme. This suggests that the very nature of the programme may cause unrest in the school initially as longstanding beliefs and attitudes are challenged.

Some of the attacks become highly personalized. Yes, [the principal] wore a huge amount of this, and then people would attack [the principal]. I think people are having to change long term beliefs. But it amazed me how there's still quite overt high levels of racism ... that there has been generations of putting a group down. I think it was good because I don't believe in a process of change management you can go through without upsetting anybody. I think it's been implemented. Well, it's been really difficult because you've challenged some people's core beliefs of a whole group of students. You've challenged people in terms of their method of delivery. There were a lot more people who were using the same method of delivery that was used 150 years ago. Any other industry they would have been ... you know, that there wasn't the acknowledgement that we've moved on ... society's moved on. So it was a major shift for some people.

However not all resistance to the implementation was necessarily focused on Te Kotahitanga. Some was directed at individual school management decisions regarding implementation, time, work load allocation, selection of facilitators and feeling pressured to participate. One teacher who felt coerced into participating described feelings of resentment within the school and believed that many staff said what they thought was politically correct. These statements indicate that implementation in schools can cause dissention in the staff, but that a significant proportion of this unrest appears to do with matters of school management rather than the programme itself. Furthermore, the goal of including all staff in the reform may not be achievable in the short term for many schools.

My feeling in here (the interview) before was that (a teacher) was saying, what was politically correct to say. I don't know if you picked that up or not. And I didn't want to come across as negative, but I did want to say that I don't feel it's good to have a programme that starts in a school and there is coercion at the beginning. There is a lot of resentment underneath the surface of a lot of staff about this because of it. Yes I do believe that. I believe that forcing people into something that they don't really- well that they feel resentful. And yes there are undercurrents. I can't tell you why. I'm privy to some emails that have been passing back and forth, which certainly show that. So I think it has to be truly voluntary and if the whole school doesn't go into it, then so be it, without any penalties being applied to people.

This comment raises the issue of participation within schools. This appeared to be a dilemma for many school leaders, facilitators and teachers as several stated that they believe Te Kotahitanga should be a whole school initiative and that all staff should be included. Schools varied in their approach to participation, with some schools having strictly voluntary participation and others required staff to commit to participating at some stage.

I honestly think that a programme will not work well in a school if the whole school's not involved, because these kids change classes all the time. If they're getting something good in (one class), and then they move to

the next class and it's not there, they lose that, I suppose, it's like "Oh, but in this class we did this and- how come it's not in this class?" Do you understand?

Well I'm pretty straight up, I would like to see the whole school do it, but embrace it with a passion, not embrace it to give me tokenism, I suppose.

I think it's a little bit sad that not all teachers are actually participating; I think it makes it a little bit more difficult when you've got some that are, some that aren't. I think really that if we're going to buy into it we should all be buying into it.

Schools with voluntarily participation discussed how the programme needed first to gain momentum and thus relied on the motivated and engaged staff to drive the programme. Teachers identified that the 'middle' ground teachers were particularly apathetic and difficult to shift.

You have to have a critical mass amongst your staff and so that 30% or 20% who are the visionaries and go getters need to be able to help you sway that middle group.

[We have] not [done as] well as an institution, probably well in some specific places, some teachers, some students. It's not necessarily the school's fault, there's a large amount of apathy and unwillingness to approach change... The bulk of the school's teachers are in the middle, not sure what the institution can do to improve that.

These comments indicate that including all staff as participants, whether voluntary or mandated by the school, is problematic for many schools. However Phase 3 schools, being well into implementation, appeared to be more settled in terms of staff and participation than Phase 4 schools. A school leader in one of these Phase 3 schools commented that staff who did not want to participate had time to '*move on*'.

Bishop et al. (2010) contend that a culturally responsive school extends this inclusion in the reform to parents and community. This level of inclusion appears problematic for many schools: lack of pro-active efforts to incorporate whānau contributions may reflect the challenges of establishing positive relationships for both schools and families. Many whānau were interested in the programme, and they often attended our Whānau Focus Groups with the express intent of learning about Te Kotahitanga. This was surprising to our team, as presumably those whānau invited to these focus groups would be family members who had some relationship with school personnel and even the programme. Some schools had made efforts to employ more whānau in the school and meet with whānau, but even in these schools whānau reported wanting more involvement with schools and the initiative. This opportunity will be discussed later in the report, and the issue requires further investigation for effective implementation.

Evaluating: Use of measures that enable facilitators, researchers and teachers to use data monitoring implementation of the reform for formative and summative purposes

As a result of the implementation of Te Kotahitanga, many schools have been challenged to change the ways in which they collect and use data on student achievement and engagement within the school. School leaders stated that the programme had changed the way in which they viewed the data: they were more purposeful in data collection, they ensured that the data were analysed, and they realised the importance of data in determining what was happening with teaching and learning in the school. Several schools began collecting data in behaviour, attendance and truancy, realising that changes in these areas were occurring within the school.

So we've always looked at that data. But as a result of being on Te Kotahitanga, the data we are going to collect and analyse now for our junior kids is going to be better data, rather than broad brush stuff.

At the end of last year, start of this year a team of us, which included (facilitators) and some other teachers, sat down and created a data collection and analysis plan for the school. Now that included stuff around about serious misbehaviour incidents, attendance, and achievement. And I'd actually say we wouldn't have done that in such a coherent way if Te Kotahitanga didn't have the demands of attendance and assessment data being collected for these targeting classes.

School leaders and facilitators specifically noted a change in the perspective of staff toward using data within the school. Initially staff used data to affirm existing misconceptions and stereotypes held regarding Māori achievement, but as the programme progressed within the school the teachers moved from deficit views towards an inquiry and problem solving orientation.

You know what I mean? The talk has changed. And that to me is the most powerful start of the change. And I can see that with the contact I have with people and it certainly- the talk has changed at my curriculum manager discussion level, we start to talk about specifics about data, we're talking about, we're not just talking about the problems, we are talking about solutions. I guess to me that's a big shift.

There was evidence that in some schools, the data collection process requires more attention. Teachers were unsure of the purpose of the data and/or indicated they did not have access to timely information about how well students were doing. Often, staff needed to know what to do with the data once collated and how to plan for the future, rather than just reflecting on past achievements of students. Furthermore, some staff confused the data collection for the research project 'Te Kotahitanga' with data collection driving student achievement. A good example of one such comment below demonstrates that some staff felt frustrated by the continual collection of achievement data and wanted to focus on other measures.

I think it's a data gathering exercise because it is a data driven programme and that data's going back to [Waikato], it's been number crunched and churned out as part of a research programme and I think that is what the data—it's how it's connected, is that data can be analysed where as other forms of feedback and that can't be analysed.

Several teachers spoke in their interviews about how they discussed with students generalised changes in achievement shown in the data, and how they had celebrated improvements in outcome data with their students. However, students could be included within the feedback loop in a more structured and positive way. In most schools, Māori students were not given the opportunity to feedback the change and developments within the school that they experienced and observed. Making provision for students to feedback to faculty could provide useful and realistic perspectives on the impact of the programme, providing staff with authentic data with which to continue improvement.

Providing opportunities for feedback is relevant in the schools where the message was consistent between teachers and students, as it would affirm that the aims of the programmes are in action. In addition, in those schools where the message was inconsistent between school staff and students, whānau at these schools would gain true indicators to evaluate evidence regarding programme success. Furthermore, provision for feedback could address concerns that students might view the programme through a deficit theorising lens, focused on their underachievement rather than on the enhancement of teaching and learning in classrooms and at the school.

Our interviews with whānau suggest that they were not informed of progress patterns through data reported to them by school staff. Whānau were not able to articulate achievement gains that individual students or Māori students as a group had made, indicating that there is opportunity for schools to share success with whānau. Whānau were more likely to look for social indicators that the programme was successful in the school, such as student happiness and length of stay

at school. There is an opportunity here for schools to involve whānau in the sharing of generalised data to gain support and momentum within the community for Māori achievement.

Ownership: A means whereby the whole school, including the Board of Trustees, can take ownership of the reform

The previous sections have addressed the ownership taken by school leaders and teachers throughout the implementation of the reform. There are aspects which appear problematic initially such as participation rates and resistance to change which in turn affect the sense of ownership reported by schools. However, the interview data demonstrate that school personnel were proud their schools were participating in the programme, could articulate the benefits, and were highly motivated to continue with the programme.

The discussion on strong leadership outlined in chapter three drew attention to the need for supportive relationships between the various actors in order for Te Kotahitanga to bring about sustained change within schools. If schools are to make a difference for Māori student achievement, supportive relationships between the lead facilitator, the principal, the Senior Management Team, the Board of Trustees—and community members—are necessary. This does not detract from the focus of Te Kotahitanga being on what Bishop et al. (2009) refer to as a Culturally Responsive Pedagogy of Relations represented in the Effective Teaching Profile. The reality of the educative process enacted through schooling is that several components of the teacher-student nexus need to become integrated if successful learning is to occur. The community context in which the school belongs to is one of these critical components.

Relationships with the community

Te Kotahitanga and Boards of Trustees

The work of the Boards of Trustees rates highly in the way in which it represents community interests and school governance. One of the major strengths of the New Zealand education system has been the prominence given to voluntary parent-teacher associations to harness closer relations between educational professionals and parents of students. Māori support groups bring their own flavour of liaison into the relationship between schools and Māori communities. Most of the data reported in this chapter is from the interviews with Whānau Support Groups.

Te Kotahitanga and the role of principals

I'm trying to get out and about into classrooms more, because if you're going to have the other part of TK, which is the relationship part and the acknowledging where the students have come from, you've got to actually know the students. So therefore I've got to be out and about more, and that's a challenge in a school of this size. With nearly 1700, it is very easy to consume all of your time in places other than classrooms. So I guess the other impact on my role as principal has been acknowledgment from me that, as part of those principles of TK, I've actually got to go out and get to know my students and my community, as well.

An empirical relationship is important when viewed from the outside (e.g., “she/he’s actually visiting us in our classrooms and spending time looking, listening and talking to us”). But as this Principal makes clear, it is reflecting on the inner logic that makes his/her performance possible. The principles underlying Te Kotahitanga require this sort of action from those who take on this initiative.

Te Kotahitanga and Māori support groups

Unfortunately, Māori parental/whānau participation in the formal education system has been a problem for generations. As a counter to this so-called ‘problem’ Māori support groups have emerged in a number of schools although they are still a relatively new phenomenon. As a support group, initially established to support Māori students but with the potential to also stand alongside teachers and the school as a whole, they bring their own flavour of liaison into the relationship between schools and Māori communities. The flavour can be described as elements of Māori culture as

evidenced in tikanga (custom), āhuatanga (Māori ways of doing things), and wairua (a spiritual, holistic dimension). Most of the data reported in this section is from the interviews with Whānau Support Groups.

In most case, whānau were confident about what they thought the schools were trying to do to help their children learn. Confidence was built around what they saw as formal attempts to address student achievement by focusing on improving relationships between teachers and students rather than fixating on what teachers perceived as non-compliant behaviour at best and aberrant behaviour at worst. Te Kotahitanga brought an expression of new confidence and a sense that secondary schools could be on the path to recognising different sets of values than those that typically privilege knowledge over experience, differentiation over connectedness, and the individual over the collective. We have elicited some of the typical comments from whānau as evidence of the points raised under the heading of relationships with the community:

It's like one big family, one big whānau with our children here.

My hopes and dreams for my daughter are like any parents', what my parents gave me, and that's to feel loved and to have a whānau that they know will support them, regardless of their academic achievements. For me, I want my daughter to contribute to the community in a positive way, and to be you, to believe in, well to stand up for what she believes in and to be a loyal friend to others, to herself, to be honest to herself, and I think that College will absolutely assist her on that pathway. The friends she makes here, I've told her, your friends at high school will be friends for life.

It's good for both cultures to learn about each other. We're learning all the tauwiwi way. The Pākehās need to learn some of the Māori way, so I think that a blending of two cultures would be good. It's good for our own kids too you know. Our Māori kids see that kaumatua are here and supporting them. I think more of that needs to be done. I don't think a lot of that was done in the past.

Whānau groups were generally aware of the existence of something called Te Kotahitanga that was operating in their schools. They all knew it was a programme that targeted their children and had something to do with raising achievement levels but most knew little more than that. Because the programme had a Māori name, most were positively disposed toward it but felt the school needed to do a lot more to inform them about what it was and how it worked.

We've got a Māori parent group and they've been kept informed about what is going on. We've not had, I guess we've not had any real active interest other than- I think people recognise and value that we are trying to do something for their children. But also it really demarcates you and therefore there is a receptiveness by particularly Māori students and Māori parents in regard to that. So I work in that role, I'm a member of the whānau support, I attend the meetings, and its quite interesting because... a couple of parents, Māori parents came along to the hui and had a bit of a bash at the school. And challenged my right to be at this whānau meeting, where we were meeting with ERO. And he said "X comes to all our meetings, he just doesn't come up- turns up to have a bit of a whinge or a moan or a poke at the school. And we'd love to have you turn up."

The Māori value of te kanohi e kitea, the face that's seen, can be read into this statement. It's important to show one's face when there is a gathering but not only when the big events occur. There is greater respect for the face that's seen on a regular basis no matter what the occasion.

Te Kotahitanga and parental motivation in the changing process

If you've got anything that showcases a student's work, if you have a concert or a performance, you will get people to come to that. Getting them to be involved in goal setting is a whole other agenda. And we continue to struggle with that, to battle with that. And I don't know the answer. I don't know the answer across the whole school community, more than just with our Māori students.

For many parents, the entry of their children into the secondary school system is like a signal that says, 'Ok. Now they're yours for the duration of the school day'. Despite what some parents might say they seem to only want to know how their child is doing at school as this relates to achievements and/or misbehaviour. Other than that the belief seems to be 'no news is good news'. There is no doubt that Te Kotahitanga focuses on the educative process and especially in the culturally responsive pedagogy of relations and this message, probably somewhat garbled, appears to be getting through to Māori parents via their children. One effect of this 'special' interest is to question the boundary between those on the inside of groups and those on the outside:

Staff encourage Māori Whānau to work here to be teachers. Back in 2005 [there was] only about 1 or 2 Māori teachers [but there are] more Māori teachers now [but we] still need more.

While whānau appreciated the Te Kotahitanga programme, whānau felt that the system needed to change as well to support Māori students. As stated in the student outcomes chapter, whānau acknowledged that it was difficult for the programme to be successful when it was being implemented in a system that was non-Māori.

I agree the principal is supportive. But in the mainstream curriculum, how much is directly about Māori history, entrepreneurs, and Māori role models? That to me is directly linked to the value of Māori in the school. It is a sad thing to hear my children say "Why do they say Māori don't attend school?" Because my kids always attend, they go to school, so it's about the messages the kids get about being Māori in the mainstream. That's why you have to look at the system, otherwise Te Kotahitanga it's a Māori concept trying to work in a non-Māori environment.

There was significant discussion in each of the whānau groups concerning whānau and their access to the school, and their own feelings of belongingness at the school. This was dependent on the context of each school. One school in particular had made a significant effort to employ whānau in the learning support centre and in doing so had given whānau a place within the school.

In two focus groups, whānau expressed their view that there was some way to go before whānau and school could work together. In one instance, whānau stated that past injustices needed to be addressed and healed before the programme could be successful.

We are here at the school. As I said before, things are starting to change, we are starting to see more whānau here, but as people have said there needs to be more honesty and more communication between us all—we are here to help. If the project is Te Kotahitanga then that is about unity, I am not sure we are there yet.

I have an in-depth knowledge about the programme, but communication from the school has been minimal. The programme only started implementing this year. Brilliant programme if it's implemented. Many years of healing has got to take place (with the Māori community) before it can work.

In general, the whānau we interviewed made clear that whānau were positive about the implementation of the Te Kotahitanga programme in their school. They reported that it was still early days but in some schools whānau detected a change in the teachers and the way in which the school valued "things Māori". In the Phase 4 interviews, some

participants highlighted the support they had received from individuals including teachers, facilitators, and/or members of the school's senior management team. However, one particular whānau group felt that their school did not provide enough support or acknowledgement for Māori. In addition, another whānau group regarded the school as discriminatory, and that it did not communicate with parents or value parental input. The data from this school was in contrast to the other whānau groups that were generally more positive about the school and their children's progress. Whānau were adamant that to improve Māori student outcomes, schools needed to develop culturally responsive systems.

Whānau noted several different outcomes of Te Kotahitanga, and these were more likely to be outcomes that supported the student culturally including increased pride, a willingness to attend the Marae and an increasing interest in the school. Some whānau groups stated that Māori teachers were important in the school and had contributed to their students' learning in positive ways. However, most whānau groups had one or two descriptions of teaching that had not changed, of teachers who didn't expect much and did not encourage their children to learn.

Whānau who were involved in the school, either as employees or on the BoT, were significantly more positive about the school, the Te Kotahitanga programme and the changes that they had seen in the teachers and school. One school in particular had sought out whānau members to work in the school, and the whānau believe that this had a positive impact on their involvement in school, on the culture of the school and their child's schooling. Similarly another whānau group had attended the Te Kotahitanga hui with staff and were clearly able to articulate the programme and the benefits as they saw them. Interestingly, this same whānau group noted the emphasis on underachievement and stated that this may send the wrong message to students about Māori achievement.

Sustainability of Te Kotahitanga

Virtually all school principals we interviewed emphasised that sustainability of Te Kotahitanga at their schools was dependent on three factors: (a) the lead facilitator role, performed by a professional with the necessary cultural knowledge, secondary curricular and pedagogical expertise, and credibility and skill in providing technical advice and support to teachers; (b) individualized expert advice to teachers and support for co-construction team activities focused on the use of evidence to enhance Māori student outcomes; and (c) the availability of ongoing expert training and consultation as had been provided by the University of Waikato research team. Most principals saw the first two factors as dependent on continued resources and expertise associated with the facilitator role. They expressed frustration at what they saw as expectations for sustainability without the addition of resources needed for key components:

It will only be those schools that can hold onto it that will be able to sustain it. We can't keep the model going that we've got without money. It is impossible for me to fund two teachers out of our teaching allowances to be doing the facilitator role. So in order to be sustainable, I think what has to happen is it [would] still [be] part of our school-wide professional development that new staff are inducted into the program, because there is always a small turnover of staff. And I think probably once each term some form of the co-construction meetings are continuing to happen. (Phase 4 principal)

Virtually every project the Ministry brings in starts off with funding, and then the funding disappears and then they say "If this is important enough you will find a way to make it continue" quote, unquote. And I find that frustrating, because this particular model wasn't built for sustainability. It was built for implementation of something really important across the whole school. (Phase 4 principal)

Some principals explored ideas for embedding the culture of Te Kotahitanga in school relationships and related school processes including staff appraisal and peer support networks. Three Phase 4 principals commented:

I think that has to come from the staff themselves wanting to keep the model going, rather than being able to provide a huge amount of release time, resources. And we've always done peer appraisal. We've always allowed people to go and watch other teachers.

I think the observations should become self-reflection at some stage. There are other ways to make TK sustainable, [so that] observations still do happen. There is some sort of trade off that says 'this is no longer formative for you, this is now summative checking that you are somewhat still on track'.

The resourcing helps make that accountability greater. Clearly, when the money dries up at the end of next year—and there won't be any more, no matter what anybody says—we will have a philosophy of practice, as far as collaboration/co-construction/ listening to student voice. We will have a way of identifying what we consider is best practice out there, and a way of validating or proving or developing that. And hopefully we will have made a positive difference too, to what students can do. As well as, if you believe in a bi-cultural perspective, the whole issue of tino rangatiratanga and that self-determination. The resourcing helps make that accountability greater.

The Phase 4 principals indicated this was something they were already thinking about:

One of the constant challenges for me I guess, has been I've been thinking throughout the year "How do I embed it? How does it become sustainable in the school?" because [you do] so many professional development initiatives and projects and then you stop doing them, and they go away.

Through the milestone reporting or whatever, you [c]ould require schools to make sure it's in their strategic plan, or their charter. Because then you've got that, and then it filters down to all the areas to where it should be. Then it becomes a self-sustaining model.

The BoT chairs we interviewed affirmed that their boards were committed to the programme. As one Phase 3 BoT chair explained:

I would think that the Board, even if the funding was no longer there, would still want to see the programme carried on; it appears that what's good for Māori is good for all students which is a real plus because of all the possible negative effects; this isn't a 'them and us' sort of situation; I think it's one of those win-win situations.

There were comments by BoT chairs supporting Te Kotahitanga as an initiative that was good for students and should be integrated into ongoing school practices rather than as a special initiative:

I believe that it should become part of the attestation process; it should be part of your professional standards; the way we deliver the curriculum has to be through that particular avenue. I think [Te Kotahitanga] should be compulsory.

I think we'll just have to build an achievement culture in the school whether the money is there or not, once you've built that it becomes a characteristic of the school which some schools are known for but which we often associate with economics, with class, with socio-economic standing.

Seems like a really good initiative. In fact, I would like to see it implemented through the whole school rather than just focusing on Māori students; all the students have similar needs and across all year groups as well.

Some BoT chairs indicated awareness of the need for dedicated staffing through internal budget allocations once funding from the Ministry ended. There had already been some efforts to do this, as pointed out by a BoT Chair from a Phase 4 school:

You really want it to get embedded. Money is an obvious one, but it depends how it will look in the future. What sort of resourcing it will need. Again a full time person to keep it ticking over and to do the PD [will]-sustain it in the long term... I think you still need someone with a focus and dedicated time, otherwise other things, the urgent and not important[will] overwhelm the not urgent but important We've done that this year, we forked out our own money and [rede]ployed one of our senior managers out of her role and put her into a role where she's just looking at student achievement data and trying to figure out across the curriculum where there is variability. That's where schools struggle often because you've got really good teachers who become managers, and the skills aren't automatic.

BoT chairs at both Phase 3 and Phase 4 schools expressed their commitment in principle to Te Kotahitanga, but it was the Phase 4 BoT chairs who most often mentioned strategies and resources need to sustain the model. They seemed more aware of the issues of sustainability:

I guess from our perspective it's just something you love and breathe, isn't it? So it's integrated so firmly within the fabric of a school that you could actually- if everybody was so in tuned and on board and involved, I guess you might not need someone to drive it as strongly. I don't know. If the funding for the facilitator position dried up? X would have to look at funding it within [the Board's] own budget, and we could seriously do that.

There has got to be some sort of strategic intent to make sure that it is firmly integrated into the fabric of the school... [Our Board of Trustees] would have to seriously consider looking at other options. We get fantastic support from our corporate; I'd go and talk to someone to see if they'd help us with that.

I think the government needs to help us fund it. They're funding it at the moment, but from what I can gather the funding may disappear in two or three years and I think it's a programme that is really important. It should be in all schools in New Zealand and the government should really fund the whole lot. Or, or help us ... subsidise us to help fund it.

One Phase 4 BoT chair suggested that teacher education programmes be involved in the responsibility to sustain Te Kotahitanga:

My big fear is where do we go from here? If we don't have the funding, okay, we say if we've got [funding] we will do it, but what happens if we haven't? And this is the problem with a voluntary scheme or programme. Let's hope that there are enough statistics to convince the powers that be that we can now look at introducing this to the training colleges.... And then slowly as the training colleges push out the new trainees, then the programme can develop elsewhere.

Most BoT chairs across Phase 3 and Phase 4 schools indicated that the withdrawal of funding would be problematic. They emphasised existing budget limitations and wondered aloud whether their Boards would support re-directing funds from other initiatives in order to continue funding Te Kotahitanga should targeted Ministry of Education funding end. Typical comments follow:

You take the funding away, well [if] it stops, that's a big barrier.

We need to have a lead teacher, we need to have someone that is managing that programme. It needs to be measured [and] we need to have something in place to make sure those teachers are getting supported. They're getting continual training, and they're getting continually assessed, and that we're also assessing the results of the students. And that all costs, that's all going to cost money. So the bottom line is money, but aside from that is the reality of making sure everyone is getting the support.

It does cost, and we're getting less and less. Our grant isn't growing and so it's got to come from somewhere so we would like that to be a stand-alone project.... The reality is the money has to be somewhere.... The facilitator is the main one I guess.

When asked about the commitment from the MoE for funding the programme, one Phase 4 chair commented:

We're funded again this year, I think next year and then I'm not sure after that to tell you the truth. I can't remember. I know that we don't get funding again.... We would need to have a look at what it cost and how we could, it's not a programme we want to lose. We need somebody to start, we need to invest in it, so we'd need to explore that if the ministry decided to take away funding. What a waste that would be.

Another Phase 3 BoT chair wanted to see better understandings and buy-in of the programme across the school community as well as funding, and saw these as critical to sustainability:

For it to keep going, probably more whānau support, more board collaboration, being more in there with the programme. I think a lot of us really still don't understand it all. Definitely to sustain it we have to continue the funding, because it can't run on its own without funding. And hopefully more buy-in from more teachers, because I don't know whether all of the teachers have a buy-in, just to be more culturally aware.

Finally, this Phase 4 BoT chair thought the experts needed to solve the sustainability issue:

I hope the people who know a lot about it are thinking about it [sustainability]. Because that is one of the problems, things don't get sustained, they don't get embedded.

To summarise, there were general discussions occurring across most schools between the principal and boards of trustees about sustainability of the model. However, our interviews with the principals and the BoT chairs did not reveal examples of formal discussions about planning for sustainability that were specific with regard to what would be needed and what the school and its board were prepared to do in order to sustain the programme.

The facilitation role

There was agreement across school personnel at all levels that the facilitation team and the role of lead facilitator is central to Te Kotahitanga, given the focus on teacher professional development towards the Effective Teaching Profile to enhance student outcomes for Māori in the mainstream. Principals commented:

I think for the ones that have got things from Te Kotahitanga, the thing that they love is having a facilitator, someone who comes in and observes them and sets up a good relationship with them.

What worked for us, specifically, was the facilitation team that we had here for the long haul, we were lucky. They were really passionate about things, improving the achievement of Māori. And their credibility because of their mana that they helped the staff check the momentum.

Approximately one-fourth of the facilitators we interviewed at the Phase 4 schools expressed concern that many principals and facilitators themselves lacked sufficient background knowledge and experience of culturally responsive

pedagogies to provide assistance and support for teachers to make changes in their classroom practice. Typical comments were:

One facilitator doesn't feel confident [in her knowledge of culturally responsive pedagogies].

Well, probably the hardest thing is still the cultural context. And te reo. At times I have thought, this should belong to Māori as well. Why am I doing this, a Pākehā's teacher? And I felt I wanted to step aside and hand it over to Māori. But I think in this school, because we have such a hugely European, Pākehā staff ... I have sometimes felt maybe I haven't got enough expertise or shouldn't be the person to do it. So yeah, it's just about developing your expertise.

One Phase 4 BoT chair emphasized that this was not a responsibility that could simply be reassigned to one of the school's senior managers:

What you don't want to do is put it on somebody, on a senior manager's job description, and expect them to keep it going. That's what I see in schools, is that senior managers or anyone with a management brief are so split and multi-tasking that it ends up being very inefficient often. I think you still need someone with a focus and dedicated time, otherwise other things, the urgent and not important overwhelm the not urgent but important.

Discussions of whether this role could be integrated with other professional development coordination responsibilities raised concerns that doing this would negatively impact programme effectiveness if responding to multiple initiatives shifted the focus away from Māori student achievement. There was strong support for a permanent senior teacher leadership role held by a person with the necessary cultural and instructional expertise so that this work would continue. On the other hand, how the position would be funded and integrated into school staffing patterns had not been addressed substantively at the time of our school visits as indicated by interviewee comments. Some principals did indicate their support for this position long term and their commitment to find the funding:

The staffing needs to be put into the staffing formula, and so it's there as of right, instead of saying we are going to give you 'x' and you have to put in 'x' amount of dollars which buys time.

Perspectives on the contributions of others on the facilitation team were somewhat equivocal in comparison to the overwhelmingly positive views towards lead facilitators. Other members of the facilitation team were generally appreciated, and teachers were able to give examples of how these additional facilitators had also assisted them. Nevertheless, teachers shared some reservations around curricular and/or logistical issues. Reasons for this include staff time, expertise and credibility around issues of culture, pedagogy and subject knowledge. One lead facilitator at a Phase 3 school explained some of the logistical complications resulting from facilitation team members having multiple responsibilities:

As a team we haven't managed to really pull together and it's structural. If I'm not here for a week at a time, [the other facilitator] comes in two days a week and those days can change. It depends on what I've got on as to whether I'm there or not. [One facilitator] has classes that [he/she] teaches, [the other] has classes that [he/she] teaches as well and is a Head of Department, so there's responsibilities there. The timetabling factor means that we may be there or we may not be there when [the person from the advisory support services] comes to touch base with us. So it's that structural stuff that really acts as a big barrier.

Our evidence of uneven implementation of the Effective Teaching Profile, despite length of participation, suggests that teacher participation could be better differentiated in a way that would make use of high implementers. One approach

that would both allow differentiation of teacher involvement based on mastery of the ETP and address the need for ongoing facilitators could be utilising these teachers on a part-time basis as facilitators; some schools were already doing this. There was awareness that teachers were at different levels in implementation of the ETP and discuss the need to differentiate:

We have people at different levels and so we're trying to cater for teachers in terms of their needs.

Enabling teachers in the different subject areas who are high implementers to serve part-time within schools and clusters mentoring other teachers could provide appropriate recognition of teacher leadership, enhanced career pathways, and higher expectations for teachers in leadership roles (e.g., Heads of Departments).

Another possibility for differentiation of teacher involvement could be to extend the model to the senior secondary school. Once teachers demonstrate ETP mastery in their Year 9-10 subjects, there could be consideration of shifting the PD activities for those teachers to their Year 11-13 teaching. This would support directly the extension of the ETP into senior subjects and expand opportunities to further enhance Māori student outcomes, particularly on the NCEA.

Finally, sustainability of Te Kotahitanga is reliant upon delivery of professional workshops and hui representing expertise in the relevant areas, such as has been provided by the University of Waikato research team. Without the availability of expert advice, ongoing training/ mentoring opportunities and technical assistance in the classroom, there is risk of losing expertise needed to sustain a teacher professional development programme towards enhancing Māori student outcomes in mainstream schools.

Key Findings: Impact on schools

- School principals were able to articulate achievement targets and achievements for students, but these were not always shared with the school community including teachers, facilitators, whānau and the Boards of Trustees.
- Across schools and across subjects, Te Kotahitanga has communicated effectively to teachers that relationships in the classroom are important. The success to which these relationships were transferred into successful learning situations was variable in some subjects and some schools.
- While evident within the schools, there is less evidence that this focus on relationships has been extended beyond the school to relationships between the school and its Māori community and whānau. Chairs of Boards of Trustees and particularly whānau expressed the desire to know more about Te Kotahitanga and an interest in closer connections between the school and its community. There is, for example, potential for improving the use of the Marae and facilities in enhancing these relationships.
- Planning for the implementation of Te Kotahitanga is crucial to the success of the programme as new staff needed to be employed, provision to timetables needed to be made and physical space appropriated. The interview data demonstrate that the physical space given to the programme signals the importance and permanence of the programme to staff and students.
- Some schools indicated that initial implementation is challenging for schools given the necessity of making changes to systems and structures to accommodate Te Kotahitanga. Principals felt that networking and/or mentoring relationships with colleagues more experienced with the model could have assisted in this process and expressed interest in playing this role for schools new to Te Kotahitanga.
- Te Kotahitanga has created new professional leadership opportunities in schools, including facilitation, mentoring, and leadership skills for teachers through the creation of new roles. There is less evidence of leadership distributed

across the school with respect to responsibility for the GPILSEO framework; the support of Deans, Heads of Departments and DPs is philosophical rather than structural. In some schools there is evidence that this power has been shared with leadership opportunities extended for Māori students with the creation of mentoring roles, prefect and head boy/girl positions.

- The implementation of the programme can initially cause division amongst staff whose different perspectives on enhancing student achievement may result in resistance. There is evidence that resistance to the programme dissipates over time, but schools still struggle over the dilemma of voluntary participation or full inclusion of staff. Shared problem-solving and decision-making by co-construction teacher groups works best when all members of the group are participating in Te Kotahitanga and can be prohibitive when some are not.
- Schools leaders, teachers and students noted a focus and a change in the relationships within the school as a result of the Te Kotahitanga programme. The classroom observations indicate that further emphasis on fostering learning relationships between students within some classrooms is needed.
- There continue to be concerns at some schools that targeting of Māori student achievement may be misconstrued as deficit theorising in attributing less than satisfactory outcomes to the students and their families rather than schools and teachers assuming agency for student results.
- Whānau at a few schools were critical of the extent to which Māori culture and te reo were supported, and they felt that their children had to struggle to be both Māori and high achievers at school. There is evidence from our school visits that a few staff at a few schools engaged in deficit theorising and racist attitudes, seen by students, teachers and whānau as continuing to impede progress for Māori students at those schools.
- Principals generally indicated that Te Kotahitanga had not had significant impact on other school practices and/or school policy. Their discussions of the programme emphasised teacher change in developing the Effective Teaching Profile rather than the GPILSEO framework and how it had impact on their school overall. They did not generally regard Te Kotahitanga as a school reform initiative, but rather as focused on teacher professional development.

Key Findings: Sustainability

- School leaders emphasised that sustainability of Te Kotahitanga at their schools was dependent on three factors: (a) the lead facilitator role, performed by a professional with the necessary cultural knowledge, secondary curricular and pedagogical expertise, and credibility and skill in providing technical advice and support to teachers; (b) individualized expert advice to teachers and support for co-construction team activities; and (c) the availability of ongoing expert training and consultation as had been provided by the University of Waikato research team.
- There is agreement across school personnel at all levels that the role of lead facilitator is central to Te Kotahitanga with its focus on teacher professional development towards the Effective Teaching Profile towards enhancing student outcomes for Māori in the mainstream. There are also concerns that integrating the role within the school with additional professional development coordination duties could have a negative impact on programme effectiveness if responding to multiple initiatives shifts the focus away from Māori student achievement. There was strong support for a permanent senior teacher leadership role held by a person with the necessary cultural and instructional expertise so that this work would continue.
- Principals emphasised that sustainability of Te Kotahitanga was dependent on continued resources and expertise associated with the facilitation team, although some principals explored ideas for embedding the culture of Te

Kotahitanga in school relationships and related school processes including staff appraisal and peer support networks.

- BOT chairs also emphasised sustainability of Te Kotahitanga depended upon both people and financial resources, and they expressed concern about funding being reduced or withdrawn. They generally saw the lead facilitator's role as key to sustainability. They emphasised existing budget limitations and wondered aloud whether their Boards would support re-directing funds from other initiatives in order to continue funding Te Kotahitanga should targeted Ministry of Education funding end.
- While also important, the role of additional facilitators in schools has presented various challenges to schools regardless of targeted Te Kotahitanga funding. Reasons for this include staff time, expertise and credibility around issues of culture, pedagogy and subject knowledge. Further, the evidence on uneven implementation of the Effective Teaching Profile, despite length of participation, suggests that teacher participation could be better differentiated. Enabling teachers in the different subject areas who have demonstrated high levels of implementation of the ETP to play a greater role in mentoring other teachers could provide a way forward as well as recognise teacher leadership.
- Sustainability of Te Kotahitanga within the Phase 3 and Phase 4 model is dependent upon delivery of professional workshops and hui from the Waikato research team to develop school leader and facilitator skills and expertise in support of the initiative. Without the availability of ongoing training and mentoring opportunities, there is risk of losing expertise needed to sustain teacher professional development programme towards enhancing Māori student outcomes in mainstream schools.
- Without better access to student outcome data on a regular basis, teacher participation in the professional development activities may wane once teachers themselves feel they have mastered the critical components or no longer have interest in doing so. Sustainability will require more efficient and relevant data on student outcomes at the school level for teacher use throughout the year. With some exceptions, the present data collection and reporting systems are not achieving this.
- The commitment of Māori whānau and the school community to Te Kotahitanga and to Māori student achievement in the mainstream requires ongoing communication and information sharing. Present communication strategies with communities do not appear to be effective, nor are effective strategies for engaging with Māori whānau evident. Enhanced communication links would further support sustainability, particularly in periods of change in school leadership.

References

- Bishop, R., & Berryman, M. (2006). *Culture speaks: Cultural relationships and classroom learning*. Wellington: Huia Press.
- Bishop, R., Berryman, M., Cavanagh, T., & Teddy, L. (2007). *Te Kotahitanga: Phase 3 whānaungatanga: 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., Cavanagh, T., & Teddy, L. (2009). *Te Kotahitanga: Addressing educational disparities facing Māori students in New Zealand*. *Teaching and Teacher Education*, 25, 734-742.
- Bishop, R., Berryman, M., Cavanagh, T., Teddy, L., & Clapham, S. (2006). *Te Kotahitanga Phase 3 Whakawhanaungatanga: Establishing a culturally responsive pedagogy of relations in mainstream secondary schools*. Wellington: Ministry of Education Research Division; Hamilton: University of Waikato Māori Education Research Institute (MERI); and Tauranga: Poutama Pounamu Research and Development Centre.
- Bishop, R., Berryman, M., Cavanagh, T., Teddy, L., Clapham, S., Lamont, R., Jeffries, A., Copas, S., Siope, A., & Jaram, D. (2008). *Te Kotahitanga: Towards sustainability and replicability in 2006 and 2007: Report to the Ministry of Education*. Hamilton: University of Waikato Te Kotahitanga Research and Professional Development Team.
- Bishop, R., O'Sullivan, D., & Berryman, M. (2010). *Scaling up education reform: Addressing the politics of disparity*. Wellington, NZ: NZCER Press.
- Castagno, A.E., & Brayboy, B.M.J. (2008). Culturally responsive schooling for Indigenous youth: A review of the literature. *Review of Educational Research*, 78, 941-993.
- Cozby, P.C. (2009). *Methods in behavioural research*, 10th ed. Boston: McGraw Hill.
- Cresswell, J.W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Los Angeles, CA: Sage.
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. f. Y Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal* 38 (4), 915-945.
- Huck, S.W., & Cormier, W.H. (1996). *Reading statistics and research*, 2nd ed. New York: Harper Collins.
- Joyce, B. & Showers, B. (2002). *Student achievement through staff development*, 3rd ed. Alexandria, VA: Association for Supervision and Curriculum Development.
- Kline, R.B. (2009). *Becoming a behavioral science researcher: A guide to producing research that matters*. New York: Guilford.
- McMillan, J.H. (1996). *Educational research: Fundamentals for the consumer*, 2nd ed. New York: Harper Collins.
- Ministry of Education (2009). *Statement of Intent: 2009-2014*. Retrieved March 2, 2010 from <http://www.minedu.govt.nz/theMinistry/PublicationsAndResources/StatementOfIntent/SOI2009.aspx>

- Neufield, B. & Roper, D. (2003). Coaching: A strategy for developing instructional capacity. The Aspen Institute Programme on Education, the Annenberg Institute for School Reform.
- Shadish, W.R., Cook, T.D., & Campbell, D.T. (2001). Experimental and quasi-experimental designs for generalized causal inference. New York: Houghton Mifflin.
- Snow-Runner, R. & Lauer, P. A. (2005). Professional development analysis. Denver, CO: Mid-continent Research for Education and Learning.

Appendices

Appendix 1: Evaluation questions and where addressed in the report

How well and in what ways does Te Kotahitanga work towards the goal of improving Māori student achievement?

Evaluation Sub-questions	Section and Page References
What is the quality of the overall design, content and implementation of Te Kotahitanga?	Chapter 1: Description of Te Kotahitanga components (pp 15-20) Chapter 3: Effectiveness and how the model works in practice (pp 42-47); impact of the model on pedagogical and cultural leadership (pp 47-52; suggestions for supports for the PD model (pp 53-56) Chapter 4: Evidence of impact on classroom practices (pp 58-63); evidence of impact on teacher skills and understandings (pp 64-77); remaining challenges (pp 77-79) Chapter 6: Evidence of implementation of GPILSEO (pp 110-125); impact on relationships with the community (pp 125-128)
How valuable are the outcomes for the teachers who participate—what new knowledge, understandings and skills do they develop, and how valuable are these learnings?	Chapter 3: Impact of the PD approach on pedagogical and cultural practices (pp 47-53) Chapter 4: Impact on teaching practices (pp 58-63); teacher perceptions of valued outcomes (pp 64-77); ongoing challenges (pp 77-79) Chapter 5: School personnel on shifting to high expectations for Māori students (pp 84-86)
How valuable are the outcomes for Māori students, and what is the impact on other classmates/peers?	Chapter 5: Impact of Te Kotahitanga on learning and belonging as Māori and Māori student identity (pp 81-84); high expectations (pp 84-86); attendance, engagement and retention (pp 86-90); achievement-related behavioural factors (pp 90-91); achievement outcomes for Māori and all students reported by schools (pp 92-96); assessment data on achievement by Māori and all students (pp 96-108)
How valuable are the outcomes for whānau?	Chapter 4: Whānau on the importance of student-teacher relationships (p 73) Chapter 5: Whānau perspectives on Māori identity (pp 83-84); whānau perspectives on attendance, retention and engagement (pp 89-90) Chapter 6: Whānau perspectives on improving outcomes for Māori students (pp 111); whānau perspectives on more information regarding student achievement (p 124); relationships between school and its community (pp 125-126); whānau perspectives on remaining challenges for schools (pp 126-128)

Evaluation Sub-questions	Section and Page References
How beneficial (or detrimental) are the effects of Te Kotahitanga on school culture (covering any changes in formal systems and policies; informal practices, or “the way we do things around here”; and underlying beliefs, values, assumptions and attitudes)?	<p>Chapter 3: Co-construction meetings (pp 46-47); pedagogical and cultural leadership for change in the classroom (pp 47-53)</p> <p>Chapter 4: Teacher beliefs and repositioning for student-focused classrooms (pp 64-70); changes in teacher agency and practices (pp 67-70 and 72-76)</p> <p>Chapter 5: Learning and belonging as Māori (pp 81-84);</p> <p>Chapter 6: Culturally responsive schools (pp 110-126); institutional and structural changes in schools (pp 116-119); relationships with the community (pp 121-123, 124-125)</p>
What are the enablers and barriers for getting Te Kotahitanga to work most effectively?	<p>Chapter 3: How the PD model works (pp 42-47); supporting the professional development model (pp 53-55); team composition, staffing (pp 55-56)</p> <p>Chapter 4: Implementation of the ETP (pp 59-63); changes in teacher agency and practices (pp 72-76); changes in teacher job satisfaction, motivation and empowerment (pp 76-77); ongoing challenges (pp 77-79); teacher expectations (pp 84-86); student attendance, engagement and retention (pp 86-90); reports on achievement for teacher use (pp 95-96)</p> <p>Chapter 5: Data on achievement and achievement-related factors (pp 90-91); school reporting and teacher use of achievement data (pp 92-96)</p> <p>Chapter 6: Leadership and inclusion for school change (pp 120-123); evaluation and ownership of school reform (pp 123-126); parental motivation (pp 126-128); facilitation role (pp 131-133)</p>
To what extent is Te Kotahitanga likely to work effectively in other settings and contexts? How sustainable is the initiative likely to be when ministry investment of resources is scaled back?	<p>Chapter 1: Te Kotahitanga as professional development (pp 15-19); the PD model (pp 19-20); sustainability of Te Kotahitanga (p 20)</p> <p>Chapter 3: Facilitator expertise and teacher PD (pp 48-53); teacher beliefs about the ETP versus “good teaching” (pp 66-67)</p> <p>Chapter 5: Student achievement data (pp 96-108)</p> <p>Chapter 6: Culturally responsive schools (pp 110-126); sustainability of Te Kotahitanga (pp 128-133)</p>
What are the most critical factors in improving teacher efficacy?	<p>Chapter 1: Te Kotahitanga as professional development (pp 15-19);</p> <p>Chapter 3: The professional development model in practice (pp 42-47); facilitator expertise (pp 47-53); leadership support for teachers and staffing (pp 53-56)</p> <p>Chapter 4: Impact on teachers' classroom practice (p 58+); teacher change (pp 67-77); ongoing challenges (pp 77-79)</p> <p>Chapter 5: School personnel on learning as Māori (pp 81-83); data on achievement-related behavioural factors (pp 90-91); reports on achievement (pp 92-96)</p> <p>Chapter 6: Culturally responsive schools (pp 110-125); the facilitation role (pp 131-133)</p>

Appendix 2: Participant information sheets and consent letters



JESSIE HETHERINGTON CENTRE FOR EDUCATIONAL RESEARCH

Te Puna Rangahau ki Ako Pai

Victoria University of Wellington
PO Box 17-310
Karori
Wellington
Phone 04 463 9588



COLLEGE OF EDUCATION

Evaluation of Te Kotahitanga INFORMATION SHEET School Principal

Dear Principal,

A research team from the Jessie Hetherington Centre for Educational Research (JHC) at Victoria University of Wellington has been funded by the Ministry of Education to investigate how well and in what ways Te Kotahitanga works towards the goal of improving Māori student achievement. The research has had the approval of Victoria University of Wellington College of Education Ethics Committee.

The research team from Victoria University requests your permission to carry out part of the research project in your school. The project will involve collecting information through:

- observations in the classrooms of a range of teachers who are implementing the Te Kotahitanga programme, and/or are not yet trained, and/or are not using the programme
- observations of selected professional development activities related to Te Kotahitanga
- interviews and/or focus group discussions with the Principal and Chair of the Board of Trustees (or his/her representative), other school staff, students, families and whānau about their experiences of Te Kotahitanga.

The purpose of these observations and interviews is to provide information to the Ministry of Education on the unique aspects and effectiveness of Te Kotahitanga in achieving its overall aim of improving the educational achievement of Māori students in mainstream secondary school classrooms.

Focus group and individual interviews will be conducted by the research team members and will be tape-recorded. The interviews will be held at school, at a time agreed with the school, and will be brief. Focus groups with students would be scheduled so as not to disrupt individual students' academic programmes. The students and teachers will be able to stop the interview and withdraw from it at any time if they so wish and will be informed of this before the interview commences.

The research team will analyse what they observe during the lessons and what is said during the interviews. The observation and interview data will be treated as confidential, that is, accessed only by the researchers; and the identity of the school, students, teachers, parents and whānau will be protected. The results of the project will be written up in the form of a report for the Ministry of Education and other dissemination activities as agreed by the Ministry of Education and the JHC. Information will be reported in aggregated form and not attributed to specific schools. In some cases, we may identify exemplary practices and would seek your consent prior to naming an individual school in this way. At the conclusion of the research after a specified time period needed for review of the data internally, all interview notes and notes from the observations will be destroyed and the audio recordings will be electronically wiped.

The final report of the whole evaluation will be shared with you and the Board of Trustees, the Principal and whomsoever the Board feels is appropriate from their school community.

The research team would like to request your consent to

- the school's involvement in the project
- a personal interview by a member of the research team.

If you agree to this request we would appreciate it very much if you would sign and date the consent form attached.

With all good wishes,

Yours sincerely,

Professor Luanna Meyer

Co-Director of the Te Kotahitanga Evaluation Team

Email: luanna.meyer@vuw.ac.nz

Professor Wally Penetito

Co-Director of the Te Kotahitanga Evaluation Team

Email: wally.penetito@vuw.ac.nz



JESSIE HETHERINGTON CENTRE FOR EDUCATIONAL RESEARCH

Te Puna Rangahau ki Ako Pai

Victoria University of Wellington
PO Box 17-310
Karori
Wellington
Phone 04 463 9588

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI



COLLEGE OF EDUCATION

Evaluation of Te Kotahitanga CONSENT FORM School Principal

This consent form refers specifically to the involvement of the school in a research project which will be conducted during 2008 by members of a research team from the Jessie Hetherington Centre for Educational Research at Victoria University of Wellington. The project is designed to investigate how well and in what ways Te Kotahitanga works towards the goal of improving Māori student achievement.

The purpose of the research project has been discussed with me as Principal.

I agree to the school's involvement in the research project as outlined above and discussed with me as Principal.

I also agree/do not agree to a personal interview by a member of the research team (**please delete as appropriate**).

I understand that the project will involve the research team collecting information through:

- observations in the classrooms of a range of teachers who are implementing the Te Kotahitanga programme, and/or are not yet trained, and/or are not using the programme
- observations of selected professional development activities related to Te Kotahitanga
- interviews and/or focus group discussions with the Principal and Chair of the Board of Trustees (or his/her representative), other school staff, students, families and whānau about their experiences of Te Kotahitanga.

During the interviews:

- the participants may withdraw at any time, without prejudice.
- a tape recording will be made. The interview tape and transcript will be kept confidential to members of the research team. Any comments reported in subsequent documents will be strictly anonymous unless those concerned give written permission for comments to be attributed to them.

Information collected during classrooms observations will be shared with the teachers concerned as far as is practically possible.

I understand that:

- the results of the project will be written up in the form of a report for the Ministry of Education.
- the final report of the whole evaluation will be shared with me, the Board of Trustees and whomsoever I and/or the Board feel is appropriate from our school community.
- at the end of the research all interview notes, notes from the observations and audio recordings will be destroyed.

Name of School: _____

Name of Principal: _____

Signature: _____

Date: _____



JESSIE HETHERINGTON CENTRE FOR EDUCATIONAL RESEARCH
Te Puna Rangahau ki Ako Pai

Victoria University of Wellington
 PO Box 17-310
 Karori
 Wellington
 Phone 04 463 9588



Evaluation of Te Kotahitanga INFORMATION SHEET Board of Trustees

Dear Colleagues

A research team from the Jessie Hetherington Centre for Educational Research (JHC) at Victoria University of Wellington is conducting an evaluation project funded by the Ministry of Education to investigate how well and in what ways Te Kotahitanga works towards the goal of improving Māori student achievement. The research has had the approval of Victoria University of Wellington College of Education Ethics Committee.

The research team from Victoria University requests your permission to carry out part of the project in your school. The project will involve collecting information through:

- observations in the classrooms of a range of teachers who are implementing the Te Kotahitanga programme, and/or are not yet trained, and/or are not using the programme
- observations of selected professional development activities related to Te Kotahitanga
- interviews and/or focus group discussions with the Principal and Chair of the Board of Trustees (or his/her representative), other school staff, students, families and whānau about their experiences of Te Kotahitanga.

The purpose of these observations and interviews is to provide information to the Ministry of Education on the unique aspects and the effectiveness of Te Kotahitanga in achieving its overall aim of improving the educational achievement of Māori students in mainstream secondary school classrooms. As far as we possibly can we will share classroom observation information with the teachers concerned after the lesson.

The interviews will be conducted by a member of the research team and will be tape-recorded. The interviews will be held at school, at a time agreed with the school and will be brief. Focus groups with students would be scheduled so as not to disrupt individual students' academic programmes. The students and the teacher will be able to stop the interview and withdraw from it at any time if they so wish and will be informed of this before the interview commences.

The research team will analyse what they observe during the lessons and what is said during the interviews. The observation and interview data will be treated as confidential, that is, accessed only by the researchers; and the identity of the school, students, teachers, parents and whānau will be protected. The results of the project will be written up in the form of a report for the Ministry of Education. At the conclusion of the research all interview notes and notes from the observations will be destroyed and the audio recordings will be electronically wiped.

The final report of the whole evaluation will be shared with the Board of Trustees, the Principal and whomsoever the Board feels is appropriate from their school community.

The research team requests your consent to the school's involvement in the project. If you agree to this request we would appreciate it very much if you would sign and date the consent form attached.

With all good wishes,

Yours sincerely

Professor Luanna Meyer
 Director of the Te Kotahitanga Evaluation Team
 Email: luanna.meyer@vuw.ac.nz



JESSIE HETHERINGTON CENTRE FOR EDUCATIONAL RESEARCH

Te Puna Rangahau ki Ako Pai

Victoria University of Wellington
PO Box 17-310
Karori
Wellington
Phone 04 463 9588



Evaluation of Te Kotahitanga CONSENT FORM Board of Trustees

This consent form refers specifically to the involvement of the school in a research project which will be conducted during term four 2008 by members of a research team from the Jessie Hetherington Centre for Educational Research at Victoria University. The project is designed to investigate how well and in what ways Te Kotahitanga works towards the goal of improving Māori student achievement. The purpose of the research project has been discussed with the Board of Trustees.

The Board agrees to the school's involvement in the research project as outlined above and discussed with the Principal.

The Board understands that the project will involve the research team collecting information through:

- observations in the classrooms of a range of teachers who are implementing the Te Kotahitanga programme, and/or are not yet trained, and/or are not using the programme
- observations of selected professional development activities related to Te Kotahitanga
- interviews and/or focus group discussions with the Principal and Chair of the Board of Trustees (or his/her representative), other school staff, students, families and whānau about their experiences of Te Kotahitanga.

As Chair of the Board of Trustees or his/her representative I agree/do not agree to a personal interview by a member of the research team (**please delete as appropriate**).

During the interviews:

- the participants may withdraw at any time, without prejudice.
- a tape recording will be made. The interview tape and transcript will be kept confidential to members of the research team. Any comments reported in subsequent documents will be strictly anonymous unless those concerned give written permission for comments to be attributed to them.

Information collected during classrooms observations will be shared with the teachers concerned as far as is practically possible,

The Board understands that:

- the results of the project will be written up in the form of a report for the Ministry of Education.
- the final report of the whole evaluation will be shared with the Board of Trustees, the Principal and whomsoever the Board feels is appropriate from their school community.
- at the end of the research all interview notes, notes from the observations and audio recordings will be destroyed.

Name of school: _____

Name of chair person of the Board of Trustees: _____

Signature: _____

Date: _____



JESSIE HETHERINGTON CENTRE FOR EDUCATIONAL RESEARCH

Te Puna Rangahau ki Ako Pai

Victoria University of Wellington
PO Box 17-310
Karori
Wellington
Phone 04 463 9588



Evaluation of Te Kotahitanga INFORMATION SHEET

Families and Whānau of Students participating in Classroom Observations and Interviews

Our school has a commitment to providing the best possible learning opportunities for all our students. We are participating in a project, Te Kotahitanga, which is aimed at raising students' achievement levels with a focus on Māori students and funded by the Ministry of Education.

A research team from the Jessie Hetherington Centre for Educational Research (JHC) at Victoria University of Wellington is investigating how well and in what ways Te Kotahitanga works towards the goal of improving student achievement. The research has had the approval of Victoria University of Wellington Education Ethics Committee. As part of the project, our research team would like to observe a number of lessons and then talk with some of the students about these lessons and about their perceptions and experiences of the Te Kotahitanga project. The purpose of these observations and interviews is to provide information to the Ministry of Education on the unique aspects and the effectiveness of Te Kotahitanga in achieving the overall aim of improving the educational achievement of students in mainstream secondary school classrooms, with a focus on Māori students. During this research project your child might be one of the students that the research team would like to participate in these interviews.

The interviews will be conducted by a member of the research team and will be tape-recorded. The interviews will be held at school, at an agreed time, during the school day. Focus groups with students would be scheduled so as not to disrupt individual students' academic programmes. Students will be advised at the beginning of the interview that they can withdraw from it at any time if they so wish.

The research team will analyse what they observe during the lessons and what is said during the interviews. The observation and interview data will be treated as confidential, that is, accessed only by the researchers; and the identity of the school, students, teachers, parents and whānau will be protected. The results of the project will be written up in the form of a report for the Ministry of Education. At the conclusion of the research all interview notes and notes from the observations will be destroyed and the audio recordings will be electronically wiped.

The research team would like to request your consent and approval before they commence the interviews. When they meet with the students, they will explain again what is involved.

No child will be interviewed without your permission. If you agree to this request we would appreciate it very much if you would sign and date the consent form attached.

With all good wishes,

Yours sincerely,

Professor Luanna Meyer
Director, Te Kotahitanga Evaluation Team
Email: Luanna.meyer@vuw.ac.nz



JESSIE HETHERINGTON CENTRE FOR EDUCATIONAL RESEARCH

Te Puna Rangahau ki Ako Pai

Victoria University of Wellington
PO Box 17-310
Karori
Wellington
Phone 04 463 9588



Evaluation of Te Kotahitanga

CONSENT FORM

Parental/Family/Whānau Consent for Interviews with Students

I/We have received the leaflet seeking permission for my/our child to participate in an interview.

I/We have had the purpose of the interviews explained to us.

I/We understand that my/our child may withdraw at any time, from the interview, if s/he so wishes.

I/We understand that their comments will be reported anonymously in the project report.

I/We understand that at the end of the research all interview notes, notes from the observations and audio recordings will be destroyed unless I/we give written permission for them to be used for subsequent research or teaching purposes.

I/We give permission for my/our child to participate in an interview.

Student's name: _____

Parent/Caregiver's name: _____

Parent/Caregiver's signature: _____

Date: _____

Please complete and return this form to the school office by 14 October 2008
Thank you.



JESSIE HETHERINGTON CENTRE FOR EDUCATIONAL RESEARCH

Te Puna Rangahau ki Ako Pai

Victoria University of Wellington
PO Box 17-310
Karori
Wellington
Phone 04 463 9588



Evaluation of Te Kotahitanga INFORMATION SHEET FOR STUDENTS

Our school has a commitment to providing the best possible learning opportunities for all our students. We are participating in a project, Te Kotahitanga, which is aimed at raising students' achievement levels with a focus on Māori students and funded by the Ministry of Education.

A research team from the Jessie Hetherington Centre for Educational Research (JHC) at Victoria University of Wellington is conducting an evaluation project funded by the Ministry of Education to investigate how well and in what ways Te Kotahitanga works towards the goal of improving student achievement. The research has had the approval of Victoria University of Wellington College of Education Ethics Committee. As part of the project, the research team from the University would like to observe a number of lessons and may wish to talk some of the students about these lessons and about your perceptions and experiences of the Te Kotahitanga project. The purpose of these observations and interviews is to provide information to the Ministry of Education on the unique aspects and effectiveness of Te Kotahitanga in achieving its overall aim of improving the educational achievement of students in mainstream secondary school classrooms, with a focus on Māori students. During this research project you might be one of the students that the research team would like to invite to participate in these interviews.

The interviews will be conducted by a member of the research team and will be tape-recorded. The interviews will be held at school, at an agreed time, during the school day. Focus groups with students would be scheduled so as not to disrupt individual students' academic programmes. If the team would like to talk to you, you will be advised at the beginning of the interview that you can withdraw from it at any time if you so wish.

The research team will analyse what they observe during the lessons and what is said during the interviews. The observation and interview data will be treated as confidential, that is, seen only by the researchers; and the identity of the school, you, the other students, teachers, parents and whānau will be protected. The results of the project will be written up in the form of a report for the Ministry of Education. At the conclusion of the research all interview notes and notes from the observations will be destroyed and the audio recordings will be electronically wiped.

The research team would like to request your agreement to being interviewed. When the interviewer meets you face to face, s/he will explain again what is involved.

You will not be interviewed without your agreement. If you agree to this request we would appreciate it very much if you would sign and date the consent form below.

With all good wishes,

Yours sincerely

Professor Luanna Meyer

Co-ordinator of Te Kotahitanga Evaluation Team

Email: luanna.meyer@vuw.ac.nz



JESSIE HETHERINGTON CENTRE FOR EDUCATIONAL RESEARCH

Te Puna Rangahau ki Ako Pai

Victoria University of Wellington
PO Box 17-310
Karori
Wellington
Phone 04 463 9588



COLLEGE OF EDUCATION

**Evaluation of Te Kotahitanga
CONSENT FORM
Interviews with Students**

I have received the leaflet asking for my agreement to participate in an interview.

I have had the purpose of the interviews explained to me.

I understand that I may withdraw at any time, from the interview, if I wish to.

I understand that my comments will be reported anonymously in the project report.

I understand that at the end of the research all interview notes, notes from the observations and audio recordings will be destroyed.

Student's name: _____

Student's signature: _____

Date: _____

**Please complete and return this form to the school office by 14 October 2008
Thank you.**

**JESSIE HETHERINGTON CENTRE FOR EDUCATIONAL RESEARCH***Te Puna Rangahau ki Ako Pai*

Victoria University of Wellington
PO Box 17-310
Karori
Wellington
Phone 04 463 9588

**COLLEGE OF EDUCATION**

Evaluation of Te Kotahitanga INFORMATION SHEET

Families and Whānau participating in Discussion/Focus Groups

Our school is participating in a project, Te Kotahitanga, which is aimed at raising students' achievement levels with a focus on Māori students and funded by the Ministry of Education.

A research team from the Jessie Hetherington Centre for Educational Research (JHC) at Victoria University of Wellington is conducting an evaluation project funded by the Ministry of Education to investigate how well and in what ways Te Kotahitanga works towards the goal of improving student achievement. The research has had the approval of Victoria University of Wellington College of Education Ethics Committee. As part of the project, the research team from the University would like to talk with some groups of parents, families and whānau about their perceptions and experiences of the Te Kotahitanga project. The purpose of these discussions is to provide information to the Ministry of Education on the unique aspects and effectiveness of Te Kotahitanga in achieving its overall aim of improving the educational achievement of students in mainstream secondary school classrooms, with a focus on Māori students. During this research project your child might be one of the students that the research team would like to participate in these interviews.

The discussions with parent, family and whānau groups will be conducted by a member of the research team and will be tape-recorded. They will be held at school, at an agreed time, during or at the end of the school day. The research team will provide refreshments. Participants in these discussion groups will be advised at the beginning of the discussion that they can withdraw from it at any time if they so wish.

The research team will analyse what is discussed at these meetings. The data will be treated as confidential, that is, seen only by the researchers; and the identity of the school, students, teachers, parents and whānau will be protected. The results of the project will be written up in the form of a report for the Ministry of Education. At the conclusion of the research all notes from the discussions will be destroyed and the audio recordings will be electronically wiped.

The research team would like to invite you to take part in one of these discussion groups. If you agree to this request we would appreciate it very much if you would sign and date the consent form attached.

With all good wishes,

Yours sincerely

Professor Luanna Meyer

Director, Te Kotahitanga Evaluation Team

Email: luanna.meyer@vuw.ac.nz



JESSIE HETHERINGTON CENTRE FOR EDUCATIONAL RESEARCH

Te Puna Rangahau ki Ako Pai

Victoria University of Wellington
PO Box 17-310
Karori
Wellington
Phone 04 463 9588

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI



COLLEGE OF EDUCATION

**Evaluation of Te Kotahitanga
CONSENT FORM
Discussion Groups with Parents/Families/Whānau**

I/We have received the leaflet inviting me/us to take part in a discussion group to talk about my/our perceptions and experiences of the Te Kotahitanga project.

I/We have had the purpose of the discussion groups explained to us.

I/We understand that I/we will be able to withdraw at any time, from the discussion group, if I/we so wish.

I/We understand that my/our comments will be reported anonymously in the project report.

I/We understand that at the end of the research all notes from the discussions and audio recordings will be destroyed.

I/We agree to participate in a discussion group with other parents/families/whānau.

Parent/Caregiver's name: _____

Parent/Caregiver's signature: _____

Date: _____

**JESSIE HETHERINGTON CENTRE FOR EDUCATIONAL RESEARCH***Te Puna Rangahau ki Ako Pai*

Victoria University of Wellington
PO Box 17-310
Karori
Wellington
Phone 04 463 9588

**COLLEGE OF EDUCATION**

Evaluation of Te Kotahitanga INFORMATION SHEET Classroom Observation and Teacher Interviews

Dear Colleague,

Your school is currently participating in a project designed to investigate how well and in what ways Te Kotahitanga works towards the goal of improving Māori student achievement. This investigation is being carried out by a research team through the Jessie Hetherington Centre for Educational Research (JHC) at Victoria University of Wellington.

As part of the project, the research team would like to observe a lesson in your classroom as a teacher who may or may not have been through the Te Kotahitanga professional development programme. The purpose of these observations and interviews is to provide information to the Ministry of Education on the unique aspects and the effectiveness of Te Kotahitanga in achieving its overall aim of improving the educational achievement of Māori students in mainstream secondary school classrooms. In-class observations will focus on the physical layout of your classroom, interactions between students and peers, and between you and the students, the nature of teaching strategies being used, student groupings, the engagement of students with classroom tasks, and so on. During the classroom observation you will be able to request that it should not be continued, if you so wish, without prejudice. We will also be meeting with some teachers in small groups or individually, and these interviews will be held at school. Teachers will be invited on our behalf by the lead facilitator to participate in these interviews, and you may withdraw from the interview at any time if you so wish.

The research team would like to analyse what they observe during the lessons and what is said during the interviews. The observation and interview data will be treated as confidential, that is, accessed only by the researchers, and the identity of students, teachers, parents and whānau will be protected. The results of the project will be written up in the form of a report for the Ministry of Education. At the conclusion of the research after the agreed time period to check all data for accuracy, all interview notes and notes from the observations will be destroyed and the audio recordings will be electronically wiped.

The research team would like to request your consent to the classroom observations and to being interviewed. Should you wish to raise any query or concern about this project at any time it will be possible for you to do so either by informing the research team in person, or by writing to, or e-mailing, luanna.meyer@vuw.ac.nz.

The team would appreciate it very much if you would sign and date the consent form attached.

With all good wishes

Professor Luanna Meyer

Director, Te Kotahitanga Evaluation Team

Email: luanna.meyer@vuw.ac.nz

**JESSIE HETHERINGTON CENTRE FOR EDUCATIONAL RESEARCH***Te Puna Rangahau ki Ako Pai*

Victoria University of Wellington
PO Box 17-310
Karori
Wellington
Phone 04 463 9588

TE WHARE WĀNANGA O TE ŪPOKO O TE IKA A MĀUI

**COLLEGE OF EDUCATION**

**Evaluation of Te Kotahitanga
TEACHER CONSENT FORM
Classroom Observation and Teacher Interviews**

This consent form refers specifically to classroom observations and teacher interviews which will be conducted during 2008 by members of the team investigating how well and in what ways Te Kotahitanga works towards the goal of improving Māori student achievement.

I have had the purpose of the research project discussed with me.

I agree to a member of the research team observing one of my lessons.

I agree to a member of the research team interviewing me about my perceptions of the lessons that has been observed and about my experiences as a teacher participating in the Te Kotahitanga professional development programme.

I understand that:

- I may request that the classroom observation is not continued, without prejudice.
- I may withdraw at any time from an interview, without prejudice.
- Interviews will be recorded. The interview tape and transcript will be kept confidential to members of the research team. Any of my comments reported in subsequent documents will be strictly anonymous unless I give written permission for comments to be attributed to me.
- At the conclusion of the research all interview notes, notes from the observations and audio recordings will be destroyed.

Name: _____

Signature: _____

Date: _____

**JESSIE HETHERINGTON CENTRE FOR EDUCATIONAL RESEARCH***Te Puna Rangahau ki Ako Pai*

Victoria University of Wellington
PO Box 17-310
Karori
Wellington
Phone 04 463 9588

**COLLEGE OF EDUCATION**

Evaluation of Te Kotahitanga

TRANSCRIBER'S CONFIDENTIALITY AGREEMENT

Name (print):

I agree:

- to transcribe the tapes provided to me.
- to maintain the confidentiality of all information contained on the tapes, including the names of interview participants as well as the school
- not to make any copies of the tapes or the transcripts, or keep any record of them, other than those required for the project and requested in writing by the investigators.

Signed:

Date:

Appendix 3: Participant group specific interview questions

Te Kotahitanga Questions for October 2008 School Visits

Principal Interview Questions

1. In what ways are the principles of Te Kotahitanga reflected in your work as principal of the school? (in your work with teachers, facilitators, whānau etc)
2. What can you tell me about the quality of the professional development process and content of Te Kotahitanga? What kind of evidence do you have about how effective the PD is? Which components of the PD seem to be most effective for teachers? How do you know?
3. How well has the implementation of Te Kotahitanga gone at your school? Are there things that could have been done better/differently? How did your school staff respond to implementation? How do you know?
4. How has the project helped your school gather and use evidence about student achievement? Māori student achievement? What evidence do you have or expect to have in order to evaluate the impact of Te Kotahitanga on Māori student achievement? Achievement of all students?
5. As principal, what kinds of things do you do to support and promote Te Kotahitanga in your school? What works best? What is most difficult to do?
6. One of the key principles of the Effective Teaching Profile is Manaakitanga “caring for students as culturally located individuals.” How does your school strive to affirm students’ identities as Māori? How can you tell when a teacher is enabling students to participate *as Māori learners* and to be themselves *as Māori* in the classroom? What kinds of conversations have you heard around the school about this issue?
7. What kinds of student outcomes do you think result from Te Kotahitanga working well in your school? For Māori students in particular? For all students? (Probe: Are these motivational, attitudinal, attendance-related, liking school, doing better academically?)
8. What kinds of outcomes do you see for facilitators and for teachers who participate in the project? What changes in teacher work do you see? In teaching? Does Te Kotahitanga produce behaviour change different from what happens from other PD? How? Is there any relationship between Te Kotahitanga and other PD initiatives in your school? Why/why not?
9. What have been the biggest concerns or criticisms of Te Kotahitanga in your school? From the community? How has the school handled these issues? What are the biggest challenges for teachers in implementing Te Kotahitanga in their classrooms? What things are still “works in progress” towards fully achieving the TK approach in your school?
10. Some argue that Te Kotahitanga should focus on all students, not just Māori students. What do you think about that? What do your teachers say?
11. Has this school changed in any ways as a result of being part of Te Kotahitanga? Are school policies, systems, procedures etc different? Can you give me an example of something done differently at school level as a result of the Te Kotahitanga experience? (Probe: How about attendance follow-up? Dealing with disciplinary events? Any changes to stand-down, suspension, expulsion practices?)

12. If you were providing advice to a new group of principals and schools planning to implement Te Kotahitanga, what would that be? What does the principal need to do if it is to work well? What should he/she avoid? Any other cautionary advice you could offer? Can you think of a circumstance when you would recommend that Te Kotahitanga *would not* be a good programme for a school? What kind of school might need more support to make it work well?
13. Do you think there are differences across subjects in the extent to which Te Kotahitanga has been integrated into teaching practices? Can you give me examples for a subject where it is working well? Where there seem to be challenges?
14. What would it take for Te Kotahitanga to be self-sustaining in your school?
15. What kind of training for Te Kotahitanga worked best for you as a principal? What would you recommend for principals new to the programme? Have you participated in any mentoring or principal-to-principal advice on Te Kotahitanga, and what did that look like? What kinds of training and supports for principals seem most critical to you?
16. Is there anything else you'd like to add?

Other School Leader Interview Questions

Questions for Deputy Principals and Deans were a sub-set of appropriate questions from the above list of questions for the principal, whereas questions for Heads of Departments were adapted from those asked of teachers (see below).

Student Focus Group Questions

1. How does this school support your learning [rather than “how does this school make you feel?”] How do your teachers show they care about your learning, not just generally but each of you personally? What do they do or say to show they care about your learning?
2. How do teachers make learning relevant to your own lives? Can you think of some examples where students could bring their ideas, experiences or questions into classroom learning activities, in different subject areas?
3. What does being Māori mean for you? Does “being Māori” look different in school compared to how it looks outside school?
4. Do you feel that you can “be Māori” in this school? In different classrooms? Can you give some examples of how teachers let you know that they respect and understand “being Māori”? What if anything makes you feel you aren't supposed to “be Māori” in the classroom?
5. How do the teachers incorporate Māori culture and understandings into different subjects? Activities that you do in school? Other?

Whānau Focus Group Questions

1. What does your school need to do to help your children succeed educationally—give examples? What is your school doing now that you think is helpful/important for Māori children's educational success?
2. There is a programme in your school called Te Kotahitanga. What can you tell me about this programme? Do you think Te Kotahitanga is making a difference to your children's learning? Can you give examples?

3. What does “being Māori” mean to you? Do you think children can “be Māori” in school or do they have to be something different? Can you describe what this looks like?
4. How are parents involved in this school? In what ways do the BOT, principal and teachers encourage Māori culture in your school?

Teacher Focus Group Questions

1. What do you think is most important for teachers to do to promote Māori student achievement? Why? How can you tell if what a teacher is doing is working?
2. What do you see as the most important educational outcomes for Māori students? For all students? How well do you think this school is doing to achieve these?
3. Which aspects of Te Kotahitanga are most useful and helpful to you as a teacher? Why? Which are not? Why not?
4. How is Te Kotahitanga different from good teaching generally? Can you give me some examples of something reflecting Te Kotahitanga practices in different subject areas?
5. What does it mean to you to enable students to learn “as Māori” and to be themselves “as Māori”? Can you give an example of “caring for students as culturally located individuals”?
6. What suggestions could you make to change or improve Te Kotahitanga if you could? Why?

Lead Facilitators and Facilitators Interview Questions

1. What do you see as the most valuable outcomes of Te Kotahitanga? For Māori students? For teachers? For you and other facilitators? For others (who)? Why are these the most valuable outcomes?
2. In what ways have teachers made changes to improve Māori student achievement? How has Te Kotahitanga influenced what teachers do?
3. In your own words, tell me what does culturally responsive practice look like for Māori students? In the classroom? How are students made to feel that they can “be themselves as Māori”? Can you give me an example of how Te Kotahitanga has supported a teacher to “care for students as culturally located individuals” in [science/math/English]?
4. Do you think that teachers in different subject areas vary in how ready they are to incorporate what they’ve learned in Te Kotahitanga or how successfully they do incorporate it into their teaching and how their classrooms operate? Which subject areas if any seem to do more? Are there any that seem to you to be “struggling” with how to do this? Alternatively, is it primarily a matter of individual teacher experiences, attitudes and skills? Both? Can you give me some examples?
5. How does Te Kotahitanga’s professional development operate in this school? What are the barriers to making it work well? What are the enablers that help it work well?
6. How do you interact with teachers to support them in implementing effective teaching practices for Māori into their classrooms, interactions with students, and instruction? What are the strongest areas of the ETP in your school? What areas need the most work? Can you give me an example of a recent ETP goal that you and the teacher agreed was a “weakness” and how the teacher approached working on that goal?

7. What is the hardest part of your job as a facilitator for Te Kotahitanga? Why? What kinds of things are happening to address the challenges? Are there changes to the training you've had that you would recommend for future Facilitators and lead facilitators? Who do you think make the best facilitators (training, role, relationships in the school?)?
8. What do you see as the most important and most successful components of the Te Kotahitanga programme that should stay the same? Explain? Which could be changed to make them better? Why?

Appendix 4: Data collection school site visit sample schedule

[Name of school] [phone] [Day one: Date on Site]

Principal [name]

Year 9 and 10 students: [total N]

Observations: [# of observations]

Lead Facilitator [name]

	Researchers			
Schedule	Researcher A [Māori]	Researcher B	Researcher C	Researcher D [Māori]
8:25 – 8:40AM Staff briefing				
8:40-9AM Tutor Time	Team arrival: Briefing with the Principal and lead facilitator			
9-10:00AM Period One	Observation	Observation	Observation	Observation
10-11:00AM Period Two	Observation	Observation	Observation	Observation
11-11:30AM Interval	Interval			
11:30-12:30 Period Three	PD	Facilitators	Observation	Principal
12:30 -1:30PM Period Four	Observation	PD	HoD/ Dean	PD
1:30-2:10PM Lunch	Lunch			
2:15 – 3:15PM Period Five	Teacher Focus Group 1		Student Focus Group 1	
End of school day	Whānau Focus Group	BOT Chair		Whānau Focus group

Research Team for the day: [list names]

[Name of school] [phone]

[Day two: Date on Site]

Principal [name]
Lead Facilitator [name]

Year 9 and 10 students: [total N]

	Researchers		
Schedule	Researcher A [Māori]	Researcher B	Researcher C
8:25 – 8:40AM Staff briefing			
8:40-9AM Tutor Time			
9-10:00AM Period One	Observation	Observation	Observation
10-11:00AM Period Two	PD	Student Focus Group 2	
11-11:30AM Interval	Teacher Interview	Teacher Interview	Teacher Interview
11:30-12:30 Period Three	Observation	Lead Facilitator	PD
12:30 -1:30PM Period Four	Observation	Observation	Observation
1:30-2:10PM Lunch	Lunch		
2:00 – 3:00PM Period Five			
End of school day			

Research Team for the day: [list names]

Appendix 5: Effective teaching profile (ETP) definitions

Instructions for Recording Exemplars of the *Effective Teaching Profile (ETP)*

Introduction: This is not intended as a ‘check-list.’ Instead, the purpose of highlighting these approaches or features of the ETP is to stimulate further development and exemplars of how these can be translated into teaching and learning activities. Teachers vary in their use of specific strategies/approaches, and some of these variations will naturally occur because of the subject area, topic of the day, and organisation of the lesson. In addition, some of the approaches overlap. There will also be different levels of teacher expertise in the use of the approaches. The following provides more explanation regarding what is meant by each of the ETP approaches or features:

1. **Care for students as culturally located individuals.** Teacher takes care in pronouncing student’s names/care in pronunciation of te reo. Teacher demonstrates respect for/values/draws te reo and/or on student’s first language. Teacher connects learning activities to student’s lives outside the classroom, to cultural contexts (links with families/whānau/iwi) that students are socialised in. Teacher values/respects/draws on student’s prior knowledge/experiences outside of the classroom. Similarities and differences in cultural experiences identified/valued/respected. Teacher takes a holistic view of student learning and care for students (emotional, spiritual, physical and intellectual/whānau)—demonstrated through use of karakia, waiata. Teacher asks for feedback on pronunciation.
2. **High Expectations for learning.** Teacher reminds students of class rules/routines/responsibilities (collective responsibility for learning). Teacher comments—‘You can do this... I’m here to help’, Asks students ‘What can we do if we don’t understand? (Use of inclusive language, we, us, a class identity as achievers)Teacher gives feedback on effective student behaviour observed in learning interactions. Teacher identifies specific student behaviour that leads to successful learning. Teacher identifies/models/uses specific skills—meta-cognitive skills/thinking skills. Goal setting, role modelling, teacher reminding students of high achievers who are Māori/culturally diverse achievers. Reminding them of whānau expectations. Teacher rewards/praises effective learning behaviour.
3. **Manage class to promote learning.** Teacher identifies purpose of the lesson. Teacher redirects off-task/disruptive behaviour effectively and in ‘non-confrontational’ manner. Quiet 1—1 conversations with students. Students remind peers of class rules/responsibilities, students give feedback to peers/or the teacher on learning and/or behaviour. Teacher walks around the class and monitors student learning/engagement. Teacher provides feedback to students on learning/and or behaviour. Students take on responsibility for distributing resources/ gathering in resources. Student enjoyment/interest evident. Positive relationships evident between teacher-student, student-to student. Teacher enjoys teaching the class. Student enjoyment and interest/engagement evident.
4. **Engage in discursive interactions and facilitate student—to student interactions.** Evidence of reciprocal teaching—learning (principle of ako). Teacher takes on ‘not knowing’ position. Students take on responsibility for own and others learning; teaching tasks, for leading classroom discussions, for problem-solving. Student roles/responsibilities identified in group work. Cooperative groups evident. Students reflect on learning and share this learning with the class/Teacher uses higher order thinking/questioning to facilitate student discussion. Teacher redirects student questions to other students. Use of stories in the classroom (students interview peers/parents/whānau and bring this information back to class discussions) Cultural experts used in class to share local stories First hand stories—students’ prior knowledge/experiences.
5. **Use range of strategies to facilitate learning interactions.** Teacher uses range of instructional strategies to facilitate student responsibility for own and others learning (concept maps, think-pair-share, numbered heads

together, three-step interview, jigsaw activities, student-led inquiry, venn diagrams - similarities/differences, use of ICT, role-plays, visual aids/films, stories, etc).

6. **Promote, monitor, and reflect learning outcomes with students.** Teacher identifies learning intention/outcomes. Teacher feedback relates to learning intention/outcomes. Teacher feed-forward to upcoming assessment activities – teacher – student reflection on strengths/weaknesses in student understandings. Teacher models reflection. Teacher/student feedback identifies misconceptions in student understandings. Student reflection evident within the lesson—aligned to learning intentions/outcomes. Evidence of success criteria in class, students/teachers refer to this. Use of co-constructed assessment activities. Teacher questioning of student understanding—monitoring of student understanding. Student—student monitoring of own and others understanding.

The observations provide us with opportunity to record both exemplars and missed opportunities for these six different approaches or features. The accumulation of examples of the presence and/or absence of each of these will enrich what we know about culturally responsive pedagogy and responding to student learning effectively.

Appendix 6: Observation data collection protocols

School: Teacher:Observer:

Teacher/subject: TK: ☐ Yes ☐ No Date of observation:

Class level: Ethnicity: Record ID:

No. of students: Māori Other: Lesson topic:

ROOM ENVIRONMENT

Using the left hand half of the space below, draw diagram of classroom including furniture, seating, whiteboards, materials etc. Indicate teacher position and movements using arrow sequences (see instructions) with times. Include description of visuals related to Māori culture and/or Māori icons. Use right half to record classroom changes and/or comments regarding teacher position and movement. **Codes:** T = Teacher S = Student O = Observer

LESSON NARRATIVES (FIRST 5 MINUTES): Describe how the teacher meets and greets students. Do the students appear to feel comfortable “as Māori” as they settle into the class? How does the teacher communicate caring for students as they start the lesson? How are academic and behavioural expectations set? Describe Māori culture (te reo me ona tikanga, karakia, whakatauki, mihimihi, waiata)

Māori curriculum content (if evident): Describe use of Māori intellectual knowledge in the substance of the curriculum.

LESSON NARRATIVES (LAST 5 MINUTES): Describe how the teacher concludes the lesson, checks for understandings of learning outcomes, brings together the academic focus of the lesson, the teacher's interactions with students as they prepare to leave. Include evidence of care in pronouncing student names throughout the lesson.

ETP EXAMPLES (Include uses of te reo me ona tikanga)

1. Care for students as culturally located individuals	
2. High expectations for learning	
3. Manage class to promote learning	
4. Engage in discursive interactions and facilitate student-to-student interactions	
5. Use range of strategies to facilitate learning interactions	
6. Promote, monitor, and reflect learning outcomes with students	

After each 10 minute observation period, tick relevant boxes for each type observed during the previous 10 minutes

Teaching and Learning Type	10 minutes	10 minutes	10 minutes	10 minutes	10 minutes	10 minutes
Teacher presents with factual questions and answers						
Teacher presents with elaborating questions and answers						
Individual seatwork (as instructed by teacher)						
Teacher facilitates large group discussions (student to student)						
Small group work (projects, co-operative learning, etc)						
Large group (whole class) project or activity						
Student-led presentations or activities						
Non-academic (transitions, organising materials, socialising, etc)						
Other (eg film, text): specify						

Appendix 7: Exemplars of different levels of implementation of dimensions of the Effective Teaching Profile in Mathematics, Science, English, Social Studies and other subjects.

Table 7.1: Teaching Exemplars for the Effective Teaching Profile in Mathematics

ETP Dimensions	Low Implementation or Missed Opportunities	Implementation	High Implementation
Manākitanga: Care for students as culturally located individuals	Teacher introduces observer from Victoria University, says "You may end up going there, I believe they need cleaners"; later apologises for remark	Only reference to culture is relating worksheet to Treaty of Waitangi	Greets students as they enter, shows knowledge of individual students asking them about Kapahaka festival, rugby, etc. Uses Māori greeting when approaching and talking individually with all student during class. Sits by students, relates work to student interests (rugby) and puts maths problem in context discussed with students.
Wānanga: Discursive teaching and learning & Ako: Use of a range of strategies to facilitate learning interactions	Teacher directs entire lesson from front, students told to keep quiet and work on task individually; sends students out of room for talking aloud; no discussion	Primarily Q&A from the whiteboard, giving students time to try then doing the equation together	Student leads activity, explains maths problem to class, demonstrates to whole class. Teacher manages class but has students run groups working on maths problems, emphasizes "helping each other make a plan for excellence". Teacher moves around groups, participating.
Mana motuhake: High expectations for student learning & Kotahitanga: Promote, monitor, and reflect learning outcomes with students	No learning outcomes posted or described by the teacher, and no expectations for student work are given. Instead, students are given an assignment to work on individually during class.	Teacher expects all students to complete the measurement task and checks on their work, giving help as needed. However, no learning outcomes are posted nor is the purpose of the activity explained.	Shares goal of class regarding achieving level 3 Merit and Excellences, writes 'confidence' on the board by the L.O. and explains importance of confidence when sitting exams, explains marking system and importance of reasoning. Whole class agrees on evaluation of work against L.O.
Whakapiringatanga: Manage class to promote learning	Students continue talking out of turn despite being asked several times to be quiet; student sent out of the class to stand outside the door during observation.	Teacher primarily responds to hands up asking for help or intervenes when it is obvious student/s not working on the assigned task.	Explains about co-construction meeting the previous day and the goal teachers agreed upon for their class. Shared how they would be working towards encouraging students to take leadership roles and develop confidence of all members in class. Gives positive feedback about this when student leads solution to maths problem on board.

Table 7.2: Teaching Exemplars for the Effective Teaching Profile in Science

ETP Dimensions	Low Implementation or Missed Opportunities	Implementation	High Implementation
Manākitanga: Care for students as culturally located individuals	Lesson on circuits could provide opportunity to connect to student experiences, but teaches using model only and no discussion of series vs. parallel circuits in the home	Lesson topic is volcanoes and teacher mentions "New Zealand has volcanoes" but makes no reference to significance of geological features to Māori	Group worksheet focuses on grouping matter in science, using different types of kai, hangi, BBQ, seafood; asks students to contribute their own examples, checks for understanding of whole group, emphasizes shared knowledge.
Wānanga: Discursive teaching and learning & Ako: Use of a range of strategies to facilitate learning interactions	Very traditional individual seatwork following general instructions from the front	Has well-structured group activity but very teacher driven and students encouraged to "answer the question" rather than problem-solve with one another	Lesson on NZ plants, teacher notes she is familiar with some but needs some help with pronunciation in Māori. Asks experts in class to assist, uses group activity to help students to help one another, groups have role cards and lesson uses interactive problem-solving. Teacher elicits local knowledge from students throughout activity about use of plants, eating sea urchins, students contributing knowledge.
Mana motuhake: High expectations for student learning & Kotahitanga: Promote, monitor, and reflect learning outcomes with students	Teacher invites only 2-3 students sitting immediately in the front of the room to write down their answers on the whiteboard where the questions are written	Teacher moves around groups and talks with either individual student or the group, but primarily preparing lesson question and not checking for student understanding	Teacher encourages linkages between lesson and prior lessons, upcoming assessment. Teacher outlines purpose of lesson, connects learning activities to this. Teacher monitors students' understanding, giving feedback on strengths and gaps in student definitions, encourages student-to-student feedback.
Whakapiringatanga: Manage class to promote learning	Teacher arrives to class several minutes late, and student disruptions continue for another 5 minutes; students talk, laugh, shout throughout class	Group work is fairly noisy though students listen for task assignment; teacher ignores individual student who continues to be off task and wander around the room	Teacher smiles, greets students at door, directs students to being with 'Do Now' related to Pare over entrance to NZAC 'Ko te Aitanga Pepeke o Aotearoa'. Assigns student responsibilities in class for resources, sets time limits, re-directs off-task quickly. Praises learning behavior, addresses off-task behaviour with choice/ deferred consequences. Encourages student choice, and moves around working groups.

Table 7.3: Teaching Exemplars for the Effective Teaching Profile in English

ETP Dimensions	Low Implementation or Missed Opportunities	Implementation	High Implementation
Manākitanga: Care for students as culturally located individuals	Students work only with Collins English Dictionary and no vocabulary items related in any way to Māori, e.g., moving from "rhino" to "Hectors Dolphin" not referencing te reo	Classroom décor includes pictures of Māori leaders; Māori girl is chosen as co-teacher to record which groups finish the day's activity	Teacher greets students 'Morena' as they enter the room. Encourages students to write their magazine article about their own culture, their whānau, asks them to 'bring your own knowledge to the task'. Students use te reo in the class to each other and teacher.
Wānanga: Discursive teaching and learning & Ako: Use of a range of strategies to facilitate learning interactions	Students have all finished their individual worksheets, but teacher still checking work individually. Most of the class time is spent working on the worksheets then waiting for teacher to check work.	During whole class recitation of structure-connotation of words, teacher links suggested word to next question to explain what a mind-map is but doesn't go involve students in discussion of features of mind-maps	Cooperative structures, think-pair-share students share reflection, students asked to critique to agree/disagree with peer and highlight evidence for their judgments. Gives students choices about way of working. SEEP (statements, explanation, example, personal evaluation) strategy for student reflection. Teacher conferencing with individuals about work while group working.
Mana motuhake: High expectations for student learning & Kotahitanga: Promote, monitor, and reflect learning outcomes with students	The classroom task appears very rudimentary for the students who don't seem challenged by the assignment. Learning outcomes are neither posted nor discussed with students.	Teacher says "I want you to answer all of these questions before you go" with reference to a list on the whiteboard under the phrase "Do Now."	Teacher says 'We are a whānau and we need to care about one another's success, we are here to help each other'. Teacher sets class goal that all students get at least 'Achieved' in English exams. Finishes lesson by asking students to describe biggest change you have made in your work/ progress towards these English exams, asks students to reflect on how far they've come.
Whakapiringatanga: Manage class to promote learning	Teacher leaves magazines out despite distraction; students continuously leave seats to check appearance in mirror on OHP at the back of the room	Teacher cruises room to check on student pair work, most pairs on task. By end of activity, class loud, paper thrown around, lots of social talk	Teacher encourages students, individually checks student engagement on-task. Teacher emphasises choice and responsibility. Quiet one-to-one conversations with students informally getting them to help one another in their groups. Praises positive behavior and highlights learning.

Table 7.4: Teaching Exemplars for the Effective Teaching Profile in Social Studies

ETP Dimensions	Low Implementation or Missed Opportunities	Implementation	High Implementation
Manākitanga: Care for students as culturally located individuals	Topic of immigration never connected to previous waves of New Zealand European or earliest Māori migration	Uses karakia to start the lesson but does not relate karakia to classroom environment and manākitanga	Teacher connects lesson topic to experiences students can relate to, connects topics material to student whānau. Makes reference to their own experiences within their whānau and relates to subject.
Wānanga: Discursive teaching and learning & Ako: Use of a range of strategies to facilitate learning interactions	Teacher driven questions and answers posing factual questions, then either confirming or correcting by giving answer from the front with no attempt to encourage students to problem-solve	Group work has clear tasks, but management varies with excess of social not learning conversations	Teacher introduces lesson, students move into groups to talk about 'the Kaupapa' (L.O.), teacher discusses with class refining L.O. and agree on purpose. Students work in pairs to explain Māori system of governance prior to arrival of Europeans, uses questioning to get learners to explore conclusions.
Mana motuhake: High expectations for student learning & Kotahitanga: Promote, monitor, and reflect learning outcomes with students	Prior student knowledge not adequate for lesson objective illustrated by student answers to questions to check understandings about immigration topic "Pizza means that Italians immigrated here"	States learning outcomes but these are at factual level and doesn't expect students to apply or elaborate	Clearly states expectation regarding exam, states that they should attain a Merit, asks if they understand criteria. Unpacks criteria with students, encourages students to peer check and give feedback about how to improve. Emphasis on responsibility for achievement, e.g., how will you solve that problem? Whakatauki relating to achievement on board, refers to this throughout lesson.
Whakapiringatanga: Manage class to promote learning	Teacher personal comments met with student ridicule (e.g., "I immigrated to Auckland & absolutely love it," students shout out "Who cares!" and "Big deal")	During seatwork activities, students focused and working quietly; during teacher presentation, students talk out of turn; 2 students get permission to leave classroom for drink of water	Cooperative structures with roles, sets expectations. Uses humour to manage, re-directs back on-task. Uses rule reminders, shows enthusiasm for subject, encourages students throughout, praises positive learning and behavior. Gives students responsibility for managing group behavior, keeping time etc.

Table 7.5: Teaching Exemplars for the Effective Teaching Profile in Other Curricular Areas

ETP Dimensions	Low Implementation or Missed Opportunities	Implementation	High Implementation
Manākitanga: Care for students as culturally located individuals	No references to student experiences nor culture (e.g., Māori), nothing visual related to culture in the room [Graphics]	Teacher relates artwork to skateboard designs to connect with students' lives outside class [Art]	Compared and contrasted concepts across cultures, emphasising intercultural competence as well as linguistic knowledge, e.g., "mana" [Japanese]
Wānanga: Discursive teaching and learning & Ako: Use of a range of strategies to facilitate learning interactions	Entire lesson is individual seatwork with no peer interactions, though the activity is project-related [Electronics]	Switches between hands-on work with musical instruments and paperwork about reading and writing music [Music]	Cooperative learning activity with student roles, teacher reminds students of roles, emphasised that students need to depend on each other to get the work completed, uses roles to manage and teach one another. Participates with students. [te reo Māori]
Mana motuhake: High expectations for student learning & Kotahitanga: Promote, monitor, and reflect learning outcomes with students	Does task step for student rather than talking through strategy for student to problem-solve [Business]	Teachers asks if students know how to score tennis, then goes over scoring rules but doesn't relate to learning outcomes so that class seems more like playing tennis [Physical Education]	Encourages students to persevere, to keep trying. States that 'Friends give to each other and help each other out'. Teacher tells students 'There is no excuse for 'Not Achieved' on NCEA, what could you do, be proactive. How could you find a solution?' Reminds students of goal for the day, the L.O. [Japanese]
Whakapiringatanga: Manage class to promote learning	Teacher goes from student to student, saying "well-done" or "you need to..." When talking in room gets loud, shouts "Hey, hey, what's going on?!" Shouts again to pack up at end of class, but students seem to pay no attention [Technology]	Good class participation but also lots of social chatter, with teacher periodically going "Shsh!" with little effect [Health]	Uses respectful tone and manner, 'Excuse me, Sam, just moving through, thanks'. Acknowledges challenges students face performing in front of others, sets expectations of audience behavior. Praises students respectfully using their language, 'Cheer, shot Malcolm, you did it'. Encourages students to praise each other and give feedback on performance. Students responsive and respectful throughout, teacher has warm respectful presence in the room [Music]

Appendix 8: Brief Biographies for the Te Kotahitanga Evaluation Research Team Tepora Emery (Ngāti Pikiao, Te Arawa; Ngāti Unu ki Maniapoto, Tainui)

Dr Tepora Emery is an independent research and education consultant. Completing a PhD in education in 2008, Tepora works from her haukainga Rotorua. Her work focuses on Māori health, education and socio-cultural and economic development. She is currently engaged in a diverse range of projects across a number of Iwi, Community, Government and University groups.

Rawiri Hindle (Ngāti Kuri, Pohutia)

Rawiri Hindle is Senior Lecturer in Te Kura Māori at Victoria University, where he also completed his Masters in Education in the area of the Māori arts. Working across the primary, secondary and early childhood programmes, his specialist areas are in the Māori arts as well as Māori epistemologies and pedagogies including providing leadership in the Māori arts for Māori immersion school by coordinating the Ngā Toi professional development. In this role, he was responsible for the national implementation of the Ngā Toi curriculum. He has also developed quality online and hard copy arts resources for teachers and students in Māori immersion schools, including co-authoring two books in 2008 and 2009 in the Māori arts. His papers and presentations have been presented at various arts and culture-related conferences nationally and internationally, including being invited in 2007 to present at the UNESCO-ACCU Promotion of the Convention for the Safeguarding of the Intangible Cultural Heritage in Tokyo, Japan, and in 2009 as a keynote speaker at a TRCC conference in Auckland. Other research team activities include being part of the 'Te Kauhua in Retrospect' evaluation project.

Anne Hynds

Dr. Hynds received her PhD in education from Victoria University and is Senior Lecturer in the School of Educational Psychology and Pedagogy, Faculty of Education, at Victoria University where she is Director, Postgraduate Programmes. She teaches graduate and undergraduate courses in diversity and inclusion, research methods and social justice leadership. She has worked as a teacher in primary, intermediate and secondary school settings and held senior teaching positions in Deaf Education. In 2006 she was seconded to the Ministry of Education to coordinate the Quality Teaching Research and Development in Practice Project (QTR&D), and she was also an invited member of the Ministry of Education's advisory group for Te Kauhua: Māori in the mainstream pilot project. Anne's research is focused on issues of diversity within education through the use of qualitative (collaborative inquiry & action research) methodologies. She is particularly interested in exploring the relationship between teacher understandings of culturally responsive and inclusive pedagogies and resistance to change in equity-minded school reforms. She has worked as an external peer reviewer for international journals and conferences associated with such topics. She has published numerous book chapters and peer reviewed articles in refereed journals and regularly presents at international conferences associated with the fields of her research.

Mere Kēpa (Ngāti Tāhūhū ki Ngāpuhi, Ngāti Whatua, Whakatohea, Te Whānau Rūtaia, Ngai Tuhoe)

Mere Kēpa is currently the Research Fellow and Senior Project Manager (Māori) with the *Life and Living in Advanced Age Study in New Zealand* (LiLACS NZ) funded by the Health Research Council and Ngāa Pae o te Maaramatanga, New Zealand's Māori Centre of Research Excellence (CoRE). The study of 1200 Māori and non-Māori over 80 years of age is based in the Faculty of Medicine and Health Sciences, the University of Auckland. Her research interests and experience include Pedagogical Decolonisation, Linguistics, Language, Culture, and Education, Indigenous and Migrant Education, Treaty of Waitangi Claims, the Resource Management Act, and most recently, Gerontology. Mere's work includes teaching, writing, and international consultancy.

Luanna H. Meyer

Dr. Meyer is Director of the Jessie Hetherington Centre for Educational Research at Victoria University and Professor of Education (Research) where she is responsible for research development and coordinates the PhD programme in Education. She received her BA from the University of Wisconsin-Madison and her MSc and PhD from Indiana University. Previously, she was Assistant Vice-Chancellor (Academic) and Pro Vice-Chancellor (Education) at Massey University, and faculty member at Syracuse University, the University of Minnesota, and The University of Hawai'i in the United States. Professor Meyer has published 11 books, more than 100 refereed journal articles and book chapters, and over 100 additional publications including validated assessments and invited state-wide education reviews (e.g., Tasmania, Victoria & New South Wales in Australia). She has presented papers at many international conferences and been invited to speak in over 30 U.S. states and six countries. Recent research publications have focused on tertiary assessment, the relationship of motivation and secondary school achievement, university governance, tertiary research capacity, educative intervention for severe behavioural challenges in schools, and diversity in education. She has received over US\$12 million research funding in the United States and New Zealand and was recognised by the Thomas Haring Award for Excellence in Research from TASH International in 2003. She is on the register of auditors for universities in both Australia and New Zealand and just completed a term on the board of the New Zealand Council for Educational Research.

Wally T. Penetito (Tainui - Ngāti Hauā, Ngāti Tamaterā, Ngāti Raukawa)

Dr. Penetito is Professor of Māori Education and Co-Director of He Pārekereke, Institute for Research and Development in Māori and Pacific Education, at Victoria University of Wellington. He holds a T.T.C. from Ardmore Teachers College, a B.A. from Massey University, and a Ph.D. in education from Victoria University. He has extensive experience across the education system as teacher, principal, adviser to schools, and as a public servant with the Department of Education, the Education Review Office, and the Ministry of Education. Dr. Penetito's research interests mainly revolve around his scholarship in the field of Māori education and in particular how he sees this contributing to an education for all in New Zealand. Recently, he published a major historical review of the education of Māori in a major international research collection edited by Banks, and his 2010 book 'What's Māori about Māori education? The struggle for a meaningful context' is being published by Victoria University Press. His work is especially informed by sociological perspectives with an emphasis on themes embedded in social justice, critical race theory, place-based education, and the sociology of knowledge.

Catherine Savage (Ngāi Tahu)

Dr Savage is Senior Lecturer at Victoria University in the School of Educational Psychology and Pedagogy, Faculty of Education. She is a registered psychologist and has worked as a classroom teacher, resource teacher of learning and behaviour (RTLb) and educational psychologist. Her doctorate in education from Massey University investigated the 2004 EDI policy and subsequent school reorganisation. She currently teaches postgraduate courses in whole school systems and severe/challenging behaviour. Her research is focused primarily on culturally responsive classroom

management and whole school positive behaviour support in the New Zealand context. She has reviewed both national and international conference and journal articles in special education and educational psychology. Catherine regularly presents at national and international conferences, most recently as an invited speaker at the RTLB conference in Nelson. Her most recent publications include co-authoring a chapter on multicultural special education in the 2010 Banks and Banks collection on issues in multicultural education and a sole-authored chapter on culturally responsive classroom management in New Zealand, in *Delving into Diversity* (2010).

Christine E. Sleeter

Dr. Sleeter received her PhD from the University of Wisconsin-Madison and is Professor Emerita in the College of Professional Studies at California State University Monterey Bay, where she was a founding faculty member. Formerly, she was a secondary teacher of students with learning disabilities and faculty member at Ripon College in Wisconsin and the University of Wisconsin-Parkside; she has also been a visiting scholar at San Francisco State University, Victoria University of Wellington, and the University of Washington. She is currently President-Elect of the National Association for Multicultural Education, and was previously Vice President of Division K (Teaching and Teacher Education) of the American Educational Research Association. Her research focuses on anti-racist multicultural education and multicultural teacher education. She has published over 100 articles in edited books and journals such as *Journal of Teacher Education*, *Teacher Education Quarterly*, *Teaching and Teacher Education*, and *Curriculum Inquiry*. Her recent books include *Unstandardizing Curriculum* (Teachers College Press), *Facing Accountability in Education* (Teachers College Press), and *Doing Multicultural Education for Achievement and Equity* (with Carl Grant; Routledge). She has been invited to speak in most U.S. states as well as several countries. Awards for her work include the American Educational Research Association Social Justice in Education Award, the American Educational Research Association Division K Legacy Award, the California State University Monterey Bay President's Medal, and the National Association for Multicultural Education Research Award.

Georgina M. Stewart (Ngāti Maru ki Tainui; Ngāpuhi-nui-tonu)

Dr. Stewart holds a Master of Science from the University of Auckland, a Diploma of Teaching from Auckland College of Education, and a Doctor of Education from the University of Waikato. She has a background teaching te reo Māori, Science and Mathematics in both English-medium and Māori-medium secondary schools, and has contributed to national curriculum, assessment and resource development initiatives in these curriculum areas since 1993. Her scholarship explores philosophical and political issues arising in and from Māori science education. Most recently she has held research positions with the Starpath Project, University of Auckland Faculty of Education, and the New Zealand Council for Educational Research in Wellington.

Appendix 9: Te Kotahitanga Evaluation Advisory Group Membership and Terms of Reference

December 2007*

Membership

The Advisory Group consists of nominees from the following agencies: NZQA, PPTA, Te Akatea, and a mainstream principals' representative (SPANZ or PPTA Principals' Council). The Advisory Group will be chaired by the Project Leader. Key Ministry of Education personnel including the project manager and the Project Director Russell Bishop will be in attendance.

Role and Function

The role of the group is to provide advice and support on the evaluation approach, methodology, interpretations of findings, and editorial comment on the draft final report. Specifically, the group will offer comments and advice to the evaluation team with regard to:

- The draft evaluation plan
- The final research report

In addition, the advisory group may be invited to comment as needed with regard to specific issues that are relevant to the role and expertise of individual members.

Advice and comments offered by the group will be taken into consideration by the evaluation team in finalising the evaluation plan and the overall research report. Ultimate responsibility for the direction of the evaluation and compilation of the research report will remain with the contract holders and the Ministry of Education.

Meeting Schedule

There will be three meetings of the group: one during the planning stage of the evaluation (December 2007), one during the drafting of the final evaluation report (June-July 2009), and one to review the final draft report (December 2009-January 2010).

Terms

Victoria University will reimburse travel and other expenses. In accordance with Ministry of Education requirements, in agreeing to participate in this group, members agree to maintain confidentiality with regard to all information (including documentation) or discussions relating to or arising from the evaluation of Te Kotahitanga.

**NOTE: Draft ToR were reviewed at the initial meeting of the Advisory Group on 11 December 2007, and amendments agreed at that meeting have been incorporated into the final Terms of Reference as above.*