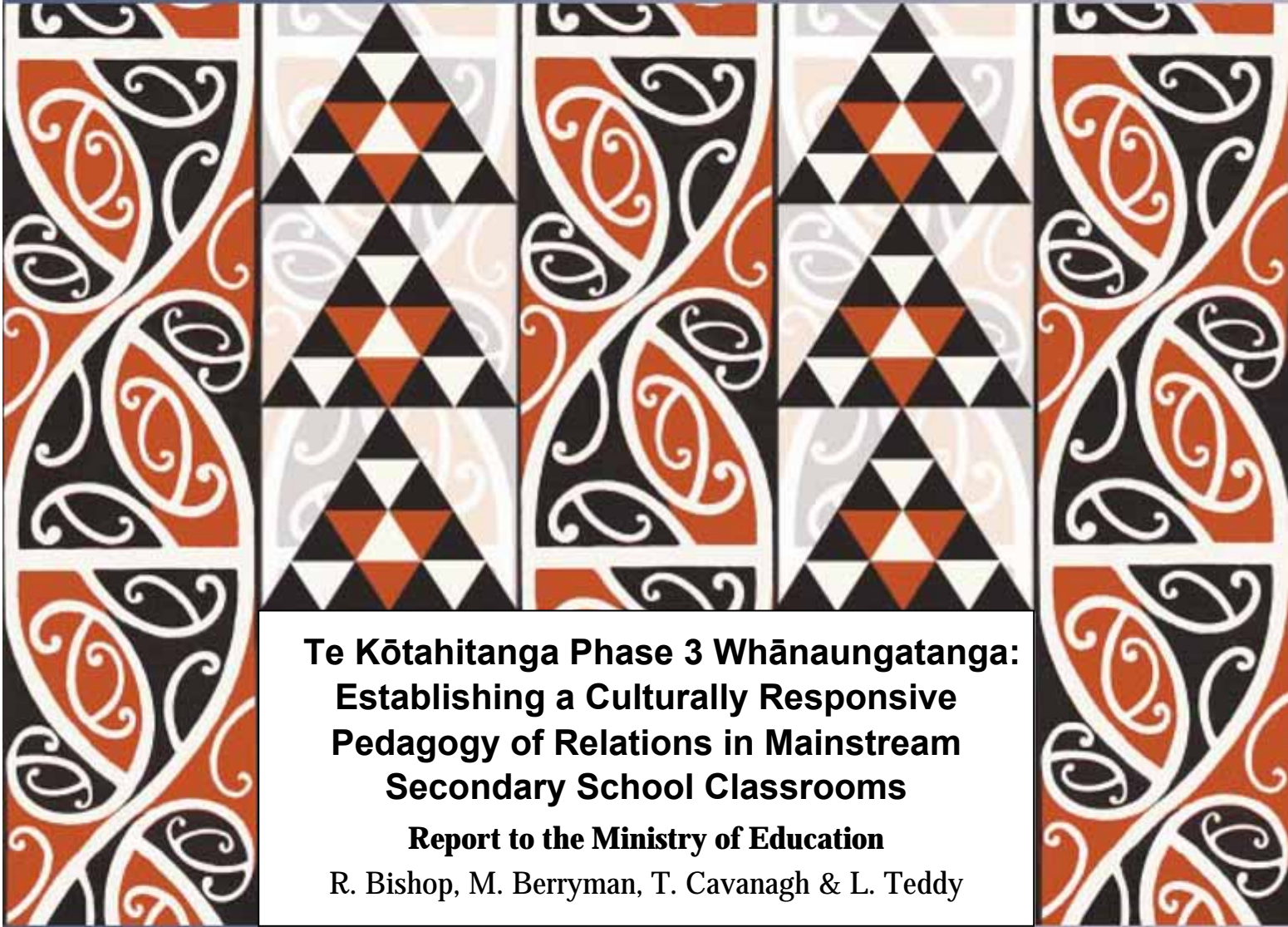




TE TĀHUHU O TE MĀTAURANGA
Ministry of Education

RANGAHAU MĀTAURANGA MĀORI

Māori Education Research



**Te Kōtahitanga Phase 3 Whānaungatanga:
Establishing a Culturally Responsive
Pedagogy of Relations in Mainstream
Secondary School Classrooms**

Report to the Ministry of Education

R. Bishop, M. Berryman, T. Cavanagh & L. Teddy

MĀTAURANGA MĀORI

WĀHANGA MAHI RANGAHAU



Research Division



Te Tere Auraki (to navigate the mainstream river) is a research and professional development strategy focused on improving teaching and learning for Māori students in mainstream schools. Te Kōtahitanga is a project that sits within this strategy.

ISBN 978-0-478-13648-7

Web Copy ISBN 978-0-478-13649-4

RMR-840

© Ministry of Education, New Zealand — 2007

Research reports are also available on the Ministry's website: www.minedu.govt.nz/goto/2107 and on Education Counts: www.educationcounts.edcentre.govt.nz/research/index.html

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



MINISTRY OF EDUCATION

Te Tāhuhu o te Mātauranga

Te Kōtahitanga Phase 3

Whānaungatanga: Establishing a Culturally Responsive Pedagogy of Relations in Mainstream Secondary School Classrooms.

Final Report

Ministry of Education Research Division Wellington

EXTERNAL RESEARCH CONTRACT WITH:

Māori Education Research

School of Education, University of Waikato, Hamilton

AND

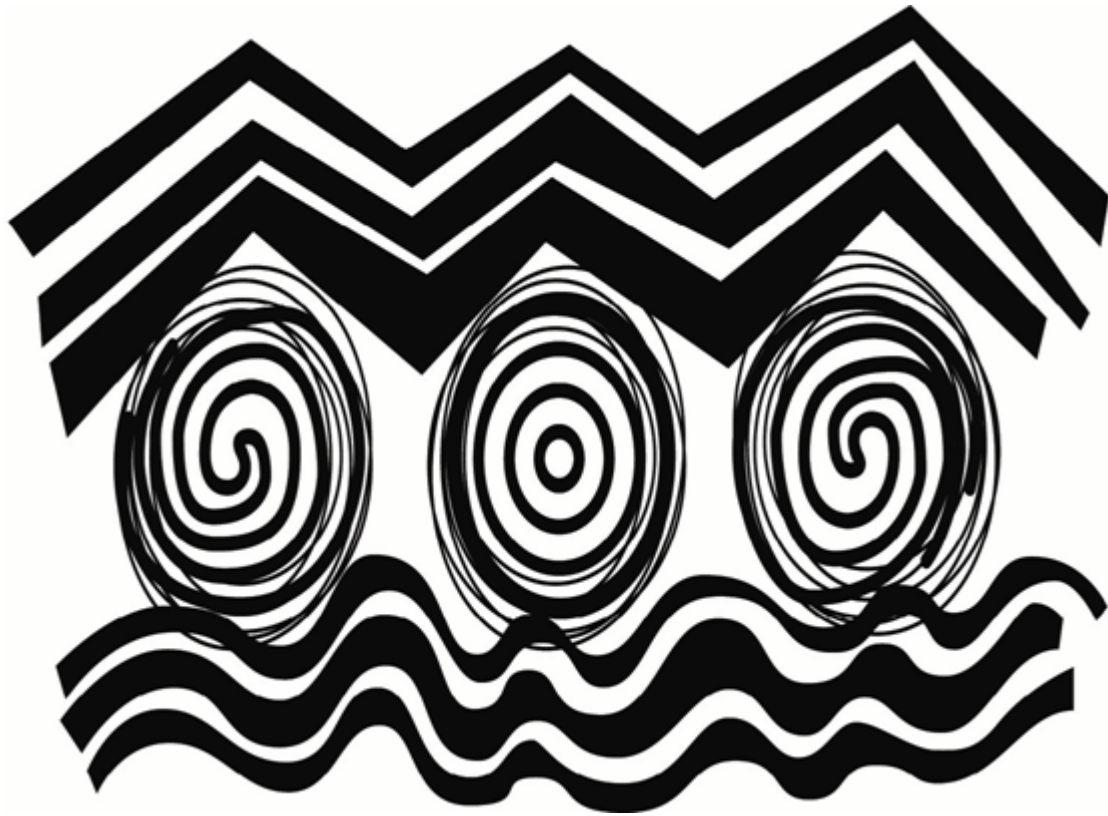
Poutama Pounamu Research and Development Centre

GSE Ministry of Education Tauranga

PREPARED BY:

R.Bishop, M.Berryman, T.Cavanagh and L.Teddy.

March 2007



TE KŌTAHITANGA

The wavy lines at the base of the model come from the New Zealand Ministry of Education's logo where they represent the waterways of our island nation and the life blood of Aotearoa New Zealand. In this model they show the Ministry's funding and support to the project. The zig zag lines at the top come from the Māori symbol for 'niho taniwha' or teeth of the taniwha. 'Niho taniwha' make metaphoric references to relationships, guardianship and leadership. The zig zag lines in this model represent the role of the University of Waikato and the participation of researchers from this institution who worked in partnership with researchers from the MOE, GSE, Poutama Pounamu research centre.

The symbol of concentric circles in the centre represents Māori students and their families and their central place in this project. The innermost circle represents the students themselves within their whānau (family, second circle), their hapū (sub-tribe, third circle), their iwi (tribe, fourth circle) and their culture provided by the remaining overlay of circles. On either side is a double spiral. The centre of the double spiral is understood to represent the interconnectedness of passive and active elements from whence change can be generated. The double spiral to the left represents Māori educators, while the double spiral to the right represents non-Māori educators. Reading from left to right it can also be noted that this research was by Māori, for Māori and for non-Māori. Raising Māori students' achievement is seen to be inextricably interconnected with the creation of culturally appropriate and responsive learning contexts. Graphically the waves and the niho taniwha placed on either side of the learning contexts suggest that research informs practice and practice informs research, and that this process is iterative and ongoing.

Acknowledgements

This project was funded by the Curriculum Teaching and Learning Division of the Ministry of Education and conducted by Māori Education Research of the School of Education, University of Waikato and Poutama Pounamu Research and Development Centre. The latter group were formerly of the Specialist Education Services and now are part of Group Special Education of the Ministry of Education.

Firstly, our thanks must again go to the students who so willingly shared their stories in the initial phase of this project upon which this whole project is based. These students understood that they themselves might not benefit from their stories, but that these may indeed help other students like them in the future.

Secondly, we also wish to again thank the parents, the principals and the teachers who also shared their stories with us in Phase 1 of the project. These stories have now been published as *Culture Speaks: Cultural Relationships and Classroom Learning*.

Many other people in many different roles supported and contributed to this project. We are very grateful to our Advisory Committee members, (which consisted of Waikato School of Education staff members, experts from related fields and Ministry of Education staff), for their critical consideration and insights during the project. We are particularly grateful to the staff of Ministry of Education, Cheree Nuku in the initial stage and Lynette Bradnam latterly, for their support for improving mainstream education for Māori students.

The project was developed and directed by Professor Russell Bishop assisted by Tom Cavanagh, Lani Teddy, Sandra Clapham, Pare Kana, Kura Hingston and Alison Powell. Project management was provided by Kirstin Trainor-Smith in 2003 and then by Titahi Tarawa as well as administration assistance by Allanah Ashwell.

This team worked in partnership with the Poutama Pounamu research whānau in Tauranga, which is led by Mere Berryman who helped develop the project and the professional development aspects. Our rōpu whakaruruhau, Rangiwhakaehu Walker and Mate Reweti provided invaluable cultural leadership, guidance and expertise. They were assisted by Moehu Ngātoko, Soli Weiss, Tracey Togo and Donna Fengewisch.

Table of Contents

EXECUTIVE SUMMARY	1
INTRODUCTION AND OVERVIEW	5
CHAPTER 1: DEVELOPING A CULTURALLY RESPONSIVE PEDAGOGY OF RELATIONS.....	7
<i>Rangatiratanga: relative autonomy/self-determination</i>	10
<i>Taonga Tuku Iko (Cultural Aspirations)</i>	11
<i>Ako (reciprocal learning)</i>	11
<i>Kia piki ake i ngā raruraru o te kainga (mediation of socio-economic and home difficulties)</i>	12
<i>Whānau: (Extended family)</i>	12
<i>Kaupapa (collective vision, philosophy)</i>	14
IMPLICATIONS OF THESE METAPHORS	14
A CULTURALLY RESPONSIVE PEDAGOGY OF RELATIONS.....	16
THE STUDENTS.....	18
THE WHĀNAU	19
THE PRINCIPALS	19
THE TEACHERS.....	19
INTERPRETATION OF THE NARRATIVES OF EXPERIENCE: DEVELOPMENT OF THE ANALYTICAL MODEL.....	21
DISCURSIVE POSITIONING	23
USES OF THE NARRATIVES	24
HOW THE EFFECTIVE TEACHING PROFILE WAS CONSTRUCTED.....	26
HOW THE EFFECTIVE TEACHING PROFILE WAS CONSTRUCTED.....	27
<i>Manaakitanga</i>	28
<i>Mana Motuhake</i>	29
<i>Ngā Whakapiringatanga</i>	29
<i>Wānanga</i>	29
<i>Ako</i>	30
<i>Kōtahitanga</i>	30
CONCLUSIONS	32
CHAPTER 2: IMPLEMENTING THE EFFECTIVE TEACHING PROFILE: THE PROFESSIONAL DEVELOPMENT INTERVENTION.....	35
INTRODUCTION AND OVERVIEW.....	35
PART A: IMPLEMENTING THE EFFECTIVE TEACHING PROFILE.....	35
<i>Activity No 1: The induction hui: the hui whakarewa</i>	36
<i>PSIRPEG: The Model for Implementing the Effective Teaching Profile in the classroom</i>	38
<i>Activity No 2: Te Kōtahitanga Observations</i>	40
<i>Activity No 3: Individual Teacher Feedback</i>	40
<i>Activity No 4: The Co-construction Meeting</i>	42
<i>Activity No 5: Shadow Coaching</i>	42
THE PROFESSIONAL DEVELOPMENT MODEL	43
<i>The First Order of the Professional Development Implementation Model</i>	44
<i>The Second Order of the Professional Development Implementation Model</i>	45
<i>Third Order of the Professional Development Implementation Model</i>	45
<i>Principals' support</i>	46

RESOURCES DEVELOPED TO SUPPORT THE TE KŌTAHITANGA PROFESSIONAL DEVELOPMENT	46
<i>Project Structure:</i>	49
PART B: DEMOGRAPHIC INFORMATION AND DESCRIPTIVES OF PARTICIPATING SCHOOLS,	
FACILITATORS AND TEACHERS	51
<i>Participation of facilitators</i>	51
<i>Participation of Teachers</i>	52
SUMMARY	56
CHAPTER 3: RESEARCH METHODOLOGY	57
METHODOLOGICAL FRAMEWORK.....	57
KAUPAPA MĀORI RESEARCH.....	59
CHAPTER 4: SO WHAT HAPPENED IN THE CLASSROOMS? RESULTS FROM THE IN-	
CLASS OBSERVATION TOOL.	63
INTRODUCTION	63
I). SHIFTS IN CLASSROOM INTERACTIONS	63
<i>a). Shifts from traditional to discursive interactions</i>	63
<i>b) Teacher use of discursive practice</i>	72
<i>c). Shifts between whole class, individual and group interactions</i>	74
II) SHIFTS IN CLASSROOM RELATIONSHIPS	75
III) SHIFTS IN TEACHER AND MĀORI STUDENT PROXIMITY	76
IV) SHIFTS IN THE COGNITIVE LEVEL OF LESSONS.....	79
V) SHIFTS IN MĀORI STUDENT ACADEMIC ENGAGEMENT AND STUDENT WORK COMPLETION	80
SUMMARY	82
CHAPTER 5: ANALYSIS OF TWO NEW INSTITUTIONS ESTABLISHED TO SUPPORT	
CLASSROOM IMPLEMENTATION OF THE EFFECTIVE TEACHING PROFILE.....	85
INTRODUCTION	85
THE EVOLVING METHOD OF COLLECTION AND ANALYSIS	86
ANALYSIS ONE	86
ANALYSIS TWO	88
<i>Framework for Treatment Integrity Analysis</i>	88
<i>Conversations from Feedback and Co-construction Sessions</i>	89
<i>Feedback Sessions: Conversations from Facilitators and Teachers According to the Themes and</i>	
<i>Sub-themes</i>	90
<i>Co-construction Sessions: Conversations from Facilitators and Teachers According to the Sub-</i>	
<i>themes</i>	98
OVERALL QUANTITATIVE ANALYSIS OF TAPED FEEDBACK AND CO-CONSTRUCTION SESSIONS 2004	105
OVERALL QUANTITATIVE ANALYSIS OF TAPED FEEDBACK AND CO-CONSTRUCTION SESSIONS 2005	107
LEARNING OUTCOMES FROM THE TREATMENT INTEGRITY PROCEDURE	110
CHAPTER 6: TE KŌTAHITANGA 2005 TEACHER PARTICIPATION SURVEY RESULTS	113
INTRODUCTION	113
RESULTS	114
QUANTITATIVE DATA ANALYSES	114
<i>Analyses of Part 1 of the survey</i>	114
<i>Analyses of Parts 1-5 of the survey</i>	115
<i>Inferential statistical analyses of survey questions</i>	116
<i>Analyses of teacher positioning questions</i>	119

QUALITATIVE DATA ANALYSES	120
CONCLUSIONS	125
CHAPTER 7: TEACHERS' EXPERIENCES OF THE EFFECTIVE TEACHING PROFILE	127
INTRODUCTION	127
METHOD	127
<i>Framework for analysis</i>	128
ANALYSIS OF INTERVIEWS	129
<i>Experiences of the Te Kōtahitanga training and narratives</i>	129
<i>Teachers' philosophical positioning</i>	133
<i>The professional development cycle</i>	135
<i>The observations</i>	135
<i>Feedback</i>	136
<i>Co-construction meetings</i>	137
<i>Shadow coaching</i>	139
<i>Facilitation, collegial and senior management support</i>	139
<i>Principal and senior management support</i>	142
<i>The impact of Te Kōtahitanga and focusing on Māori</i>	143
<i>Suggestions for new teachers</i>	143
<i>Suggestions about the professional development</i>	145
<i>The Te Kōtahitanga difference</i>	148
<i>Summary</i>	149
CONCLUSION	151
CHAPTER 8: MĀORI STUDENTS' CLASSROOM EXPERIENCES OF HIGHLY EFFECTIVE TEACHERS: 2004-2005	153
INTRODUCTION	153
METHOD	153
<i>Framework for analysis</i>	155
ANALYSIS OF STUDENT INTERVIEWS	157
<i>Manaakitanga</i>	157
<i>Mana motuhake</i>	159
<i>Ngā whakapiringatanga</i>	161
<i>Wānanga</i>	162
<i>Ako</i>	164
<i>Kōtahitanga</i>	165
SUMMARY	165
<i>Teacher positioning about Māori students</i>	166
<i>Relationships</i>	167
<i>Outcomes</i>	169
CONCLUSION	170
CHAPTER 9: TE KŌTAHITANGA 2004-2005 STUDENT ACHIEVEMENT RESULTS AND DISCUSSION	173
INTRODUCTION	173
ASSESSMENT TOOL FOR TEACHING AND LEARNING (ASTTLE)	173
<i>Results</i>	175
<i>Discussion</i>	176
ESSENTIAL SKILLS ASSESSMENT (ESA)	177

STANINES	177
<i>Results</i>	178
<i>Discussion</i>	179
RAW SCORE	181
<i>Results</i>	181
<i>Discussion</i>	182
CONCLUSIONS	183
CHAPTER 10: SUMMARY AND CONCLUSIONS	185
SUMMARY	185
CONCLUSIONS	187
1. <i>The Effective Teaching Profile</i>	187
2. <i>Anti-deficit thinking</i>	189
3. <i>The importance of relationships</i>	190
4. <i>Teacher-student interactions</i>	191
5. <i>The dominant pattern of teacher-student interactions</i>	192
6. <i>Addressing Student Achievement</i>	193
7. <i>Towards Sustainability and Scale</i>	194
REFERENCES	199
APPENDIX A.....	207
TE KŌTAHITANGA IN-CLASS OBSERVATION SHEET	207
APPENDIX B.....	211
TAPED FEEDBACK/CO-CONSTRUCTION SESSIONS: ANALYSIS FORM	211
APPENDIX C.....	213
TE KŌTAHITANGA TEACHER PARTICIPATION SURVEY	213
APPENDIX D.....	225
TE KŌTAHITANGA PHASE 3 TEACHER INTERVIEWS	225
APPENDIX E.....	227
TE KŌTAHITANGA PHASE 3 STUDENT INTERVIEWS	227
APPENDIX F.....	231
EVIDENCE ABOUT EFFECTIVENESS OF TE KŌTAHITANGA FROM EDUCATION REVIEW OFFICE (ERO) REPORTS.....	231
APPENDIX G	245

Executive Summary

The overall aim of this project has been to investigate how to improve the educational achievement of Māori students in mainstream secondary school classrooms. From the theoretical position of Kaupapa Māori research, and an examination of appropriate Māori cultural metaphors, we suggested that this will be accomplished when educators create learning contexts within their classroom; where power is shared between self-determining individuals within non-dominating relations of interdependence; where culture counts; where learning is interactive, dialogic and spirals; where participants are connected to one another through the establishment of a common vision for what constitutes excellence in educational outcomes. We termed this pedagogy a Culturally Responsive Pedagogy of Relations.

To examine what this pedagogy might look like in practice, in 2001 we developed an Effective Teaching Profile (ETP), the design guided and shaped by experiences of Māori students, their whānau, principals and teachers. Fundamental to the ETP is teachers understanding the need to explicitly reject deficit theorising as a means of explaining Māori students' educational achievement levels, and their taking an agentic position in their theorising about their practice. That is, practitioners expressing their professional commitment and responsibility to bringing about change in Māori students' educational achievement by accepting professional responsibility for the learning of their students. These two central understandings are then manifested in these teachers' classrooms where the teachers demonstrate on a daily basis: that they care for the students as culturally located individuals; they have high expectations of the learning for students; they are able to manage their classrooms so as to promote learning; they are able to engage in a range of discursive learning interactions with students or facilitate students to engage with others in these ways; they know a range of strategies that can facilitate learning interactions; they promote, monitor and reflect upon learning outcomes that in turn lead to improvements in Māori student achievement and they share this knowledge with the students.

The Effective Teaching Profile was then implemented in the classroom of participating teachers in 2004 and 2005 by means of the Te Kōtahitanga Professional Development Programme. This programme consists of an initial induction hui, which is followed by a term-by-term cycle of formal observations, follow-up feedback, group co-construction meetings, and targeted shadow-coaching. Other activities that support this programme, such as new knowledge, new teaching strategies and/or new assessment procedures are also introduced on a "needs be" basis.

The professional development programme was implemented in the schools through the research and professional development team, some of whom were regional coordinators, providing in-school support for the in-school facilitation teams. These teams in turn provided professional development for the project teachers.

A research programme was conducted to measure the impact of the professional development intervention. We began this research by asking what happens when the Effective Teaching Profile (ETP) is implemented in mainstream secondary classrooms. Because of the complex nature of this exercise, we used a triangulation mixed methods approach (Creswell, 2005) to gather and analyse qualitative and quantitative data from a range of instruments and measures.

As a result we have multiple indicators (Kim & Sunderman, 2005) that form the basis of our investigation.

From the *student interviews* we learned that when Māori students have good relationships with their teachers, they are able to thrive at school. Good relationships are based on teachers embracing all aspects of the ETP, including caring for them as culturally-located individuals as Māori, caring for their performance and using a wide range of classroom interactions, strategies and outcome indicators to inform their practice. These developing relationships and interactions were captured by the use of the *observation tool*. The *teachers' interviews* indicated effective Te Kōtahitanga teachers have undergone a philosophical shift in the way they think about teaching and learning. Anti-deficit thinking, agentic positioning, and the six demonstrable elements of the ETP are the essential threads in this new approach to teaching, here termed a Culturally Responsive Pedagogy of Relations. It is an approach that rests in the first instance upon a commitment by teachers to build caring and learning relationships and interactions with Māori students; in the second, for teachers to strongly believe Māori students can improve their achievement; and thirdly, their students are able to take responsibility for their learning and performance.

According to the analysis of the *Teacher Participation Survey*, Te Kōtahitanga teachers reported that their understanding of and appreciation for the kaupapa of the project, to improve Māori student achievement, and the support they receive within their schools, is directly related to improving Māori students' outcomes. Analysis of data from *feedback sessions and co-construction meetings* revealed teachers are experiencing challenges along with affirmations of their emerging positionings and practices as they participate in the new institutions developed to support the implementation of the ETP in their classrooms. Within these new institutions, they are being encouraged to further engage in discourses that: (a) have a focus on raising Māori students' achievement, (b) reject or respond to deficit theorizing and (c) are agentic. Perhaps most importantly, given the concern over this issue expressed by our government, ministry officials, educators in general, Māori parents and the students themselves, we are seeing *improvements in numeracy for Māori students* in the classrooms of teachers who have repositioned themselves discursively and *literacy gains* for all Māori students, the greatest gains, however, were for those in the lowest stanine groups.

The numeracy gains were measured by effect sizes, which is an internationally recognised measure of the strength of the intervention from pre-test to post-test. The results show that the effect size for the experimental group (Māori students of Maths teachers involved in Te Kōtahitanga) was larger than typical ($d = .76$). The effect size for two control groups were: (a) typical for Māori students of Maths teachers not involved in Te Kōtahitanga ($d = .52$) and (b) typical for Māori students nationally ($d = .51$). This means that Māori students whose teachers are in the project are achieving significantly higher in numeracy than Māori students where teachers are not in the project. This tells us that the context created in Te Kōtahitanga teachers' classrooms is better for improving the achievement of Māori students than numeracy interventions alone.

Literacy gains were measured by an analysis of stanine gains which are normalised standard scores, again internationally recognised among educators as a useful guide to student achievement. The most impressive gains were from the lower third of stanines and this is encouraging because this is where many Māori students perform (according to the international PISA study). The results for the lower three (out of 9) stanines in this study showed an effect size of .80 in the first year and .58 for 2005. Where, in 2004, 46% and in

2005, 34% of Māori students who achieved stanines between 1 and 3 in the literacy pre-test, achieved stanines between 4 and 6/7 in the literacy post-test. This means that this group of Māori students, as identified in the PISA study, are making significant gains in literacy as a result of their teachers being involved (at least in part) in Te Kōtahitanga. Overall both Māori and non-Māori are making similar progress in literacy.

On the basis that Te Kōtahitanga is focused on raising the achievement of Māori students through changing teacher practice, we adopted Elmore's (2002) model for demonstrating improvement by measuring increases in teacher practice and student performance over time. This model demonstrates improvement by measuring the quality of teacher practice and student performance on the vertical axis and time on the horizontal axis. Improvement then is shown by movement in a consistently north-easterly direction.

Eight sets of quantitative results are presented in relationship to each other. The positive trends indicated by these results is supported by the results of all the qualitative data analysed, particularly the teacher and student interviews and the analysis of the feedback and co-construction sessions, clearly indicating that there is a relationship between Māori student performance and the implementation of the Effective Teaching Profile in the project teachers' classrooms.

Introduction and Overview

This report focuses on what happened when the Te Kōtahitanga Effective Teaching Profile (Bishop, Berryman, Tiakiwai & Richardson, 2003), as an example of the operationalising of a Culturally Responsive Pedagogy of Relations, was implemented, through an interactive research and professional development programme, in classrooms within 12 structurally unmodified mainstream secondary schools, during 2004 and 2005.

Chapter 1 details how the theoretical foundation of the project has been developed from Māori cultural ways of knowing and theorising. This chapter also details the development of a Culturally Responsive Pedagogy of Relations and the means of operationalising such a pedagogy, the Effective Teaching Profile.

Chapter 2 details the professional development process used to implement the Effective Teaching Profile in the classroom of the 12 mainstream secondary schools. This chapter also provides demographic details of the teachers and facilitators who participated in this project.

Chapter 3 describes the method used to investigate the relationship between improving Māori students' educational outcomes and the Effective Teaching Profile (ETP) and evaluating the change from current to new practices.

Te Kōtahitanga is a complex and dynamic research and professional development project. As a result, both qualitative and quantitative methods were required to understand how the Effective Teaching Profile (ETP) was being implemented in the project teachers' classrooms and to what extent these teachers were becoming agentic and positively affecting Māori students' educational outcomes through their changed relationships and interactions.

We utilized a triangulation mixed methods design (Creswell, 2005, p. 514) for this research, simultaneously collecting qualitative and quantitative data, analysing the data separately and then collectively, and finally in Chapter 10, interpreting the integrated data. The strength of this design is that it combines the advantages of each form of data; that is, quantitative data provides factual information leading to generalisability, whereas qualitative data provides rich detailed information about the individuals involved, their experiences and understandings, and the context and setting. This process provided a triangulation of data sources and allowed for one type of data to inform the other, resulting in the picture of the process of implementing Te Kōtahitanga into the classrooms of project teachers in the 12 participating schools.

Phase 3 of Te Kōtahitanga focused on the classroom as the unit of change. Therefore, we collected data from the primary participants in the classroom, students and teachers. Detailed descriptions of methods of data collection and analyses are reported in subsequent chapters as we report on each data source.

Chapter 4 details what happened in the classrooms when implementing the Effective Teaching Profile during the intervention period, 2004-2005 inclusive, in terms of the results from the Te Kōtahitanga classroom observation instrument.

Chapter 5 details what happened in two of the new institutions that were established within the project schools in order to support classroom teachers to implement the Effective Teaching Profile. This analysis was conducted by evaluating taped feedback sessions and co-

construction meetings. As well as using this analysis as a means of evaluating the support being provided within these new institutions for the change from current to new practices, this analysis also gave us an opportunity to determine the fidelity of the use of the evaluative practice that we plan to leave in the schools so that they can monitor the new institutions on an ongoing, sustainable basis.

Chapter 6 investigates what teachers self-report by means of a survey of their experiences and understandings gained while implementing the Effective Teaching Profile. This chapter also contrasts the self reported experiences and understandings of the teachers with the project facilitators and their principals.

Chapter 7 details the experiences and understandings gained by a group of very effective implementers of the Effective Teaching Profile as a result of their participation in the professional development process.

Chapter 8 examines the classroom experiences of Māori students selected from all of the schools in the project. In 2004 and 2005 we spoke with 320 Māori students asking them what it was like to be a Māori student in the classroom of effective implementers of the Effective Teaching Profile.

Chapter 9 examines two sets of achievement measures that have been conducted in the project to identify what achievement outcomes can be seen in association with the changes in teacher theory and practice.

Chapter 10 summarises the previous chapters and, using Elmore's (2002) model, demonstrates how eight sets of quantitative results occur in relation to one another. The positive trend indicated by these indices are supported by the qualitative evidence presented in this report. This chapter then draws a number of conclusions and indicates how the project might be sustained.

Chapter 1: Developing a Culturally Responsive Pedagogy of Relations¹

Introduction

This chapter outlines the theoretical foundations of the Te Kōtahitanga project, kaupapa Māori theory. This chapter then details the development of a Culturally Responsive Pedagogy of Relations and explores how such a pedagogy is operationalised within Te Kōtahitanga through the development and implementation of the Effective Teaching Profile.

Te Kōtahitanga: Kaupapa Māori Research in Action

Kaupapa Māori is a discourse of proactive theory and practice that emerged from within the wider revitalization of Māori communities that developed in New Zealand following the rapid Māori urbanization in the 1950's and 1960's. This movement grew further in the 1970's and by the late 1980's had developed as a political consciousness among Māori people that promoted the revitalization of Māori cultural aspirations, preferences and practices as a philosophical and productive educational stance and resistance to the hegemony of the dominant discourse. As Smith (1997) explains, Māori communities armed with the new critical understandings of the shortcomings of the state and structural analyses began to assert transformative actions to deal with the twin crises of language demise and educational underachievement for themselves. (p. 171)

Smith (1997) explains that it is especially since the advent of Te Kōhanga Reo (language nests: Māori medium pre-schools) in 1982 that kaupapa Māori has become “an influential and coherent philosophy and practice for Māori conscientisation, resistance and transformative praxis to advance Māori cultural capital and learning outcomes within education and schooling” (p. 423). The kaupapa Māori approach developed amongst Māori groups across a wide range of educational sectors, such as Te Kōhanga Reo, Kura Kaupapa Māori (Māori medium schools), Wharekura (Māori medium secondary schools) and Wānanga Māori (Māori tertiary institutions) and also included other groups such as the NZ Māori Council, The Māori Congress, Māori Health and Welfare bodies, Iwi (tribal) Authorities and most recently, a Māori political party. For Māori, the specific intention was to achieve “increased autonomy over their own lives and cultural welfare” (Smith, 1992, p. 12). In education, this call for autonomy grew in response to the lack of programmes and processes within existing educational institutions that were designed to “reinforce, support or co-opt Māori cultural aspirations in ways which are desired by Māori themselves” (Smith, 1992, p. 12). Smith (1992) further suggests that the wish for autonomy also challenged the “increasing abdication by the state of its 1840 contractual obligation [The Treaty of Waitangi] to protect Māori cultural interests” (p. 10). In other words, if the government, granted the right to govern in Article 1 of the Treaty of Waitangi (Durie, 1998), was unable or unwilling to facilitate Māori protection of cultural treasures that were guaranteed in Article 2 of the Treaty, then Māori groups would need to take on this task themselves.

This call for autonomy is operationalised in a kaupapa Māori approach as self-determination (tino rangatiratanga) by and for Māori people (Durie, 1995; Bishop, 1996; G. Smith, 1997; L. Smith, 1999; Pihama, Cram & Walker, 2002). Self-determination in Durie's (1995) terms

¹ Much of this chapter has previously been published in Bishop, R. (2006 in press), *The Handbook of Critical and Indigenous Methodologies*. New York: Sage.

“captures a sense of Māori ownership and active control over the future” (p. 16). Such a position is consistent with the Treaty of Waitangi where Māori people are able to “determine their own policies, to actively participate in the development and interpretation of the law, to assume responsibility for their own affairs and to plan for the needs of future generations” (Durie, 1995, p.16).

Nevertheless, despite self-determination meaning the right to determine one’s own destiny, to define what that destiny will be and to define and pursue means of attaining that destiny, there is a clear understanding among Māori people that the autonomy is relative, not absolute; that it is self-determination in relation to others. As such, Māori calls for self-determination are often misunderstood by non-Māori people. It is not a call for separatism or non-interference, nor is it a call for non-Māori people to stand back and leave Māori alone, in effect to relinquish all responsibility for the ongoing relationship between the peoples of New Zealand. Rather it is a call for all those involved in education in New Zealand to reposition themselves in relation to these emerging aspirations of Māori people for an autonomous voice (Bishop, 1994; Smith, 1997; Durie, 1998). In other words, kaupapa Māori seeks to operationalise Māori people’s aspirations to restructure power relationships to the point where partners can be autonomous and interact from this position rather than from one of subordination or dominance.

Young (2004), in a chapter that considers the development of the notion of self-determination among Western nation-states, explains how the dominant discourse on self-determination, (which stands in contrast to indigenous people’s understandings), speaks of self determination in absolute terms. This dominant discourse on self-determination was informed by the development of sovereign nation states, particularly following the two world wars of the twentieth century and posits that self-determination means sovereignty over a space and all the constituent activities within a designated boundary; a boundary that broaches no interference from outside. In other words, self-determination is related to territoriality. On the other hand, indigenous peoples’ aspirations for self-determination are relational, acknowledge interdependence and ... “are better understood as a quest for an institutional context of non-domination” (Young, 2004, p. 187). That is, being self-determining is possible if the relations in which peoples and individuals stand to each other are non-dominating. To ensure non-domination, “their relations must be regulated both by institutions in which they all participate and by ongoing negotiations among them.” (Young, 2004, p. 177).

This indigenous peoples’ position on self-determination means that, while in practice individuals should be free to determine their own goals and make sense of the world in their own culturally generated manner, self-determining individuals cannot ignore their interdependence with others and the claims that others may have to their own self-determination (Young 2004). Therefore, the implications for educational institutions and classrooms are that they should be structured and conducted in such a way, by the participants in these institutions, as to seek to mediate these potential tensions by actively minimizing domination, co-ordinating actions, resolving conflicts and negotiating relationships.

Māori attempts to promote this indigenous peoples’ understanding of self-determination has to date been limited and the most successful Māori education initiatives have been those that, on the surface at least, have most closely approximated the majority culture’s notion of self-determination. Māori medium pre-schools, schools and tertiary education institutions have been developed in recent years by Māori people themselves and have become a major success story among indigenous peoples’ efforts to address the impact of colonization on their lives.

However, perhaps they have been successful because of their approximation to the dominant discursive position on self determination. Nevertheless, these efforts have messages for the mainstream (where most Māori children are enrolled), for as Smith (1992, 1997) suggested, these projects share some common elements that have formed out of the cycle of conscientisation, resistance and transformative praxis that typifies the struggle of Māori people. While identifying that these elements arise from the Māori education sector, and Kura Kaupapa Māori in particular, Smith (1992, 1997) also suggests that they may well also speak to the “general crisis in schooling” for Māori as well (p. 18; p. 446).

This chapter sets out to examine what might constitute this “speaking to” the wider crisis in Māori education; in particular, disparities in achievement in mainstream educational settings from Māori experiences of successful Māori innovations in education. This examination is further informed by a range of studies into effective innovation in Māori medium schooling (Smith, 1997; Bishop, Berryman & Richardson, 2001a, 2001b; Alton-Lee, 2003) and focuses upon, in particular, those Māori metaphor that might provide solutions to the Māori educational crisis in mainstream settings. In this chapter, the implications of Māori metaphor for mainstream education are elaborated on so as to illustrate how change in mainstream education settings can be developed by drawing upon a culture other than that traditionally dominant. For example, by drawing upon Māori metaphor that are inclusive and that focus on the importance of relationships and interactions for success in education.

However, prior to examining some Māori metaphor, it is important to note that metaphor in this sense is not merely an analogy, a likeness between things (but rather) a deeply creative act, an act that gives rise to our assumptions about how reality fits together, and how we know (Heshusius, 1996). Heshusius (1996) goes on to explain that as “[we] make sense out of reality and construct reality, [and] people's lives, their thoughts, actions, and experiences are generated by metaphorical images, the very vehicle for shaping the content of consciousness” (p. 5).

Elbaz (1983, 1988) also identifies that understanding this relationship is fundamental to educational reform in that the principles teachers hold dear and the practices that teachers employ are developed from the images they hold of others. Such images are expressed in the metaphors teachers use when describing their own experiences; the metaphors being drawn from a variety of discourses. As Danaher, Shirato & Webb (2000) explain, “these discursive windows or explanations shape our understanding of ourselves, and our capacity to distinguish the valuable from the valueless, the true from the false and the right from the wrong. In other words, teacher’s actions and behaviours, how they relate to and interact with students is governed by the discourse that they position themselves within and thus, how they understand the other people in the relationship” (p.73). To Foucault (1972), it is the predominance of these metaphors from the language of the dominant discourse that allows teachers to make sense of, and continue to see things, in deficit terms.

The principles that are derived from these images are a combination of “reflections with purpose” that guide the teacher's actions and also explain the basis for the actions. These principles are derived largely from teachers’ experiences and remain useful as a locus for reflection. From this pattern of principles, teachers develop rules of practice. These are concise, clearly stated prescriptions for action. Therefore, in order to change practice, we must investigate what constitutes appropriate metaphors to inform practice.

The metaphors used in this part of this chapter are those that Smith (1997) identifies as fundamental to Māori medium schooling (*rangatiratanga*, *taonga tuku iho*, *ako*, *kia piki ake* ..., *whānau* and *kaupapa*) and are here expanded to provide a picture of what might constitute an appropriate pedagogy for Māori students in mainstream schools.

Rangatiratanga: relative autonomy/self-determination

Fundamental to Māori educational institutions is the concept of *rangatiratanga*. Literally *rangatiratanga* means chiefly control, however increasingly it has taken on its figurative meaning of self-determination which, as is described above, means the right to determine one's own destiny, to define what that destiny will be and to define and pursue means of attaining that destiny in relation to others; this notion of relations being fundamental to Māori epistemologies. For example, Māori cultural practices for formally establishing relationships (*pōwhiri*), the complex set of interactions undertaken by people when meeting and greeting each other at the commencement of ceremonial and decision-making interactions (*hui*), illustrates the centrality of Māori understandings of self-determination to such events. These interactions contain metaphoric meaning in terms of both recognizing the *mana* (power/status) and *tapu* (the potentiality for power) of each participant whilst also acknowledging and ritualizing the necessary relatedness of the participants. In this way, a *kaupapa* Māori analysis of the metaphor fundamental to this discourse is both a means of proactively promoting a Māori world-view as legitimate, authoritative and valid in relationship to other cultures in New Zealand, and also is suggested here as a means of addressing educational disparities in New Zealand. It is suggested that educational relationships and interactions predicated upon a Māori understanding of self-determination, that is, upon non-dominating relations of interdependence, could well be a means of addressing the seemingly immutable problems of disparate achievement levels within mainstream educational institutions. In this way, issues of power relations, initiation, benefits, representation, legitimation and accountability (Figure 1.1) will be addressed in totally different ways than they have been in the past. As Bruner (1996) suggests, participation on one's own terms brings commitment; and according to Applebee (1996), commitment brings about learning.

One way of implementing such an approach in classroom contexts is as Beane (1997) suggests where children should participate in the process of decision making about curriculum planning to the extent of participating in a pedagogy of sharing power over decisions about curriculum content and the directions that learning will take. In Applebee's (1996) terms, this is the process of developing and participating in *knowledge-in-action*, and is far closer to what happens in real life. Scientists, for example, do not make discoveries by solely being recipients of the thinking processes of others. They use their own in a kaleidoscope of ways to investigate the natural world. Artists and writers also use a similar process.

Central to this concern is that the attempt to reduce disparities does not just focus on bringing low achieving students up to the current levels of their peers by traditional means; rather all students' achievement level needs to raise in order that educators can create learning contexts that will provide students with those tools that are vital for the future, the tools of creative, critically reflective thinking citizens. In order to do so, we need to immerse students in power-sharing relationships with their peers and their teachers from an early age. In short, the principle of self-determination within non-dominating relations of interdependence should be relevant to all involved in classroom interactions (including teachers of course), and should raise educational achievement of all involved, whilst reducing disparities.

Taonga Tuku Iko: cultural aspirations

Literally meaning the treasures from the ancestors, this phrase nowadays is almost always used in its metaphoric sense as meaning the cultural aspirations that Māori people hold for their children, and include those messages that guide our relationships and interaction patterns such as manaakitanga, (caring) kaitiakitanga, (oversight) mana motuhake (respect for specialness). Above all this message means that Māori language, knowledge and ways of knowing, culture and values are normal, valid and legitimate, and indeed are a valid guide to classroom interactions. The implications of this principle for educational contexts is that educators need to create contexts where to be Māori is to be normal; where Māori cultural identities are valued, valid and legitimate. In other words, where Māori children can be themselves.

Stereotyping of Māori children needs to be avoided by classroom teachers; rather it is important that learning relationships allow for the many realities within which Māori children might live and grow up; urban/rural, tribal/non-tribal, rich/poor, single-parented/dual parented/ extended families (Durie, 1998). A further dimension that needs consideration is the realisation that individual identities are multi-faceted and multi-generative. Students are no longer, if they ever were, monocultural. Indeed some will have experiences of many cultural settings. As Kalantzis & Cope (1999) identify, "[j]ust as there are multiple layers and facets to everyone's identity, so to there are multiple discourses of identity and multiple discourses of recognition to be negotiated" (p. 270). In short, a pedagogy is needed that is holistic, flexible and complex, that will allow children to present their multiplicities and complexities and their individual and collective diversities, rather than a pedagogy that perpetuates teacher images.

Taonga tuku iho therefore, teaches us to respect the tapu (their potentiality for power) of each individual child and to acknowledge their mana, (their power,) rather than ascribe cultural meanings to the child. Just as manuhiri (visitors) at a hui (meeting) must have their mana and tapu respected in the process of bringing them onto a marae, (meeting place) so this image can guide us in our relationships with young people. In Kalantzis & Cope's (1999), terms, in order to recognise the diversity of lifestyles and their discursive practices "learning processes need to recruit, rather than attempt to ignore and erase, the different subjectivities students bring to learning" (p. 270). This is because "[i]ndividuals have at their disposal a complex range of representational resources, never of one culture, but of many cultures in their lived experience, the many layers of their identity and the many dimensions of their being" (p. 271). Taonga tuku iho, far from being a prescriptive set of knowledge's to be transmitted for regurgitation, suggests a set of principles by which classrooms can be organised and student learning promoted.

Ako: reciprocal learning

Literally meaning to teach and to learn, this term metaphorically emphasises reciprocal learning, which means that the teacher does not have to be the fount of all knowledge, but rather should be able to create contexts for learning where the students can enter the learning conversation. Teachers and students can take turns in the metaphor of the conversation when storying and re-storying their realities, either as individual learners or within a group context. Reciprocal learning also promotes, in Applebee's (1996) terms, learning as knowledge-in-action; that is, learning through participation in the discursive practices that creates knowledge, in contrast to knowledge-out-of-context that promotes 'learning about,' often through transmission education practices. One implication of this principle is that active

learning approaches are preferred, because in this way the processes of knowledge-in-action are able to be brought to the interaction, indeed for the interaction. This means that students can participate using sense-making processes they bring to the relationship and share these with others as of right, and has clear implications for the type of classroom interactions and pedagogies that will be useful in promoting this vision.

Kia piki ake i ngā raruraru o te kainga: mediation of socio-economic and home difficulties

Participation in kura kaupapa Māori reaches into Māori homes and brings parents and families into the activities of the school. There are at least two main impacts of this feature. The first is that where parents are incorporated into the education of their children on terms they can understand and approve of, then children do better at school. This contention is well supported by research data (Glynn & Glynn, 1986; Glynn, Berryman & Glynn, 2000). This feature also has implications for better and less problematic home to school transitions. In other words, the closer the classroom experiences and the home experiences are for students, the more likely it will be that students will be able to participate in the educational experiences designed at the school. This addresses the preference Māori people have for their problems to be dealt with in culturally familiar ways. Such understandings also have major messages for the way schools and teachers deal with peoples of all cultures in that they will have their own way of relating to schools and education and this needs to be understood.

The second is that whānau, or extended family, a central cultural construct, is fundamental to the restructuring of power relationships between the dominant schooling system and alternatives. That is, in Māori medium educational settings, whānau intervene in the educational crisis in a way quite different from an SES intervention for example, because it deals with a collective entity through the promotion of culturally acceptable alternatives. As Smith (1992) explains, difficulties, such as those that are created by economic poverty, child relationships, health and social issues, are resolved by a collective action which in turn involves individual responses and commitments.

Whānau: extended family

Whānau is a primary concept (a cultural preference) that contains both values (cultural aspirations) and social processes (cultural practices) that have multiple meanings for mainstream education. The root word of whānau literally means family in its broad 'extended' sense. However the word 'whānau' is increasingly being used in a metaphoric sense (Metge, 1990). This generic concept of whānau subsumes other related concepts; whānaunga (relatives), whānaungatanga (relationships), whakawhānaungatanga (the process of establishing relationships) and whakapapa (literally, the means of establishing relationships). The term whānau is, as Metge (1990) explains, a term that Māori people can and do apply to a variety of categories and groups usually linked by blood ties. Above all, the most rapid growth in the application of the term whānau has been in the metaphoric use of the term to refer to collectives of people working for a common end, who are not connected by kinship, let alone descent. Examples include: whānau systems in schools where students from a range of age-levels work within a self-contained unit within a school; in Kōhanga Reo, early in the inception of this movement the term 'whānau' was adopted, (as have many other Māori medium or Māori generated education initiatives), for the collectivity of children and adults associated with and participating in the institution; in the urban context the term is used as an

identifying locative for people associated, not with an area, but with a common reference point; Sports teams and clubs often refer to themselves as whānau.

These metaphoric whānau attempt to develop relationships, organisations and operational practices based on similar principles to those which order a traditional whānau. Metge (1990) explains that to use the term is to identify a series of rights and responsibilities, commitments and obligations, and supports that are fundamental to the collectivity. These are the *tikanga* (customs) of the whānau; warm interpersonal interactions, group solidarity, shared responsibility for one another, cheerful co-operation for group ends, corporate responsibility for group property, material or non-material (e.g. knowledge) items and issues. These attributes can be summed up in the words *aroha* (love in the broadest sense), *awhi* (helpfulness), *manaaki* (hospitality) and *tiaki* (guidance).

The whānau is a location for communication, for sharing outcomes and for constructing shared common understandings and meanings. Individuals have responsibilities to care for and to nurture other members of the group, while still adhering to the *kaupapa* of the group. The group will operate to avoid singling out particular individuals for comment and attention, and to avoid embarrassing individuals who are not yet succeeding within the group. Group products and achievement frequently take the form of group performances, not individual performances. The group will typically begin and end each session with prayer, and will also typically share food together. The group will always make major decisions as a group and then refer those decisions to *kaumātua* (elders) for approval, and will seek to operate with the support and encouragement of *kaumātua*. This feature acknowledges the multi-generational compositioning of a whānau with associated hierarchically determined rights, responsibilities and obligations.

When imaging or theorising classroom interactions in terms of, for example, metaphoric whānau relationships, classroom interactions will be fundamentally different from those created when teachers talk of method and process using machine or transmission metaphors to explain their theorising/images. Just as when using whānau metaphors in research (Bishop, 1996, 2005), classroom relationships and interactions informed by whānau metaphors will be very different if teachers were to think and theorise their experiences in this way. In Bishop (1996, 2005), the centrality of whānau and the process of establishing extended family-like relationships was used metaphorically as a research strategy to address concerns about research initiation, benefits, representation, legitimation and accountability created by the imposition of the researcher's agenda, concerns and interests on the research process. This approach gave voice to a culturally-positioned means of collaboratively constructing research stories in a culturally-conscious and connected manner. It focused on the researcher's connectedness, engagement, and involvement with others in order to promote self-determination, agency and voice of those involved in the interaction. Indeed, establishing and maintaining whānau type relationships is a fundamental, often extensive and ongoing part of the research process. This involves the establishment of whānau of interest through a process of spiral discourse. This means establishing a whānau-like relationship among the research group and using collaborative storying and re-storying (spiral discourse) as a means of creating a collective response.

Similarly, in classrooms, where whānau-type relationships are established, commitment and connectedness would be paramount and responsibility for the learning of others would be fostered; the classroom would be seen as an active location for all learners, including the teachers, to participate in the decision making processes through the medium of spiral

discourse. Whānau processes may also be used, literally or metaphorically, to give substance to a culturally positioned and understood means of collaboratively constructing learning objectives and “texts” to promote culturally-positioned self-determination, agency and voice, as opposed to pre-determined learning objectives; and developing a commitment in learners and teachers to these objectives in a culturally conscious and connected manner.

Whānau as a research metaphor also means that researchers understand themselves to be involved somatically in the research process; that is physically, ethically, morally and spiritually and not just as a 'researcher' concerned with methodology. Such positionings are typically demonstrated in the language/metaphor used by researchers (Bishop & Glynn, 1999). Similarly, in the classroom context, teachers could also talk of themselves as being involved with their students; where trust, connectedness and commitment, as evidenced in for example caring and the setting of high expectations, develops with such involvement being fundamental to the process of establishing relationships, that is whakawhānaungatanga.

Establishing relationships in a Māori context also addresses the power and control issues fundamental to research (IBRLA see Figure 1.1), through participatory research practices in a manner, to use Heshusuis' (1994) term, at participatory consciousness that facilitates the sharing of power and control. This approach has direct parallels in classroom interactions and messages for power sharing in that it seeks to create a consciousness among educators where the metaphors of engagement are inclusive, dialogic, interactive and participatory. The clear implication for classroom relationships is that where the establishment of whānau-type relationships in the classroom is primary, then a pattern of interactions would develop where commitment and connectedness is paramount, where responsibility for the learning of others is fostered, and where the classroom becomes an active location for all learners to participate in decision making processes through the process termed spiral discourse.

Kaupapa: collective vision, philosophy

Just as Māori medium education institutions have a collective vision, a kaupapa that provides guidelines for what constitutes excellence in Māori education that connects with “Māori aspirations, politically, socially, economically and spiritually” (Smith, 1992, p. 23), so to do mainstream institutions need such a philosophy or agenda for achieving excellence in both languages and cultures that make up the world of Māori children. Such a kaupapa is essential for the development of education relations and interactions that will promote educational achievement and reduce disparities.

Implications of these Metaphors

This series of metaphors drawn from the experiences of kura kaupapa Māori, and kaupapa Māori research, and expanded here to address Māori students in mainstream settings, does provide us with a picture of the sort of alternative educational relations and interactions that are possible; where educators draw upon an alternative culture than that previously dominant. Metaphorically, a collective vision focusing on the need to address Māori students achievement, identifies the need for power over reciprocal decision-making to be constituted within relationships and interactions constructed as if within a collective whānau context. Whānau relationships would enact reciprocal and collaborative pedagogies in order to promote educational relationships between students, between pupils and teachers (also, between whānau members in decision making about the school) and between the home and

the school as a means of promoting excellence in education; one wider indicator of this pattern being the development of inextricable two-way connections between the home and the school.

Such a pattern of metaphor creates an image, a picture of an educational setting where students are able to participate on their own terms; terms that are determined by the student because the very pedagogic process holds this as a central value. Further, the terms are to be culturally determined, through the incorporation and reference to the sense-making processes of the student. Learning is to be reciprocal and interactive, home and school learning is to be interrelated, learners are to be connected to each other and learn with and from each other. In addition, a common set of goals and principles should guide the process. Further, just as using Māori metaphors for research repositions researchers within Māori sense-making contexts (Bishop 1996, 2005), so too does using new metaphors for pedagogy reposition teachers within different contexts where students' sense-making processes offer new opportunities for them to engage with learning. In these contexts; learners' experiences, representations of these experiences, and sense making processes are legitimated.

In detail, therefore, such a pattern of metaphor suggests that educators can create learning contexts that will address the learning engagement and improve the achievement of Māori students by developing learning - teaching relationships where the following notions are paramount. That is:

- *where power is shared*: where learners can initiate interactions; learners' right to self-determination over learning styles and sense making processes are regarded as fundamental to power-sharing relationships, and collaborative critical reflection is part of an ongoing critique of power relationships;
- *where culture counts*: where classrooms are places where learners can bring "who they are" to the learning interactions in complete safety, and their knowledge's are 'acceptable' and 'legitimate';
- *where learning is interactive and dialogic*: learners are able to be co-inquirers, that is raisers of questions and evaluators of questions and answers; learning is active, problem-based, integrated and holistic; learning positionings are reciprocal (ako) and knowledge is co-created; classrooms are places where young people's sense-making processes and knowledge's are validated and developed in collaboration with others;
- *where connectedness is fundamental to relations*: teachers are committed to and inextricably connected to their students and the community; school and home/parental aspirations are complementary.
- *Where there is a common vision*; an agenda for excellence for Māori in education

In short, an education: where power is shared between self-determining individuals within non-dominating relations of interdependence; where culture counts; learning is interactive, dialogic and spirals; participants are connected and committed to one another through the establishment of a common vision for what constitutes excellence in educational outcomes. In this way, the pattern is similar to that identified by Gay (2000) and Villegas & Lucas (2002), as in their concept of culturally responsive pedagogy, and Sidorkin (2002) and Cummins (1995), as in their concept of a pedagogy of relations. The merging of these concepts is a useful means of describing the pattern identified from this set of Māori cultural metaphors as a Culturally Responsive Pedagogy of Relations.

A Culturally Responsive Pedagogy of Relations

With this framework in mind, this chapter now seeks to examine what a culturally responsive pedagogy of relations might look like in practice. To do this, we examine a large scale research project called *Te Kōtahitanga*, where Māori metaphors inform educational theorizing and practice in ways that seeks to mediate the ongoing educational crisis facing Māori people in mainstream education from within a kaupapa Māori framework.

Te Kōtahitanga: Improving the Educational Achievement of Māori students in Mainstream Schools (Bishop, Berryman, Tiakiwai & Richardson, 2003), is a kaupapa Māori research/professional development project that aims to improve the educational achievement of Māori students through operationalising Māori people's cultural aspirations for self-determination within non-dominating relations of interdependence through developing classroom relations and interactions and in-school institutions for this purpose.

The project commenced in 2001, seeking to address the self determination of Māori secondary school students by talking with them and other participants in their education about just what is involved in limiting and /or improving their educational achievement through an examination of the main influences on Māori students' educational achievement. The project sought to examine how a number of groups might address this issue, and commenced with the gathering of a number of narratives of Māori students' classroom experiences and meanings by the process of collaborative storying (Bishop, 1996) from a range of engaged and non-engaged Māori students (as defined by their schools), in five non-structurally modified mainstream secondary schools. These stories were also complemented by the gathering of stories of experience and meaning from their whānau, their principals and their teachers.

Cook-Sather (2002) suggests that an approach that authorises student perspectives is essential to reform education because of the various ways that it can improve educational practice, reform existing conversations about educational reform, and point to the discussions and reform effects yet to be undertaken (p.3). From a detailed analysis of the literature she identified that such authorising of students' experiences and understandings can directly improve educational practice; in that when teachers listen to and learn from students, they can begin to see the world from the perspective of those students. This in turn can help teachers make what they teach more accessible to students. These actions can also contribute to the conceptualisation of teaching, learning, and the ways we study as being more collaborative processes. Further, students can feel empowered when they are taken seriously and attended to as knowledgeable participants in learning conversations and they can be motivated to participate constructively in their education. In addition, she further identifies that authorising students' perspectives is a major way of addressing power imbalances in classrooms in order for students' voices to have legitimacy in the learning setting.

Authorising student perspectives addresses the power of determination over issues of power: such as who initiates classroom interactions; who determines what benefits there will be; and who will benefit; whose reality or experiences (voice) are present in the classroom; with what authority do educators speak; and to whom are educators accountable? These issues of power relations are further detailed in Figure 1.1. (Bishop, 1996; Bishop & Glynn, 1999).

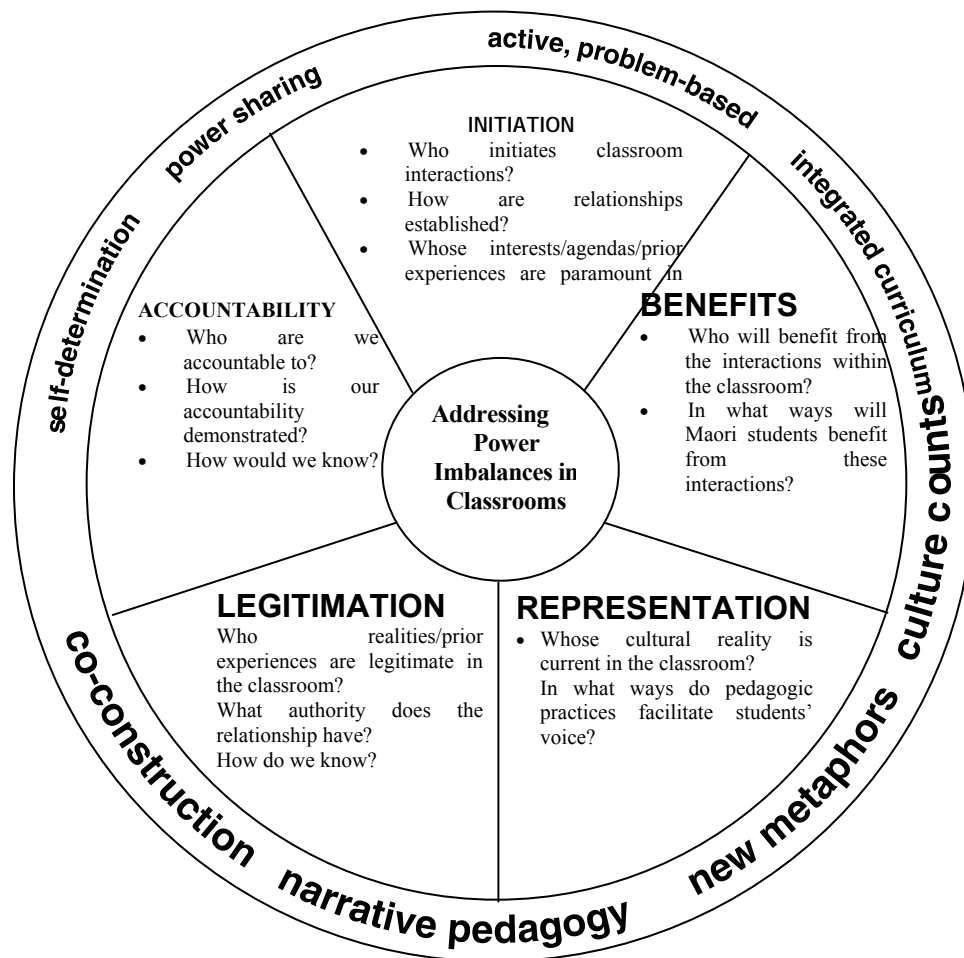


Figure 1.1: Addressing power imbalances in classrooms
(Bishop & Glynn, 1999) p.162

Such understandings inform this project for it is a kaupapa Māori position that when teachers share their power with others (students), they will better understand the world of the “others” and those “othered” by power differentials and will be better able to more successfully participate and engage in educational systems on their own culturally constituted terms. In turn, teachers can create culturally appropriate and responsive contexts for learning (Gay, 2000; Bishop et al. 2003), through drawing upon a different pattern of metaphor such as described in Part A of this chapter so that Māori students are able to interact with teachers and others in ways that legitimates who they are and how they make sense of the world. It is suggested that such positive, inclusive interactions will lead to improved student engagement in learning. Numerous studies (Fisher, et al, 1981; Applebee, 1996; Bruner, 1996; Widdowson, et al, 1996) identify that improving student engagement is a necessary condition for improving educational achievement. In fact improved student on-task engagement has been identified as a moderate to good predictor of long-term student achievement (Fisher et al. 1981; Gage & Berliner, 1992; Widdowson et al. 1996; Yesseldyke & Christenson, 1998).

Fundamental to kaupapa Māori Theorising is an analysis of that which might limit Māori advancement. Therefore, as part of this initial phase of the project, in addition to the

narratives of the students, their whānau, their principals (as the agenda setters of the schools) and a representation of their teachers (approx 23% of the teachers in the 5 schools), were also asked to narrate their experiences in order to develop narratives of the experiences and involvement of these groups in the education of Māori students so that the students' experiences could be understood within the wider context of their education and their lives in general. The analysis of these narratives provided some very illuminating information about the positions taken by people in relation to one another, the consequent pattern of interdependence and the potential of a variety of discursive positionings for perpetuating or offering solutions to the problem of educational disparities.

The Students

Whilst there were differences between the experiences of the engaged and non-engaged students, most students reported being Māori in a mainstream secondary school was for them a negative experience. Few reported that being Māori in their classrooms, currently or in the past, was a positive experience. The non-engaged Māori students spoke of their being constantly reproached in behavioural terms, very infrequently spoken to about their learning; the engaged Māori students were equally as frustrated because, although they did not present behavioural problems for the teachers to deal with, they felt they were often ignored or bypassed in their attempts to engage in learning conversations with their teachers.

The engaged Māori students often distinguished themselves from the non-engaged Māori students by labelling them as “the others“ or “those over there”, in effect perpetuating negative stereotyping they themselves identified and complained about. However, all of the Māori students understood that they were not seen as achievers by most of their teachers and felt that they were more likely to be singled out as causing trouble in and outside of the classroom even if they were well-behaved students. Many students appeared to conform to this negative stereotype out of frustration of not having their voices heard and listened to. In many ways many resisted the relations of dominance in ways that actually worked against what they themselves defined as their best interests.

Most of the students identified that the relationships they have with their teachers was the most influential factor in their ability to achieve in the classroom. In particular the students emphasised that the ways in which teachers taught, that is how they related to and interacted with Māori students, influenced them into either becoming engaged in their learning or not. To a lesser extent, these Māori students did identify issues that related to their home experiences, and to structural issues within the school that impacted on their learning and contributed to their educational experience being less productive. Overall, the majority of the students interviewed wanted to be able to attend school, to have positive educational experiences and to achieve. Most of all however, they wanted to be able to do this as Māori.

In so doing they alerted us of the need for education to be responsive to them as culturally located people. This notion of cultural responsiveness (Gay, 2000; Nieto, 2000) offers a means whereby teachers can acknowledge and address Māori students self-determination within their classrooms by creating learning contexts wherein the learning relationships and interactions are such that Māori students can bring themselves into what Grumet (1995) terms the “conversation that makes sense of the world,” because teachers are able to create learning contexts that are appropriate and responsive to the culturally-generated sense-making processes of the students.

The Whānau

Those parenting Māori students identified that the major influence on Māori students' educational achievement was the quality of their children's relationship with their teachers.

These whānau members acknowledged that they had to take some responsibility for ensuring their child did well in the educational setting and that the relationship they had with their children contributed to their success at school. However, there remained a strong expectation that schools should take some responsibility for providing their children with good experiences at school. If this was to be achieved, according to the whānau members, the schools and the teachers needed to have a greater understanding of things Māori, including the reality that Māori people have their own cultural values, aspirations and ways of knowing. This realization was seen as vital so as to allow the culture of the child to be present, recognised and respected within the school and the classroom.

The Principals

Like the students and the whānau, the principals also drew primarily upon the discourse of relationships to identify the main influences on Māori students' educational achievement. In particular, the principals identified that the attitude of the teacher was crucial to the development of positive learning relationships between the teacher and their Māori students. Teachers' low expectations of Māori students and the need for teachers to adjust to the individual learning requirements of their students were also identified as critical factors.

The principals identified that one way teachers might facilitate a more responsive relationship was by recognising Māori students' culture and taking cognisance of Māori cultural aspirations and notions of belonging. They identified that developing more culturally responsive relationships required schools to build pedagogies for Māori students that went beyond the limited inclusion of Māori cultural iconography into their curriculum and programmes. This type of initiative was seen by principals as a means of enhancing the relationship between Māori students and staff, and as a means of gaining positive support from parents of Māori students. Pivotal to this was the building and maintaining of relationships with their Māori communities

The principals also identified a number of structural and systemic issues. These included financial constraints, curriculum demands, the traditional perception of schools, staffing issues, the need to create a safe environment for children at school, the transition between primary and secondary schooling and the importance of the role of whānau (family) within school initiatives as influences on Māori students' educational achievement. In addition, from within the discourse of the child and their home, the principals did identify that differences between the culture of the home and the culture of the school, and the low socio-economic status of some homes were factors they understood to limit the achievement of Māori students. For the principals, however, these influences were not as significant as the quality and type of in-class relationships and interactions between Māori students and their teachers.

The Teachers

Contrary to the narratives of experience provided by the students, those parenting and the principals, most teachers identified factors from within the discourse of the child and their home as having the greatest influence on Māori students' educational achievement. In

particular, teachers perceived deficits within the home, or problems that Māori students brought with them to school from home as having the major influence on Māori students' educational achievement.

In terms of influences outside of the school, teachers identified problems of home background and socio-economic problems, leading to greater mobility and transience of Māori students, as being problematic. Deficit influences were further elaborated by teachers' perceptions of Māori students' lack of access to resources, inadequate nutrition, condoned absenteeism, access to drugs, alcohol and other anti-social behaviours in the community, participation in work outside of school, and inadequate parental support or positive role models.

In addition, teachers identified the problems that Māori students cause when they are at school. Teachers argued that Māori student underachievement was the result of the low-level aspirations of Māori students, their lack of motivation and poor behaviour. Teachers also spoke of the negative influence of peers (Māori), and the wasted talent of Māori students being unwilling to stand out from the crowd (a perceived cultural issue). Teachers identified that Māori students were disorganised, not prepared for their classes or for learning and difficult to discipline. Many teachers expressed a great deal of disillusionment about their ability to effect change in the face of these constant pressures.

Although teachers as a group were less convinced that in-class relationships were of importance to Māori students' educational achievement, a small group of teachers did identify that positive relationships were built in their classrooms through their respect of the cultural knowledge and aspirations of Māori students. They further suggested that these actions resulted in improved student behaviour, engagement and involvement in learning.

The teachers identified that structural and systemic issues had the least influence on Māori students' educational achievement. These included curriculum demands being placed upon teachers and high student and staff turnover.

Overall, however, the teachers argued strongly for the perceived deficits of the child and/or their home having the most significant impact on Māori students' educational achievement.

Interpretation of the Narratives of Experience: Development of the Analytical Model

A critical reading of the narratives of experience identified that there were three main discourses² within which the participant groups positioned themselves when identifying and explaining both positive and negative influences on Māori students' educational achievement. There was the discourse of the child and their home, which included those influences that were to be found outside of the school and the classroom. There was the discourse of structure and systems or those influences outside of the classroom, but pertaining to the school itself and or the wider education system. Thirdly there was the discourse of relationships and classroom interaction patterns, which included all those influences that were identified as being within the classroom.

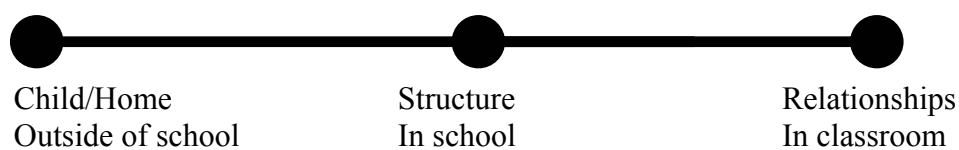


Figure 1.2: Discourses explaining Māori Students' Educational Achievement

This schema was used in the analysis of all the narratives as a means of comparing the relative weightings that the various groups of interview participants gave to each set of influences within the major discourses. This was undertaken by compiling frequency tables of unit ideas see (Bishop et al. 2003, and Figure 1.3 below). In this way researchers sought to identify which influence each group gave primacy to, and which discourse each group drew upon most frequently.

The analysis of the narratives was coded according to idea units and the number of times those units were repeated across the schools rather than within each school. In this way we were attempting to develop a picture from across all the schools, as opposed to letting the experiences of one school dominate, or even one articulate student or teacher. The frequency count of unit ideas as shown in Figure 1.3., were then listed according to the discourse they illustrated and ranked according to the number of times such idea units were mentioned in the narratives.

Primacy in the interviewing approach was given to acknowledging the self-determination of the interview participants so they were able to explain their own experiences in their own culturally constituted terms. In other words, the interviews were undertaken as in-depth, semi-structured interviews as conversations that sought to minimize the imposition of the researchers own sense-making and theorizing on the experiences and explanations of the interview participants. As a result, in the construction of the narratives, emphasis was given to the meanings that interview participants had ascribed to their experiences and in this way produced a representation that the participants would legitimate.

² Discourse is used here in the sense used in Shields, Bishop and Mazawi (2005) to identify that sets our language in social use or language in action provide a medium that filters the different ways that people can make meaning of their experiences. The three discourses used in this analysis have long and contested histories in New Zealand, and it is no surprise that they are the common sets of explanations that people draw upon when seeking to explain their contemporary experiences.

Similarly, when coding the narratives the research team were particular to refer to the meaning that the various participants ascribed to their experiences, that is, coding was based on what the experiences meant to the speaker rather than what it meant to the researchers. For example, some of the students' references to peer influences may be coded to relationships, whereas for parents and teachers these idea units may be coded as part of the discourse of the child and home. Another example is coding references to the curriculum. For many of the students, this is coded as part of the discourse of relationships; for many of the teachers, however, it was coded as part of the discourse of structures. On the surface this may appear to be inconsistent; however, all of those who were coding were fully conversant with the process of constructing narratives of experience through the process of spiral discourse/collaborative storying (Bishop, 1996) and therefore when coding, were reading the narratives widely so as to identify the meaning that the interview participants had attributed to that particular issue. Further, coders error-checked with each other on a regular and ongoing basis to ensure that their coding was consistent with each other.

The coding was undertaken by a small number of the research team who were both familiar with the process of collaborative storying and who had developed a common agreement as to what constituted idea units, themes, sub themes and more importantly how participants positioned themselves in relation to the various discourses. However, as this analysis of the interviews came from only four of the schools and interviews were conducted all in the second half of the year, it is also important to emphasise that such rankings came from a "snapshot in time" only. As a result, we are not suggesting that these tables and graphs represent firm generalisations. Rather, they provide a means of ascribing a rough weighting to each discourse and are indicative of patterns and trends that one may well find in other, similar settings.

In particular, we suggest that the picture we present is more one that others can reflect upon, so that they can critically evaluate where they position themselves when constructing their own images, principles and practices in relation to Māori students within their own settings. Indeed, as previously mentioned, when we share these stories with teachers in professional development and other workshops, many people voice their own familiarity with these experiences and also express that reading these narratives of experience has an attitude-changing effect. In effect, we present these stories, not so others can generalise, but rather so that educators can particularise to their own experiences.

The interpretative process, which drew on both qualitative and quantitative means of measurement, provided frequency bars for all four interviewee groups. When viewed together as in Figure 1.3., they provide a clear picture of conflict in theorizing about the lived experiences of Māori students. In addition, while it may be tempting to attribute significance to some minor differences in numbers or percentages, it is the overall pattern of differences that is of importance. It is also important to note that the frequency figures refer to the number of narratives where such a factor was found; these are frequencies from groups of students (and later of groups of parents and of teachers) rather than of individual responses. Only in the principals' narratives are there individual responses.

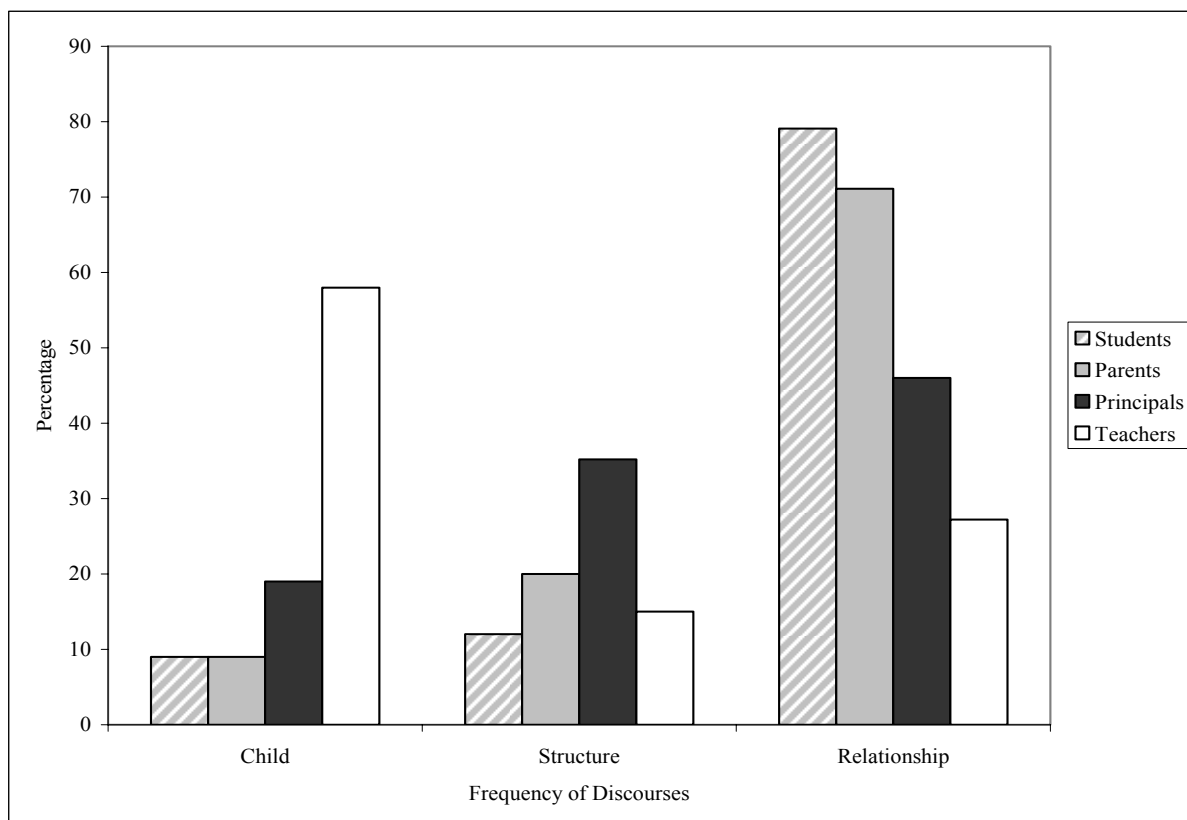


Figure 1.3: Frequency of Discourses³

Discursive Positioning

It is clear from the analysis in Figure 1.3 that the main influences on Māori students' educational achievement that people identify varies according to where they position themselves within the three discourses. It clearly shows that there are two broad groupings. The first group comprises those who identify that from their experiences, in-class relationships between teachers and students (and others involved in the educational community) have the greatest influence on Māori students' educational achievement. The second group comprises those who identify the main influences on Māori students' educational achievement as being Māori students themselves, their homes and/or the structure of the schools, that is, influences from outside of the classroom. What is problematic for education is that it is mainly teachers who position themselves in significant numbers within this second group. In so doing, a large proportion of the teachers were pathologising Māori students' lived experiences by explaining their lack of educational achievement in deficit terms, either as being within the child or their home, or within the structure of the school.

Positioning within this latter group also means that the speakers tended to blame someone or something else outside of their area of influence and as a result they suggest that they can have very little responsibility for the outcomes of these influences. The main consequence of such deficit theorising for the quality of teachers' relationships with Māori students and for classroom interactions is that teachers tend to have low expectations of Māori students' ability or a fatalistic attitude in the face of systemic imponderables. This in turn creates a downward spiralling self-fulfilling prophecy of Māori student achievement and failure.

³ (Morgan, Gliner, & Harmon, 2006) refer to the use of percentages as displayed in bar charts to illustrate frequency distributions. We have created this Figure and other similar Figures appearing later in this report based on their guidance.

Further, those who position themselves here see very few solutions to solve the problems. In terms of agency then, this is a very non-agentic position in that there is not much an individual can do from this position other than change the child's family situation or the education 'system', solutions often well outside of their own agency. Therefore, along with others (Wagstaff & Fusarelli, 1995; Kincheloe & Steinberg, 1997; Gay, 2000; Nieto, 2000), it is suggested that this deficit theorising by teachers is the major impediment to Māori students' educational achievement and as Bruner (1996) identifies, unless these positionings by teachers are addressed and overcome, they will not be able to realise their agency and little substantial change will occur.

Indeed in Shields, Bishop and Mazawi (2005), we found in 3 case studies of the impact of pathologising theories and practices on Navaho, Māori & Bedouin peoples, that pathologising of the lived experiences of these 3 peoples was all pervasive and was deeply rooted in psychological, epistemological, social and historical discourses. Indeed, we found that,

pathologising is manifested in education and schooling in knowledge, power, agency, structures and relationships including both the pedagogical and home-schooling relationships. In fact pathologising in the form of deficit theorizing is the major impediment to the achievement of minoritised students (p 196).

In contrast, speakers who position themselves within the discourse of relationships and interactions understand that within this space, explanations that seek to address the power differentials and imbalances between the various participants in the relationships can be developed and implemented. In addition, these speakers tend to accept responsibility for their part in the relationships and are clear that they have agency, in that they are an active participant in educational relationships. That is, speakers who position themselves here have a personal understanding that they can bring about change and indeed are responsible for bringing about changes in the educational achievement of Māori students.

Uses Of The Narratives

The narratives of experience and the collaborative storying approach were therefore useful in a variety of ways in the project.

Firstly, the analysis of the narratives identified the usefulness of the concept of discourse as a means of identifying the thoughts, words and actions shaped by power relations; those complex networks of images and metaphors that the various people in the stories drew upon to create meaning for themselves about their experiences with the education of Māori students. A critical reading of the narratives illustrates the impact of discursive positioning where some discourses offer solutions, others merely perpetuate the status quo. For example, despite most teachers wishing to make a difference for Māori students' educational achievement, they are not able to do so because of their discursive positioning, whereas others, discursively positioned differently, were able to offer numerous solutions to seemingly immutable changes. However, despite our occupying "subject positions within discourse" (Burr, 1995, p. 146), teachers are able to shift their discursive positions by positively and vehemently rejecting deficit theorising as a means of explaining Māori students' educational achievement levels. Such discursive (re)positioning is possible, because it is not just a matter of our being subject to, or a product of, discourse; we have agency that allows us to (re)story our lives. As Burr (1995) argues, this narrative notion "allows us the possibility of personal

and social change through our capacity to identify, understand and resist the discourse we are also subject to” (p. 153).

Secondly, the interviews for the narratives were conducted in a kaupapa Māori manner (Bishop, 1997, 2005) in order that the participants were able to explain the meanings they constructed about their educational experiences either as or with Māori students in ways that acknowledged their self-determination. The students, for example, clearly identified the main influences on their educational achievement by articulating the impact and consequences of their living in a marginalized space. That is, they explained how they were perceived in pathological terms by their teachers, and how this has had a negative effect up on their lives. The whānau members and the principals were also able to identify the main influences upon Māori students’ education from their own experiences. Similarly their teachers were able to explain the vast range of experiences and meanings they ascribed so that they were able to speak in a way that legitimated their representations.

Thirdly, the detailed narratives of experience are used at the commencement of the professional development part of this project in response to Bruners’ (1996) understanding that “...our interaction with others are deeply affected by our everyday intuitive theorizing about how other minds work” (p. 45). In other words, it is necessary to acknowledge that teachers are not simply vessels to be ‘filled’ by the expert outsider and that they do have strongly held theories of practice that affect and direct their practice and maybe some of these positions offer hope and maybe some don’t. Indeed, it is clear from Figure 1.3 that many of these theories that teachers hold could well do with being challenged through the creation of a situation of cognitive, emotional or cultural dissonance by the provision of evidence that is outside of the usual experiences of the teachers; this evidence being used to critically reflect upon one’s discursive positioning and the implications of this positioning for student outcomes. However, in line with the principles outlined in the earlier part of this chapter, it is clear that this challenging needs to be undertaken in a non-confrontational manner, one that acknowledges the mana of the teachers where manaakitanga (caring for others) overrides aspirations to argue with, to chastise or to correct the ideas of one’s guests. Therefore the focus of the professional development is to create a culturally appropriate and responsive context for learning wherein teachers can reflect upon the evidence of the experiences of others in similar circumstances, including perhaps for the first time, the students. In this manner, teachers can critically evaluate where they position themselves when constructing their own images, principles and practices in relation to Māori students in their own classrooms. Sharing these vicarious experiences of schooling enables teachers to reflect upon their own understandings of Māori children’s experiences and consequently upon their own theorizing/explanations about these experiences and their consequent practice. In this way, teachers are afforded the opportunity to critically reflect upon their own discursive positioning and the implication of this positioning for their own agency and for Māori students’ learning.

Fourthly, the students were clear about how teachers, in changing how they related and interacted with Māori students in their classrooms, could create a context for learning wherein Māori students’ educational achievement could improve; again by placing the self-determination of Māori students at the centre of classroom relationships and interactions. In addition, those others who positioned themselves within the relationship discourse were able to add numerous practical solutions to the problems of educational disparities facing Māori students. These stood in contrast to the very limited, and mainly impractical (especially for classroom teachers) solutions offered by those who discursively positioned themselves within the other two discourses, that of the child and their home and the structural discourse. It was

from the ideas of those who were positioned with the agentic, relationships discourse that an Effective Teaching Profile was developed (see Figure 1.4).

Figure 1.4: The Te Kōtahitanga Effective Teaching Profile

Te Kōtahitanga Effective Teaching Profile (Bishop, et al. 2003)

Effective teachers of Māori students create a culturally appropriate and responsive context for learning in their classroom. In doing so they demonstrate the following understandings:

- a) they positively and vehemently reject deficit theorising as a means of explaining Māori students' educational achievement levels (and professional development projects need to ensure that this happens); and
- b) teachers know and understand how to bring about change in Māori students' educational achievement and are professionally committed to doing so (and professional development projects need to ensure that this happens);

In the following observable ways:

- 1) Manaakitanga: They care for the students as culturally-located human beings above all else.
(Mana refers to authority and āaki, the task of urging some one to act. It refers to the task of building and nurturing a supportive and loving environment).
- 2) Mana motuhake: They care for the performance of their students.
(In modern times mana has taken on various meanings such as legitimation and authority and can also relate to an individual's or a group's ability to participate at the local and global level. Mana motuhake involves the development of personal or group identity and independence).
- 3) Whakapiringatanga: They are able to create a secure, well-managed learning environment by incorporating routine pedagogical knowledge with pedagogical imagination.
(Whakapiringatanga is a process wherein specific individual roles and responsibilities are required to achieve individual and group outcomes).
- 4) Wānanga: They are able to engage in effective teaching interactions with Māori students as Māori.
(As well as being known as Māori centres of learning wānanga as a learning forum involves a rich and dynamic sharing of knowledge. With this exchange of views ideas are given life and spirit through dialogue, debate and careful consideration in order to reshape and accommodate new knowledge).
- 5) Ako: They can use a range of strategies that promote effective teaching interactions and relationships with their learners.
(Ako means to learn as well as to teach. It refers both to the acquisition of knowledge and to the processing and imparting of knowledge. More importantly ako is a teaching-learning practice that involves teachers and students learning in an interactive dialogic relationship).
- 6) Kotahitanga: They promote, monitor and reflect on outcomes that in turn lead to improvements in educational achievement for Māori students.
(Kotahitanga is a collaborative response towards a commonly held vision, goal or other such purpose or outcome).

How The Effective Teaching Profile Was Constructed

The Effective Teaching Profile (ETP) was constructed from reflecting upon the numerous conversations we had with the students, their whānau, their principals and their teachers when we were constructing the narratives of experience (Bishop & Berryman 2006). These narratives are the heart of the project and are central to the professional development part of Te Kōtahitanga, which seeks to assist teachers to implement the ETP in their classrooms so as to improve Māori students' achievement. The narratives are used to allow teachers to critically reflect upon and match their own understandings about how Māori students see the world and experience schooling with how Māori students themselves experience schooling. This reflection is a necessary part of the consideration by teachers of the part they play in their students' learning.

The ability of students to articulate their experiences clearly and in detail formed the basis of this profile, as the students told us about the types of relationships and interactions between themselves and their teachers that both hindered their educational achievement and also promoted their advancement.

The Effective Teaching Profile is made up of two parts. The first identifies two major understandings that effective teachers possess, the second part identifies six relationships and interactions that can be seen in effective teachers' classrooms on a daily basis.

It is clear that our actions as teachers, parents or whoever we are at that particular time are driven by the mental images or understandings that we have of other people. To put it simply, if we think that other people have deficiencies, then our actions will tend to follow this thinking, and the relations we develop and the interactions we have with these people will tend to be negative and unproductive. That is, despite our being well-meaning, with the best intentions in the world, if students with whom we are interacting as teachers are led to believe that we think they are deficient, they will respond to this negatively. We were told time and again by many of the interview participants that negative, deficit thinking on the part of teachers was fundamental to the development of negative relations and interactions between the students and their teachers, resulting in frustration and anger for all concerned. The students, their whānau, the principals and the teachers gave us numerous examples of both negative aspects of such thinking, the resultant behaviours and the consequences for students and teachers. Both groups spoke of how negative relations affected them. The teachers spoke of their frustration and anger; the students spoke about negative relations being an assault on their very identity as Māori people. They told us of their aspirations to participate in learning, and with what the school had to offer, but they spoke in terms of these actions being an all-out assault on their identity, on who they were, on their very basic need to be accepted and acceptable which precluded them from being able to participate in what the school had to offer.

We also learnt that positive classroom relationships and interactions were built upon positive, non-deficit thinking by teachers about students and their families that saw the students as having loads of experiences that were relevant to the classroom interactions. This agentic thinking by teachers means that they see themselves as being able to solve problems that come their way, they have recourse to skills and knowledge that can help all of their students and that all of their students can achieve, no matter what. We learnt that this positive thinking was fundamental to the creation of learning contexts in classrooms where young Māori people are able to be themselves as Māori; where Māori students' humour was acceptable, where

students could care for and learn with each other, where being different was acceptable and where the power of Māori students own self-determination was fundamental to classroom relations and interactions. Indeed, it was the interdependence of self-determining participants in the classroom that created vibrant learning contexts which were in turn characterized by quality learning relations and interactions.

The teachers who were already running effective classrooms along the lines described in the Effective Teaching Profile told us about the importance of their not seeing Māori students in deficit terms and of their knowing in themselves that they could make a difference for all of their students. Indeed, these teachers were able to give us numerous examples of strategies they used to create effective learning relationships and interactions in their classrooms. These teachers were very clear that their ability to teach and interact effectively with Māori students in their classrooms was closely tied to their having positive, non-judgmental relationships with Māori students, seeing Māori students as being self-determining, culturally located individuals and seeing themselves as being an inextricable part of the learning conversations; but not as the only speaker, but as one of the participants. The principals spoke of the importance of relationships that were built on trust and respect which in turn lead to positive learning outcomes. The whānau members were also convinced of the value of positive relationships based upon teachers respecting who the students were as Māori rather than what problems they presented. Above all, the students were very clear that teachers who saw them as having deficiencies were not able to develop positive learning relationships with them, but those of their teachers who saw them in positive terms were wonderful to be with and learn with.

Many students spoke of how they reacted strongly when confronted with what they saw as unfair treatment; for example, unfair punishments. Some spoke of them retreating into themselves, into drugs, and/or using selective absenteeism as a means of escaping from untenable relationships in some particular classrooms. However, one group in particular told us how they reacted and 'fought back' signalling to us that they were striving for their own self-determination within the situation they saw as being manifestly unfair. In many ways, it is a sad irony for Māori people living in modern New Zealand that Māori haka is used in international sports clashes to signal defiance and self-determination, whereas when Māori students display their aspirations for self-determination in a defiant manner at school, they are punished rather than understood.

We now turn to the actions that effective teachers demonstrate on a daily basis in their classrooms. In this section we describe each of the actions as drawn from a detailed consideration of the narratives, and then describe how our *kuiā whakaruruhau* explained these actions in terms of Māori understandings.

Manaakitanga

The students and their whānau members spoke in detail about the importance of teachers caring for the children as Māori. Indeed, they spoke about this as often as they spoke about their aspirations for the students to achieve at school. Many Māori leaders have echoed these aspirations and asked what if we gain good achievement levels but we lose who we are as a people. That is, what was clear from the stories was the aspirations of Māori people, old and young, for educational relationships and interactions that respected their aspirations for self-determination; for them to be able to be themselves, to be different, but to be part of the conversation that is learning, and to participate in the benefits that education has to offer. The

people we spoke to emphasized the importance of teachers demonstrating on a daily basis that they cared for Māori students as Māori, as being culturally located; that is, as having cultural understandings and experiences that are different that other people in the classroom. They emphasized that Māori people see, understand and interact with the world in different ways, and it is important that teachers are able to create learning relations and interactions where this is fundamental. Our kuia whakaruruhau termed this phenomenon, *Manaakitanga*, where mana refers to authority and āaki, the task of urging some one to act. This concept refers to the task of building and nurturing a supportive and loving environment by teachers for Māori and all students where students can be themselves.

Mana Motuhake

The students spoke at length about the low expectations that many of their teachers had of them and how their performance in class changed when their teachers signalled that they had high expectations of them. Time and again, the students emphasized that teachers get what they expect from their Māori students. Our kuia explained that in modern times, mana has taken on various meanings such as legitimation and authority and can also relate to an individual's or a group's ability to participate at the local and global level. Mana motuhake involves the development of personal or group identity and independence which means teachers caring for the performance of their students.

Ngā Whakapiringatanga

The students did not appreciate chaotic classrooms any more than did their teachers. They also knew when lessons were not prepared and when they were not at the centre of the teacher's attention, but more of an irritant to be coped with until a more acceptable and probably senior class came along. The effective teachers and the students spoke of the strong desire for and necessity of boundaries, rules and organizations that are fundamental to effective learning. This includes teachers knowing their curriculum area and being able to use the curriculum flexibly so as to respond to the learning conversations being developed in the classroom. Our kuia saw this action in terms of *Ngā Whakapiringatanga*: which involves the careful organization of specific individual roles and responsibilities required in order to achieve individual and group outcomes. This concept has at least two major implications for classroom management: that teachers are able to create a secure, well-managed learning environment by incorporating routine pedagogical knowledge with pedagogical imagination; teachers need to be able to organise classrooms so that all the individuals involved are able to contribute to their own learning and to support the learning of others.

Wānanga

The students spoke time and again about the problems that traditional approaches to teaching posed for their learning. They could just not cope with the teacher writing notes endlessly on the board, or talking at them for long periods of time. They could not learn from this style of teaching whereas, when they were able to discuss things with their mates, and interact with the teacher in smaller than classroom sized settings, they felt much more able to learn. They also wanted feedback on their attempts at learning, and indications as to what they could do in terms of what they had attempted to do so far. Others spoke to us about the fact that they had good ideas and would like opportunities to share these with teachers and their peers in ways that would help them have a say in the direction of lessons and their learning. Our kuia identified that as Wānanga. As well as being known as Māori, centres of learning wānanga as

a learning forum involves a rich and dynamic sharing of knowledge. With this exchange of views ideas are given life and spirit through dialogue, debate and careful consideration in order to reshape and accommodate new knowledge. This means that teachers are able to engage in effective teaching interactions with Māori students as Māori.

Ako

Many of the people we spoke to talked about the problems posed for students' learning by teachers using a limited range of strategies, especially those that precluded interaction and discussion. Our kuia spoke of this aspiration as the desire to implement the Māori understanding of *Ako* which means to learn as well as to teach. It is both the acquisition of knowledge and the processing and imparting of knowledge. More importantly *ako* is a teaching-learning practice that involves teachers and students learning in an interactive, dialogic relationships that teachers can use strategies that promote effective teaching interactions and relationships with their learners.

Kōtahitanga

Students spoke about their desire to know how well they were learning and their desire to be let in on the secret that is learning in such a way that they can monitor their own progress, and the teachers spoke about how student progress could inform and allow them to reform their practice. Our Kuia understood this in terms of *kōtahitanga*, which is a collaborative response towards a commonly held vision, goal or other such purpose or outcome, meaning that teachers and students can separately and collaboratively promote, monitor and reflect on outcomes that in turn leads to improvements in educational achievement for Māori students.

This profile represents an operationalisation of Māori aspirations for education as identified in the first part of this chapter and attempts to illustrate just what a Culturally Responsive Pedagogy of Relations might look like in practice. The notion of developing a culturally appropriate and responsive context for learning grew out of international literature on this topic (Gay, 2000; Villegas & Lucas, 2002) and is based on the notion of culture that is fundamental to this project.

Culture is what holds a community together, giving a common framework of meaning. It includes how people communicate with each other, how we make decisions, how we structure our families and who we think is important. It expresses our values towards land and time and our attitudes towards work and play, good and evil, reward and punishment.

Culture is preserved in language, symbols and customs and celebrated in art, music, drama, literature, religion and social gatherings. It constitutes the collective memory of the people and the collective heritage which will be handed down to future generations.

Quest Rapuara (1992, p. 7)

In this way, culture is seen in terms of both its visible and invisible elements. The visible are the signs, images and iconography that are immediately recognizable as representing that culture and that theoretically create an appropriate context for learning. The invisible are the values, morals, modes of communication and decision making and problem-solving processes

along with the world views and knowledge - producing processes that assists individuals and groups with meaning and sense-making. Hence the notion that the creation of learning contexts needs to allow for the existence of both visible and invisible elements.

Fundamental to this profile is the creation of a culturally responsive context for learning where teachers understand the need to explicitly reject deficit theorising as a means of explaining Māori students' educational achievement levels, and where they take an agentic position in their theorising about their practice. That is, where they see themselves as being able to express their professional commitment and responsibility to bringing about change in Māori students' educational achievement and accept professional responsibility for the learning of their students. This notion of agentic positioning addresses what Covey (2004) terms *response ability*, that is teachers understanding the power they have to respond to who the students are and to what they bring to the classroom; often the invisible elements of culture. In short, the realization that learning comes about through changing the learning relations and interactions in classrooms, not just changing one of the parties involved, be they the students or the teachers. These two central understandings are observable in these teachers' classrooms on a daily basis and are here again expressed and understood in terms of Māori metaphor such as Manaakitanga, Mana Motuhake, Whakapiringatanga, Wānanga, Ako and Kōtahitanga. In practice these mean that teachers: care for and acknowledge the mana of the students as culturally located individuals; have high expectations of the learning for students; are able to manage their classrooms so as to promote learning (which includes subject expertise); reduce their reliance upon transmission modes of education so as to engage in a range of discursive learning interactions with students or enable students to engage with others in these ways; know a range of strategies that can facilitate learning interactively; promote, monitor and reflect on learning outcomes that in turn lead to improvements in Māori student achievement and sharing this knowledge with the students so that they are let into the secret of what constitutes learning.

This profile, constructed from Māori students' suggestions as to how to improve education for themselves and their peers, and supported by the reported experiences of their whānau, their principals and some of their teachers matches the principles identified from the pattern of Māori metaphor earlier of this chapter. At centre stage is the necessity for a common kaupapa or philosophy that rejects deficit thinking and pathologising practices as a means of explaining Māori students' educational achievement. In concert is the underlying aspiration for rangatiratanga that promotes the agency of teachers to voice their professional commitment, willingness to engage in whānau relations, and interactions and reciprocal practices that are fundamental to addressing and promoting educational achievement for Māori students. The ways suggested for attaining success draws on Māori cultural aspirations in the way that the interview participants identified; the need for caring as manaakitanga, for teachers demonstrating their high expectations and the creation of secure, well-managed learning settings again in terms of the mana of the students. The preferred discursive teaching interactions, strategies and the focus on formative assessment processes that are identified in the narratives also resonates with Māori cultural aspirations, above all the creation of whānau type relations and interactions within classrooms and between teachers, students and their homes. Reciprocal approaches to learning, through cooperative learning strategies for example, in concert with the underlying aspiration for relative autonomy, underlies that desire to improve the educational achievement of Māori students in New Zealand through operationalising Māori people's cultural aspirations for self-determination within non-dominating relations of interdependence.

Conclusions

In this chapter an indigenous model of classroom relations and interactions is presented both theoretically and in practice. Methodologically, this model was developed from a theoretical examination of Māori people's aspirations for and actualization of a pro-active, culturally-constituted educational intervention in the educational difficulties facing Māori people in Aotearoa/New Zealand today. This analysis took the form of an examination of what the metaphor fundamental to kaupapa Māori generated educational institutions and kaupapa Māori research might mean for mainstream educational institutions. These institutions, where education for the vast majority of Māori students is located and which are dominated by metaphors based in the dominant culture such as territorial, bounded notions of self-determination, are sites of struggle for Māori people, culture and language. The model suggests that mainstream classrooms that are constituted as places where; power is shared between self-determining individuals within non-dominating relations of interdependence; where culture counts; where learning is interactive, dialogic and spirals; where participants are connected and committed to one another and where there is a common vision of excellence, will offer Māori students educational opportunities currently being denied to them.

Methodologically, examining what might constitute the operationalisation of this model involved a variety of approaches. The first involved the use of collaborative storying (Bishop, 1996; 2005) as a means of developing a series of narratives of experience from Māori students themselves and also from those most intimately involved with their education. This approach seeks to address Māori peoples concerns about researcher imposition by focusing on the collaborative co-construction of the meaning that the participants ascribe to their reported experiences. In this project, this involved the authorising of student experiences and the meanings they constructed from these experiences in ways that addresses the power of determination over issues such as who initiates classroom interactions; who determines what benefits there will be and who will benefit; whose reality or experiences (voice) are present in the classroom; with what authority do educators speak; and to whom are educators accountable? (Bishop, 1996; Bishop & Glynn, 1999).

The narratives were then used in the project in four main ways. Firstly they were used to identify a variety of discursive positions pertaining to Māori student achievement and the potential impact of these positions on Māori student learning. Secondly, the narratives were used to give voice to the participants (students, whānau, principals, and teachers) in a manner that addressed issues of power relations pertaining to issues of initiation, benefits, representation, legitimation and accountability. Thirdly, the narratives were used in the professional development part of the project to provide teachers with a vicarious means of understanding how students experienced schooling in ways that they might not otherwise have access to. This experience provided teachers with a means of critically reflecting upon their own discursive positioning and the impact this might have upon their own students' learning. Fourthly the narratives provided us with a practical representation of the theoretical model that was identified in the first part of this chapter.

Operationalising a Culturally Effective Pedagogy of Relations means implementing the Effective Teaching Profile. Such a profile creates 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 knowledges are acceptable and legitimate.

Such a context for learning stands in contrast to the traditional classroom where the culture of the teacher is given central focus and has the power to define what constitutes appropriate and acceptable knowledges, approaches to learning, understandings and sense-making processes. This model suggests that when the learner's own culture is central to their learning activities, they are able to make meaning of new information and ideas by building on their own prior cultural experiences and understandings. The visible culture of the child need not necessarily be present but may well become present as a result of a co-constructing learning experiences with their teachers, in this way addressing the potential imposition of the teacher displaying cultural iconography. Such contexts for learning also allows learners to critically reflect on their own learning, how they might learn better and more effectively and ensures greater balance in the power relationships of learning by modelling this approach in class. In effect therefore, raising expectations of their own learning and how they might enhance and achieve these expectations engages students actively, holistically and in an integrated fashion, in real-life (or as close to) problem-sharing and questioning and uses these questions as catalysts for on-going study; this engagement can be monitored as an indicator of potential long-term achievement. This shift from traditional classrooms is important because traditional classroom interaction patterns do not allow teachers to create learning contexts where the culture of the child can be present, but rather assume cultural homogeneity (Villegas & Lucas, 2002), which in reality is cultural hegemony (Gay, 2000). Discursive classrooms have the potential to respond to Māori students and parents desires to "be Māori"; desires that were made very clear in their narratives of experience. However it must be stressed that fundamental to the development of discursive classrooms that include Māori students, is the understanding that the deficit theorising by teachers must be challenged. Deficit theorising will not be addressed unless there are more effective partnerships between Māori students and their teachers within the classrooms of mainstream schools, and in turn between teachers and those parenting Māori students. Once these aspects are addressed the culture of the child can be brought to the learning context with all the power that has been hidden for so long.

The metaphors that *Te Kōtahitanga* draws upon are holistic and flexible and able to be determined by or understood within the cultural contexts that have meaning to the lives of the many young people of diverse backgrounds who attend modern schools today. Teaching and learning strategies which flow from these metaphors are flexible and allow the diverse voices of young people primacy and promote dialogue, communication and learning with others. In such a pedagogy, the participants in the learning interaction become involved in the process of collaboration, in the process of mutual story-telling and re-storying, so that a relationship can emerge in which both stories are heard, or indeed a process where a new story is created by all the participants. Such a pedagogy addresses Māori people's concerns about current pedagogic practices being fundamentally monocultural and epistemologically racist. This new pedagogy recognises that all people who are involved in the learning and teaching process are participants who have meaningful experiences, valid concerns and legitimate questions.

This model constitutes the classroom as a place where young people's sense-making processes are incorporated and enhanced, where the existing knowledge's of young people are seen as 'acceptable' and 'official', in such a way that their stories provide the learning base from whence they can branch out into new fields of knowledge through structured interactions with significant others. In this process the teacher interacts with students in such a way (storying and re-storying) that new knowledge is co-created. Such a classroom will generate totally different interaction patterns and educational outcomes from a classroom where knowledge is seen as something that the teacher makes sense of and then passes onto students

and will be conducted within and through a pedagogy of relations, wherein self-determining individuals interact with one another within non-dominating relations of interdependence.

Te Kōtahitanga began in 2001 in a small way, and now in 2007, as we move into our fourth year in 12 secondary schools, is beginning to show significant improvements in Māori student engagement with learning and achievement. Such an approach of course is not without its detractors, coming as it does from a once dominated culture. Nevertheless, one of the main messages and challenges here for mainstream educators is as Freire (1972) identified above, that the answers to Māori educational achievement and disparities do not lie in the mainstream, for given the experiences of the last 150 years, mainstream practices and theories have kept Māori in a subordinate position, while at the same time creating a discourse that pathologised and marginalized Māori peoples' lived experiences.

The counter-narrative that is kaupapa Māori demonstrates that the means of addressing the seemingly immutable educational disparities that plague Māori students in mainstream schools actually lies elsewhere than in mainstream education. The answers lie in the sense-making and knowledge-generating processes of the culture the dominant system has sought to marginalize for so long.

The power of counter narratives such as kaupapa Māori, which has grown out of Māori resistance to the dominance of majority culture aspirations on our lives (Bishop, 1996; G. Smith, 1997; L. Smith, 1999), is such that alternative pedagogies that are both appropriate and responsive, can be developed out of the cultural sense-making processes of people previously marginalized by the dominance of colonial and neo-colonial education relations of power. Such pedagogies can create learning contexts for previously pathologised and marginalized students in ways that allow them to participate in education on their terms, to be themselves and to achieve as Māori as well as being, in Durie's (2001) words, "citizens of the world."

Chapter 2: Implementing the Effective Teaching Profile: The Professional Development Intervention

Introduction and Overview

This chapter details the means we used to implement the Effective Teaching Profile in the classrooms of the project teachers and the demographics of these teachers.

It then describes the actual activities the teachers are expected to take part in and how these activities are conducted. The people involved and the relationship between each of the levels in the project is then explained. These details are followed by a description of the resources that have been developed to support the implementation of the project. Finally, the demographic details of the teachers and the in-school professional developers are described.

PART A: Implementing The Effective Teaching Profile

The professional development continues to apply what the research and professional development (RPD) team has learned to be most effective from the two previous Te Kōtahitanga phases. In Phase 1 of Te Kōtahitanga the professional development was introduced to teachers by the researchers themselves as the facilitators, and in Phase 2 Te Kōtahitanga was introduced collaboratively by the researchers and in-school facilitators. In Phase 3 of Te Kōtahitanga the in-school professional development for teachers was undertaken by facilitators who were supported by the RPD team to implement the Effective Teaching Profile in the classrooms of project teachers through a sequence of professional development activities. This professional development for teachers followed on from a series of formal and informal introductory meetings, where the project was outlined to each school's leader and staff. Once schools undertook to participate in the project, they selected a facilitation team who were provided with professional development support from the RPD team to undertake a series of baseline data gathering activities and the professional development in their schools. The professional development to operationalise the Effective Teaching Profile in classrooms involves applying the mnemonic GEPRISP (see below) as the initial implementation mode and PSIRPEG as the classroom implementation and evaluation mode, initially through group focused activities external to classrooms, followed by an ongoing cycle of activities working in classrooms with teachers.

Table 2.1: Overview of the Professional Development

<i>Intended Outcome:</i> OPERATIONALISING THE EFFECTIVE TEACHING PROFILE			
Group Focused, External to Class		Individually Focused, In-Class	
G	<ul style="list-style-type: none"> Introducing Te Kōtahitanga to schools Hui whakarewa The Narratives Re-positioning Exercises The Effective Teaching Profile Pedagogical content 	<ul style="list-style-type: none"> The Effective Teaching Profile in classrooms Formal observations Individual feedback meetings Co-construction around target classes/students shadow coaching 	P
E			S
P			I
R			R
I			P
S			E
P			G
<i>Goal:</i> Raising Māori students' achievement			

The professional development activities include:-

The hui whakarewa, at which the narratives of experience are used to create a learning context where teachers are able to critically reflect on their own theoretical positioning vis-à-vis Māori students. The application of the Effective Teaching Profile in their classrooms is then detailed.

This initial hui is then followed by a term-by-term cycle of four specific but interdependent activities.

- Individual teacher observations using the Te Kōtahitanga Observation tool. (see Appendix A)
- Individual teacher feedback and co-construction sessions reflecting on specified events observed in the formal observation.
- Group co-construction meetings for teachers of a common class reflecting upon student participation and achievement evidence with focused group goal setting.
- Targeted shadow-coaching sessions in order to move towards targeted goals (from feedback & co-construction sessions).

In addition, staff are also involved in ‘new knowledge,’ ‘new strategy’ or ‘new assessment’ professional development sessions which tend to be run by the school leaders on a ‘needs be’ basis.

Activity No 1: The induction hui: the hui whakarewa

The first formal professional development activity that was provided for the teachers is the induction hui, the hui whakarewa. These induction hui were usually held at a local marae (a Māori residential meeting place) with elders present and actively engaged in the training. A marae setting provided a space where Māori is the majority culture and ‘normal’, and also a location that constituted a culturally appropriate context for Māori learning. This location also allowed each school to signal to their local Māori community that they are seriously engaged in addressing the educational achievement of their Māori students. As schools have participated in Te Kōtahitanga over time, these hui have been held annually so as to bring more teachers into the project, and to reaffirm those already in the project. In this way the ongoing nature of the project is signalling to the Māori Community the serious intentions of the school to pursue the goal of raising Māori students’ achievement. These activities also open up ongoing lines of communication and accountability to the elders and parents of the Māori community.

These hui use the GEPRISP model (see Figure 2.1) as a guide to sequence and to cover the complex range of components that need to be addressed in order for the educational achievement of Māori students to improve.

GEPRISP is a mnemonic device that identifies for teachers that this project is focused on the **GOAL** of improving Māori student’s educational achievement. The means of doing so commences with an examination of Māori students’ **EXPERIENCES** of schooling and of teachers’ discursive **POSITIONING** in relation to the goal and Māori students’ experiences. The importance of **RELATIONSHIPS**, **INTERACTIONS**, **STRATEGIES** and **PLANNING** that can be used to reach the goal are then detailed.

When commencing the professional development process at the induction hui, the Hui Whakarewa, the teachers are introduced to the need to acknowledge and highlight the specific **Goal** of raising Māori student participation and achievement by means of a detailed examination of data pertaining to Māori student participation and achievement. Māori Student **Experiences** of education and those of their significant others using the original Narratives of Experience (Bishop & Berryman, 2006) are then worked through in a problem-solving exercise so as to allow teachers an opportunity for critical examination of their own discursive **Positioning** and its implications for classroom relations and interactions with Māori students. Through this process of critical reflection upon the evidence presented to them in the narratives of Māori students and others, a professional learning conversation is created wherein teachers can critically reflect upon their own experiences in similar settings. In this way teachers are provided with supported opportunities to begin to reposition themselves discursively in ways that acknowledge their own mana and rangatiratanga, and in ways that they can begin to realise their own agency, that is their power to act. This critical activity provides opportunities for teachers to begin to identify and challenge their own discursive positioning so that they reject deficit thinking (“until something happens at this school, there is nothing I can do”, “these Māori students are just not up to it”), and pathologising practices (“they need more remedial work, special programmes, they can’t cope with this work”) as a means to theorising Māori student achievement levels. Instead they begin to understand how they themselves can reposition and operate more effectively from positions of agency (“I can do this”).

Changing teachers’ explanations and practices (theoretical repositioning within discourse) about what impacts on Māori students’ learning involves providing teachers with the opportunity to challenge their own deficit theorising about Māori students (and their communities) through real and vicarious means in non-confrontational ways. It is a fundamental understanding of this project that until teachers consider how the dominant culture maintains control over the various aspects of education, and the part they themselves might play in perpetuating this pattern of domination, albeit unwittingly, they will not understand how dominance manifests itself in the lives of Māori students (and their communities) and how they and the way they relate to and interact with Māori students may well be affecting learning in their classroom. Therefore, the professional development devised by the researchers includes a means whereby teachers’ thinking can be challenged, albeit in a supported way. Cognitive and affective dissonance, in effect, cultural dissonance, which Timperley, Phillips and Wiseman (2003) identify as being necessary for successful professional development, can lead teachers to a better understanding of the power imbalances of which they are a part. In particular those power imbalances which perpetuate cultural deficit theorising and support the retention of traditional transmission classroom practices.

The professional development induction hui then turns to examine those **Relationships** of care, expectation and management and discursive **Interactions** that are fundamental to creating culturally responsive contexts for learning. **Strategies** that can be used to develop relations of care and learning conversations are specifically introduced next and indeed are also used as the model for presentation throughout the professional development hui with teachers. The importance of detailed **Planning**, to bring about change in classrooms, departments and across the school is then identified and illustrated.

PSIRPEG: The Model for Implementing the Effective Teaching Profile in the classroom

To implement what has been learned at the hui whakarewa, the induction hui, the order of GEPRISP is reversed into **PSIRPEG** (the P is silent) where teachers focus on their need to undertake classroom and lesson **Planning** that will use **Strategies** to promote discursive **Interactions** in their classrooms that in turn will develop caring and learning **Relationships** that will reinforce teachers' agentic, discursive **Positionings**. Together these in turn all work towards improving Māori students' educational **Experiences** and promoting the **Goal** of improving Māori students' educational engagement, participation and achievement.

Understanding the components of GEPRISP and PSIRPEG

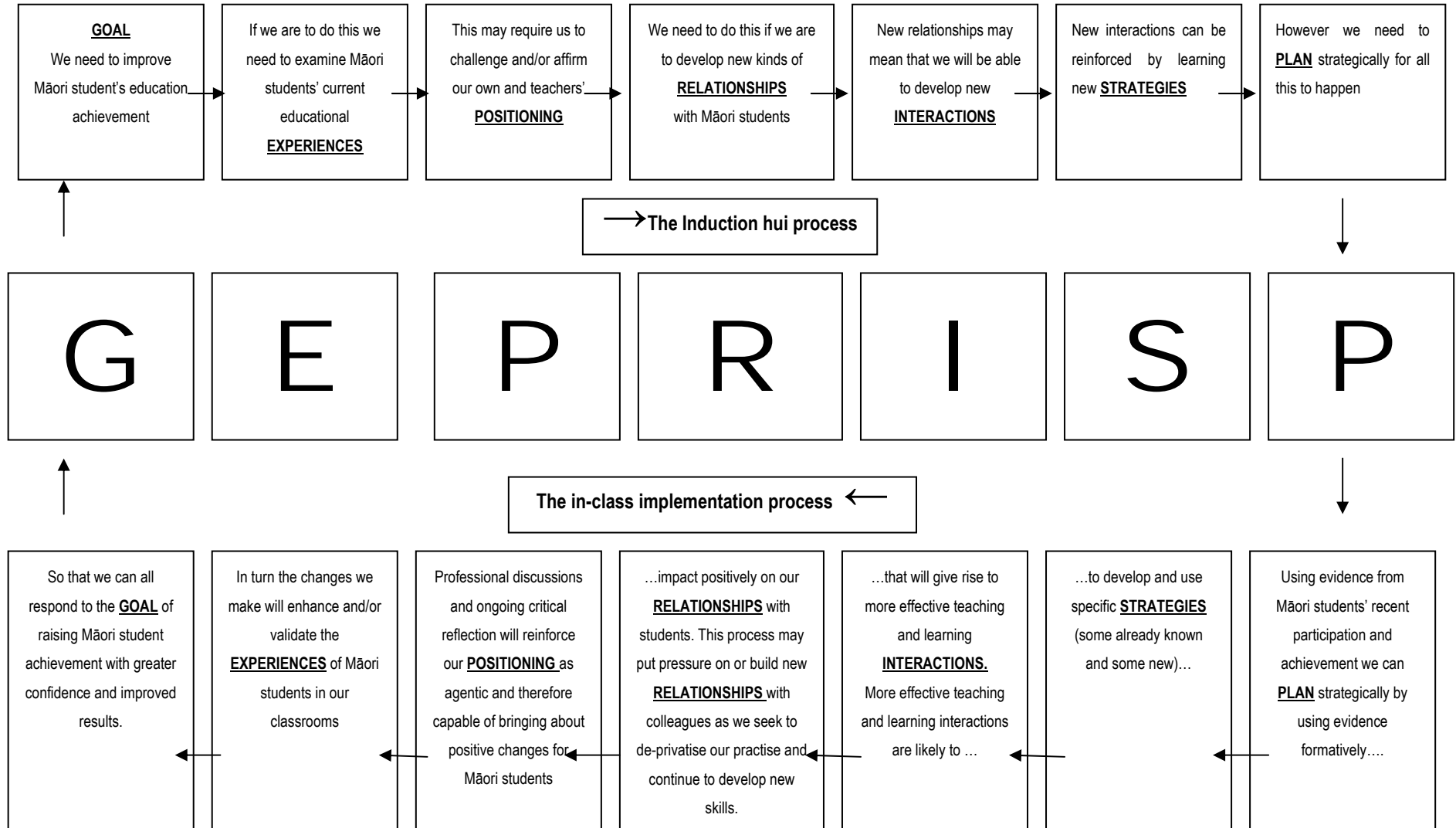


Figure 2.1: The Implementation and Evaluation Process

In order to implement the PSIRPEG process, following the teachers' return to school, a series of in-class professional development activities were implemented in each of the four terms of the school year. These consist of **classroom observations** (data-gathering for formative and summative purposes), **interactive feedback sessions** on the lesson observed, **co-construction meetings** followed by further in-class support in the form of **shadow-coaching**. These more formal visits were also accompanied by informal contacts, and other classroom visits or professional development sessions seen to be necessary.

Activity No 2: Te Kōtahitanga Observations

The Te Kōtahitanga observation tool (see Appendix A) is designed to assist the teachers to begin to implement the Effective Teaching Profile in their classroom by providing them with information and targeted feedback about their planning, strategies used, relationships established in the classrooms and the range of interactions used, along with other information about student participation and performance.

Side 1 of the observation tool used in Te Kōtahitanga is a variation of the time sample sheets developed for the Mangere Guidance Units (Thomas & Glynn, 1976) and the collaborative home and school behaviour management programme, Hei Āwhina Mātua (Glynn, Berryman, Atvars & Harawira, 1997). This aspect of the observation tool and the recording conventions used were developed and further refined by the research team during Phases 1 and 2 of Te Kōtahitanga (Bishop, Berryman, Tiakiwai & Richardson, 2003; Bishop, Berryman, Powell & Teddy, 2005). These regular formal observations provide details of classroom interactions as they relate to the ETP, student engagement and work completion, teacher and student location to identify the zone of physical interaction (Philpott, 1993), and the cognitive level of the class and the lesson (to identify expectation levels). These final two components are co-constructed between the observer and the teacher.

Side 2 of the observation tool was developed during Phase 2 of Te Kōtahitanga. It seeks to objectively quantify evidence of the relationships that are specified in the ETP, and as they can be observed within the classroom lesson. It seeks to do this in collaboration with the teacher.

This observation tool acknowledges that there are many factors within the learning environment that contribute to student behaviour and learning. Observations that focus on students alone are likely to be located within a functional limitation paradigm that suggests the problem or deficiency is located solely within the child. Te Kōtahitanga observations are located within an ecological paradigm which takes into account a wider range of contributing factors when considering student behaviour and learning. This breadth of observation parameter provides greater scope for effective and meaningful feedback and reflection, thus greater scope for solutions for all participants.

Activity No 3: Individual Teacher Feedback

The Observation Tool provides the means to monitor the degree to which participating teachers are incorporating the interactions and relationships detailed in the ETP into their everyday teaching. This information then enables observers (the facilitators) to provide teachers with specific feedback and feed-forward on observed teacher-student learning expectations, interactions, and strategies as well as resulting evidence of these interactions on

five Māori students⁴ in terms of their engagement and work completion (as shown on page 1 of the observation tool). Page two of the tool provides evidence of the learning contexts provided by the teachers in terms of the cultural responsiveness and appropriateness of these contexts and the teachers' relationships with Māori students.

At previously negotiated times following the classroom observations, facilitators give teachers specific feedback about the lesson they have formally observed using the observation tool. Facilitators and teachers talk about their in-class experiences and begin to co-construct new directions in terms of individual goals for future teaching. Facilitators are trained to avoid general feedback but to consider instead seven types of specific feedback.

1. Feedback on what was observed
2. Feedback to Reflect
3. Opportunities for teachers to feedback
4. Feedback on Relationships
5. Positive Feedback
6. Feedback to Feed-forward
7. Responsive Feedback

Facilitators are also trained to ensure that feedback sessions are based specifically on the events recorded or annotated during the classroom observation and to conclude with reminders or links to their next co-construction meeting.

The teachers' sessions normally take one to one and a half hours and in the early stages of the project consist of feedback being given to the teacher by the facilitator. However, as the teachers become familiar with the observation data, and the interrelatedness of the various components observed, these sessions become more interactive. Indeed, there is a developing continuum of response by the teachers to the observation data.

The first response by teachers is usually for them to be rather passive and receptive of the data, what it shows and what it might mean for their practice. At this stage, student engagement and work completion is generally seen as a separate outcome. The second response is where the teachers begin to understand for themselves what the interrelated data shows and seek advice about how they might change their practice in relation to student engagement and work completion. The third stage is where the teacher and facilitator become co-constructors of the knowledge that is created from the observation tool, and the meanings of the relationships between the students' outcomes and their practice. In other words, through this process of facilitated feedback, learning conversations develop to a stage where the teacher is more likely to take the lead in the analysis of the data; seek suggestions and co-construct solutions with the facilitator as to how they might go about developing caring relationships in their classrooms; changing classroom interactions from traditional to discursive in order to improve Māori student outcomes in their classrooms in terms of Māori student engagement, work completion, attendance and achievement.

It is worth noting that the facilitator, through this process, is modelling the means whereby the teacher can improve the participation and engagement of Māori students in their classrooms.

⁴ The Māori students are selected collaboratively; three purposefully by the teachers, two randomly by the observers.

Activity No 4: The Co-construction Meeting

The co-construction meetings are facilitated collaborative problem-solving opportunities for a group of teachers, ideally who work with a common group of students in a target class and who come from different curriculum areas, to collaboratively reflect and co-construct solutions. The focus on co-construction meetings is for teachers to collaboratively examine evidence of M ōri (and other) students' participation and progress with learning. This activity is undertaken in order to collaboratively develop plans and strategies that will promote discursive interactions, caring and learning relationships and improve M ōri students' educational experiences which will lead to measurable improvements in M ōri students' participation and achievement.

Facilitators ensure that the teachers feel at ease and understand that what was discussed in their individual feedback session is confidential and will not be shared with the others unless they choose to share these things themselves. Facilitators also ensure that teachers know that co-construction meetings are not linked to performance appraisal, nor designed to demean or to glorify individuals but rather are aimed at improving M ōri student achievement. Facilitators emphasise that the co-construction process is about working collaboratively towards improving or maintaining positive relationships with M ōri students and moving towards using more culturally responsive and discursive teaching and learning interactions in their classrooms. The teachers in the co-construction group are given space to reflect upon and share evidence of M ōri students' classroom participation, achievement and progress with learning collected as a result of their classroom practice. Such evidence may well relate to their last personal and/or group goals and may include student class attendance patterns, student engagement data, examples of student work, teacher-developed pre-and post-test data or data from standardised norm-referenced tests. Co-construction meetings conclude by setting times and dates with the facilitator for shadow coaching to further support the implementation of their newly set goals.

Activity No 5: Shadow Coaching

Shadow coaching involves the facilitator supporting individual target teachers to meet their personal and group goals by coaching them in their classroom or other environment where work towards the goal is naturally likely to occur. This might involve collaboratively planning lessons, making adaptations to the learning environment or curriculum, or physically modelling steps towards the goal but it is more likely to involve giving the teacher another opportunity for feedback and reflection on observed classroom interactions. Facilitators are expected to negotiate specific times and processes with teachers. Facilitators understand that they may have to provide shadow-coaching a number of times to ensure that the goals are being met.

The Professional Development Model

In Phase 1 and to a limited extent in Phase 2 of Te Kōtahitanga, the research / professional development team worked directly in the classrooms with the teachers. However, as the numbers of teachers in the Phase 2 schools increased and especially prior to commencing work with the 12 schools in Phase 3, it was obvious that the research / professional team needed to take a step back and get others to work directly in the schools with the teachers. Besides the increase in numbers, it was also becoming increasingly obvious that in order for such a reform to be sustainable, we needed to leave behind in schools staff who had the capability to continue the project once the research / professional development team withdrew. Therefore it was important that these staff and leaders not only understand the reform initiative to sufficient depth to be able to maintain its integrity but also be able to use the instruments developed in or relevant to the project to continue to gather evidence for both summative and formative purposes. Therefore in Phase 3 of the project the professional development activities described above have been carried out in each school by a team of facilitators who have been supported and led by their principal(s). These teams have been made up of teachers from the school who have been released from their teaching duties. One of these teachers has become the Lead Facilitator; the others, while supporting the project, also provide for succession. Lead facilitators work close to full time in the project, others tend to be more part-time in the role. In addition, the facilitation teams include Resource Teachers of Learning and Behaviour (RTLB) and School Support Services or Team Solutions staff both of whom participate in a part-time capacity (approx .4).

Schools have largely determined the configuration of these facilitation teams and the research and professional development (RPD) team have provided ongoing professional development to every person identified by schools as currently being on their facilitation team. Despite members of the facilitation team coming from various backgrounds, they all undertake the same professional development (except for the principals who have extra 'leadership' workshops) and are expected to undertake all the professional development activities and other tasks associated within the project.

As a result of the development of facilitation teams in the 12 schools, we in the research and professional development team needed to develop a means whereby as well as providing facilitation team members with professional development hui (2 in 2003; 3 per annum in 2004 and 2005), we could also support them in school as they learnt how to implement the professional development activities. As a result we employed 2 more staff in 2004 and 2005 to act as Regional Co-ordinators whose task was to support the professional development hui, provide in school support and monitoring and to undertake evaluation and research in to the use of the instruments we are developing to provide summative and formative evidence within the project.

Over the period of 2004 & 2005, the following pattern developed and is one that we suggest will allow for both replication of the project in other schools as well as provide feedback loops so that people at each level of the model are able to receive evidence of how well their efforts are being received and implemented.

The following model consists of 3 orders (rather than levels that suggest a hierarchy) that identifies the order in which the professional development model is rolled out. This model is presented here in the form of a hypothesis that we intend putting to the test in Phase 4, part of which will focus on replicability of the project in new schools.

1. The first order of the model is the provision of professional development by the original research and development team for the new regional coordinators (who will be responsible for a cluster of schools). This will consist of an induction process, theoretical analysis of the project and opportunities for regional coordinators to work alongside the original team to learn new tasks. They will also be expected to play a full part in the ongoing evaluation of the implementation of the project.
2. The second order of the model is the process whereby the regional coordinators provide external (that is a series of induction and development hui) and in-school term-by-term professional development for the facilitation team members.
3. The third order of the model is the process whereby the facilitators work with target teachers to theorise the ETP with teachers and operationalise the ETP in their classrooms with Māori students through the application of the GEPRISP/PSIRPEG model in their classrooms.

As the professional development programme progresses through this order the challenge is to ensure the reliability and integrity of the programme remains true while also acknowledging that some programme adaptations will occur in response to individual school situations.

The First Order of the Professional Development Implementation Model

The first order of the professional development implementation model involves the research and professional development team providing professional learning opportunities for the regional coordinators in order that they are able to provide the full range of professional development and support necessary for facilitation team members.

The First Order of the professional development implementation model was not fully developed in Phase 3 because we in the research / professional development team needed to conduct the 2nd order of the model fully (that is provide the professional development for the facilitation team members) in order that we could develop this aspect of the professional development implementation model and understand how it needed to be conducted and what support the facilitation team members needed. It was also important to identify the research areas that were pertinent to this position.

However, for Phase 4, the research / professional development team will be providing professional development for the Regional Co-ordinators. They will be provided with their own specific wānanga and will be shadow-coached by members of the research/professional development team as they work in 2nd order-professional development wānanga with facilitation team members and in-school with facilitation teams in order to support the specific theories and practices through to their implementation. Shadow coaching sessions will be provided and will be followed by informal hui whereby the regional coordinators will be able to reflect on their practice with members of the RPD team or co-construct and plan for their next in-school interactions with facilitation team members. Regional Coordinators will also lead the conducting of the treatment integrity activities on both the teacher feedback and co-construction sessions. Regional co-ordinators will also engage in self-directed related study and writing. Such study will be supervised by the appropriate members of the RPD team.

These plans are based on our experiences in 2004 and 2005 when the Regional Coordinators were gradually introduced into the professional development provided for facilitation teams

and into the role of in-school support. During this time one of the regional coordinators also completed a Masters' dissertation (Hingston, 2005) based on the professional development of facilitators in Te Kōtahitanga. However, developing skills and expertise of these two regional coordinators were lost to the project at the end of 2005 and we have had to commence phase 4 with 3 new staff in this position.

The Second Order of the Professional Development Implementation Model

The Second Order of professional development implementation involves the RPD team supporting the regional coordinators to work with facilitators to operationalise the ETP with target teachers. In other words, the regional coordinators will be expected to conduct the hui whakarewa for facilitators work ongoing hui for facilitators (3 a year) and also work in-school with facilitators to support the implementation of the project in the schools. At times this work was also undertaken in tandem with, or by a member, of the RPD team.

The in-school support consists of the regional coordinators (assisted by the RPD team) shadow coaching facilitators through the initial collection of baseline classroom observations and then the in-school Hui Whakarewa held to introduce Te Kōtahitanga to participating teachers. They will also be expected to provide ongoing support focused on centralising the GEPRISP model through the in-class professional development provided by the cycle of term-by-term observation, feedback, co-construction and shadow coaching, as well as maintaining the integrity of the implementation of Te Kōtahitanga in a consistent manner across the schools.

Third Order of the Professional Development Implementation Model

The Third Order of implementation of the professional development involves the facilitation team members working with target teachers from their school to operationalise Te Kōtahitanga and the ETP with Māori students.

In this third order of implementation, facilitation team members begin the process of Te Kōtahitanga in their schools by conducting baseline observations with target teachers, then a three day professional development wānanga (Hui Whakarewa) to introduce their teachers to the kaupapa of Te Kōtahitanga, the narratives of experience, the GEPRISP model and the ETP. As mentioned above these wānanga have often been held off the school grounds and are often held on marae. In this way many schools have not only begun to engage with the kaupapa of raising Māori student achievement but they have done so in a setting where they have also begun to engage with their Māori community as guests in their space. Having to engage on the Māori community's terms rather than the Māori community having to engage with the school on the school's terms has generated interesting learning for many of the Te Kōtahitanga school communities. Often this has been the beginning of new and more collaborative relations with the Māori community.

At the hui Whakarewa, the narratives from Phase 1 and a repositioning exercise focus teachers on the Goal of raising Māori students' achievement. As a result of engaging with the experiences of Māori students from the narratives, as well as the experiences of others with whom Māori students were engaged, many teachers at these wānanga have experienced the cognitive and cultural dissonance necessary for theoretical re-positioning and for change to begin. For others, who may have more entrenched personal beliefs about Māori students'

learning and achievement, the impetus to change is much more challenging and change occurs much more slowly and with the need for much more facilitator and collegial support.

The individual, in-class programme in their respective schools that follows these wānanga, that includes observations, feedback, co-construction and shadow coaching, provides all teachers with an impetus to continue building on the knowledge they have acquired from the initial hui. The importance of the in-class professional development is that it is individually focused and is informed by the teachers' own evidence. To begin with, the evidence comes from teachers' observations carried out by the facilitators but increasingly teachers are strongly encouraged to bring their own student evidence to these Te Kōtahitanga professional learning conversations as well. Examples of these conversations between teachers and facilitators can be found in Chapter 7.

A third type of wānanga that have emerged as part of the professional development offered at this level have been in-school group wānanga around specifically identified pedagogical, curriculum knowledge or assessment activities such as using asTTle. Again many of these sessions have flowed down from the first to the third order of implementation, for example when we found in schools that many teachers used assessments for summative purposes only and were not using assessments for formative purposes, regional wānanga were held to assist facilitators with current information and useful ideas to apply in their practice. Many of these ideas in turn became part of school based, group focused wānanga.

Overseeing the Te Kōtahitanga process is the kuia whakaruruhau group. This group of elders is our on-going link back to Māori students and their families. Just as they provide a voice for the students we are working to support, they support us all, by ensuring cultural advice and safety. The attendance of cultural advisors throughout these wānanga has always ensured that sessions occur within appropriate Māori cultural contexts. Since it was vital that professional developers from both the first and second order models were informed and knowledgeable about the related teaching and learning theories and competent educational practitioners, all within the RPD team including these kuia whakaruruhau, but with the exception of some of the research team, have been practising teachers.

Principals' support

Given that the role of the principal was critical to the successful implementation of Te Kōtahitanga, separate as well as combined sessions were held for principals to explore issues around providing leadership to support the implementation of the project, the importance of data management, elements of professional leadership and the kind of support needed on return to school. These sessions were by and large facilitated by ex-principals with recognised expertise in the topic and/or members of the RPD as was appropriate. Increasingly we have seen the important benefits of working with principals in the whole group wānanga working alongside the rest of their team.

Resources Developed To Support The Te Kōtahitanga Professional Development

A number of resources have been developed to support the Te Kōtahitanga professional development and have been provided to schools over the two years of Te Kōtahitanga Phase 3.

1. The Te Kōtahitanga Professional Development Handbook commenced in 2003. This handbook contains the following modules.
 - Module 1: Te Whakapapa
 - Module 2: GEPRISP
 - Module 3A: Mahi Tahi, Working with the Effective Teaching Profile
 - Module 3B: Mahi Tahi, Working with the Observation Tool
 - Module 3C: Mahi Tahi, Working with Feedback, Co-construction and Shadow-coaching
 - Module 4: Hui Whakarewa, Running the first Te Kōtahitanga Professional Development Hui
 - Module 5: Mana Tangata , Roles and Responsibilities within your Te Kōtahitanga Team
 - Module 6: Data Gathering
 - Module 7: The Roles and Responsibilities of the Principal
 - Module 8: In school professional development and professional learning conversations (including the formative use of achievement data)
 - Module 9: Sustainability
 - Module 10: Readings

2. A series of DVDs is undergoing final editing with CWA New Media. They have been developed as a series of visual stories that illustrate the complex processes of change necessary to create schools as communities wherein previously minoritised Māori students are targeted for inclusion into the benefits of mainstream education. These stories illustrate the process of change that is fundamental to reforming education so as to include Māori students into the benefits of mainstream education, on their own terms. The stories emphasise and exemplify many points about Māori aspirations for self-determination within non-dominating relations of interdependence as being a means of reforming education.

DVDs have been developed to illustrate two themes, these being:

 1. Te Kōtahitanga processes, procedures and outcomes
 2. Case studies of effective Te Kōtahitanga Teachers (6-8 mins long and 25-30 min long).

3. A series of power point presentations have been developed to be used by facilitators to assist with their professional development sessions in their schools. These include:
 - Introduction to Te Kōtahitanga
 - The Narratives of Experience
 - Review of the Narratives
 - GEPRISP
 - The Effective Teaching profile
 - The Results of the Professional Development
 - Co-operative Learning Strategies

4. A Smart presentation covering all aspects of the initial Te Kōtahitanga professional development that has the potential to use power point material and video clips in an interactive way has also been developed by CWA New Media.

5. The Narratives of Experience have been further edited and published by Huia Publishers both for use in Te Kōtahitanga and for the general public.

6. A computer programme has been developed on CD Rom by CBA Ltd. This programme enables facilitators to input observation data, to analyse the observation data and then present outcome data for both individual and cohorts of teachers in graph form. This programme has provided facilitators with a means by which they can give specific, almost instantaneous, graphic feedback to individual teachers.
7. Three tools have also been developed to assist facilitators in their support of teachers by providing them with a means to give specific evidence based feedback. These tools are the Te Kōtahitanga Teacher Participation Survey (Appendix C), the Te Kōtahitanga Observation Tool (Appendix A) and the Taped Feedback/Co-construction Sessions, Analysis Tool (Appendix B).
8. Finally a Te Kōtahitanga brand has been developed to encapsulate the collaborative bicultural nature of Te Kōtahitanga as a working model. This was developed in consultation with the kuia whakaruruhau and then painted by the artist Donn Ratana. The components within this model are described below.

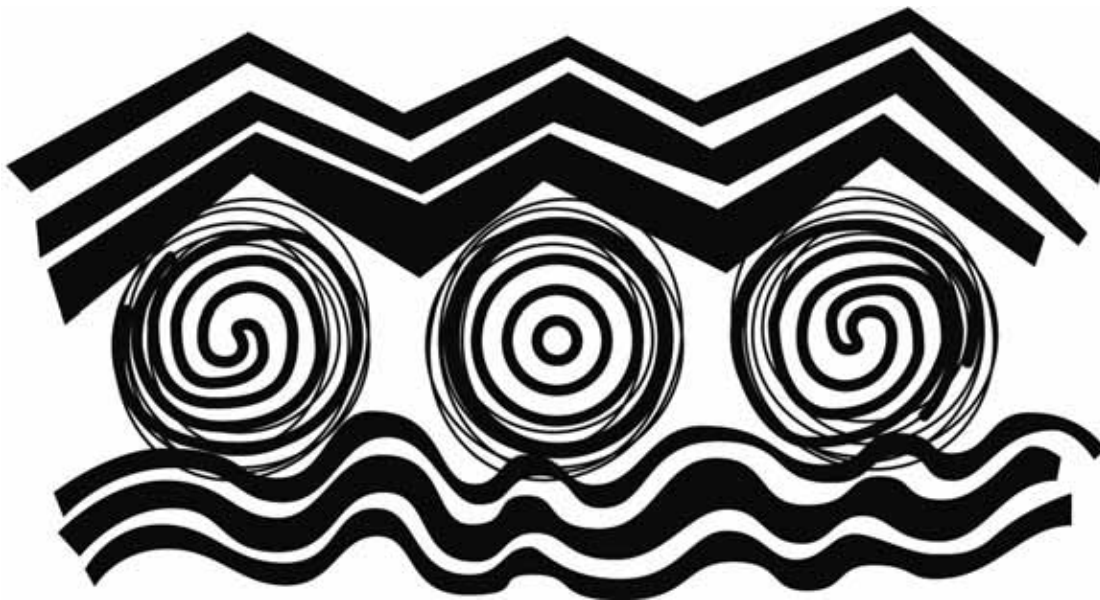


Figure 2.2: Te Kōtahitanga

The wavy lines at the base of the model come from the New Zealand Ministry of Education's logo where they represent the waterways of our island nation and the life blood of Aotearoa New Zealand. In this model they show the Ministry's funding and support to the project. The zig zag lines at the top come from the Māori symbol for 'niho taniwha' or teeth of the taniwha. 'Niho taniwha' make metaphoric references to relationships, guardianship and leadership. The zig zag lines in this model represent the role of the University of Waikato and the participation of researchers from this institution who worked in partnership with researchers from the MOE, GSE, Poutama Pounamu research centre.

The symbol of concentric circles in the centre represents Māori students and their families and their central place in this project. The innermost circle represents the students themselves within their whānau (family, second circle), their hapū (sub-tribe, third circle), their iwi (tribe, fourth circle) and their culture provided by the remaining overlay of circles. On either side is a

double spiral. The centre of the double spiral is understood to represent the interconnectedness of passive and active elements from whence change can be generated. The double spiral to the left represents Māori educators, while the double spiral to the right represents non-Māori educators. Reading from left to right it can also be noted that this research was by Māori, for Māori and for non-Māori. Raising Māori students' achievement is seen to be inextricably interconnected with the creation of culturally appropriate and responsive learning contexts. Graphically the waves and the niho taniwha placed on either side of the learning contexts suggest that research informs practice and practice informs research, and that this process is iterative and ongoing.

Project Structure:

The following tables use the GEPRISP model to illustrate the structure of the project in terms of the tasks needing to be carried out, the evidence that will be generated, the source of this evidence, the purpose for this evidence, how often it is collected and by whom.

Such a structure clearly identifies in the last column, the ongoing iterative nature of the project when there are interrelated roles for the school and the research/professional development team, the aim being that the school will eventually be able to take over most if not all of these functions so as to ensure sustainability.

Table 2.2 GEPRISP Implementation and in-school evidence: Tasks, Evidence and Methods 2004/2005

TASKS		EVIDENCE				
Task	Purpose	Evidence	Source	Purpose S=summative F=formative	How often is it collected?	Who collects it?
G Goal setting	To improve Māori student participation	Attendance	Schools-SMS/registers	Research team (s) FB, Co-con mtgs (f) School planning (f)	Term by term	School/Research team
		Absenteeism	Schools-SMS/registers		Term by term	School/Research team
		Suspensions	Schools/MOE		Term by term	School/Research team
		Stand-downs	Schools/MOE		Term by term	School/Research team
		Exemptions	Schools/MOE		Term by term	School/Research team
		Retention	Schools- SMS		Annually	School/Research team
		Work completion	Observation tool		FB/Co-con mtg (f) Research team (s)	Term by term
	Student engagement	Observation tool	FB/Co-con mtg (f) Research team (s)	Term by term	Facilitation team	
	To improve Māori student achievement	E.S.A	Sample of schools All year 9 and 10	Research team (f,s)	2 x year	Research team
		asTTle	All schools, reading and numeracy	In-school and Research team (f,s)	2 x year for Research team, may be more often in schools	Schools/Research team
in-class/school testing		Teachers, Dept, School	FB, Co-con Mtgs (f)	Term by term	Teacher/Facilitation team	
on-going evidence of learning conversations		Individual teacher data, Obs tool	FB, Co-con Mtgs (f)	Term by term	Facilitation team	
E Students' experiences	To improve Māori student experiences	Interviews	Year 9 and 10 students- sample from classes of effective teachers	Research team (s)	Annually	Research team
		Questionnaires/Surveys(?) Community Portfolios	Year 9 and 10 students and their families		Ongoing	Research team
P Teacher positioning	To shift teacher discursive positioning	Shift to discursive interactions	Observation tool- WIG diagrams	FB/Co-con Mtgs (f) Research team (s)	Term by term	Facilitation team
		Reporting	Surveys/Interviews	(f)	Annual	Research Team
		FB/Co-con tapes of professional learning conversations	20% sample of FB & Co-con mtgs	(f)	Term by term	Facilitation team Research team
	To change teacher in-class behaviour	Teacher relations/physical positioning	Observation tool	FB/Co-con Mtgs (f)	Term by term	Facilitation team Research team (s)
Cognitive level of lesson		Observation tool	FB/Co-con Mtgs (f)	Term by term	Facilitation team Research team (s)	
R Teacher-student relationships	To improve in-class relationships	Shifts in in-class relations	Observation tool- side 2	FB/Co-con Mtgs (f) Research team (s)	Term by term	Facilitation team
I Teacher-student interactions	To move in-class interactions from traditional to discursive	Shift from traditional to discursive teaching	Observation tool	FB/Co-con Mtgs (f) Research team (s)	Term by term	Facilitation team
		Shift from whole class- individual-group	Observation tool	FB/Co-con Mtgs (f) Research team (s)	Term by term	Facilitation team
S Teaching strategies	To shift type and number of strategies used	Shift in range and type of strategies used	Observation tool	FB/Co-con Mtgs (f) Research team (s)	Term by term	Facilitation team
P Teacher planning	To improve overall approach to planning	Documents analysis	School plans	Principals hui	Term by term	Principal, facilitator

Note: The aim of the project is that the schools leadership (Principals, facilitator) take over the gathering of evidence for summative and formative purposes. Table 2.2 illustrates the data gathering exercises that were planned in order to cover the GEPRISP model. In subsequent chapters of this report, modifications were made and noted where appropriate.

PART B: Demographic Information And Descriptives Of Participating Schools, Facilitators And Teachers

Twelve schools participated in Te Kōtahitanga Phase 3: Whānaungatanga. Data were gathered across the 12 schools from participating teachers, their students (particularly Māori students), facilitators, and principals.

Table 2.3 below shows the demographic profile of the 12 schools, all of which were mainstream secondary schools, with decile rankings ranging from 2 to 8. Eleven of the schools were co-educational. Student numbers in 2004 (the first year of implementation of the professional development) ranged from just over 280 to more than 2,300, with nine schools indicating a school population of over 900 students. In 2004 five of these schools had a Māori student population of less than 30% and another five schools had a Māori student population in the 40-55% range. The two remaining schools had Māori student populations 66% and 82% in 2004.

Table 2.3 also indicates the rural or urban location of schools. Schools 1-6 are located in the Waikato/Bay of Plenty area, schools 7-9 are in the Auckland area while schools 10-12 are Northland based.

Table 2.3: Demographic Information for Participating Schools in Te Kōtahitanga Phase 3

School	Decile	Description	Location	Gender	Roll ⁵ 2004	Percent Māori	Roll 2005	Percent Māori
1	6	Years 9-13	rural	co-educational	1020	27%	1012	29%
2	2	Years 9-13	rural	co-educational	283	46%	282	49%
3	4	Years 9-13	urban	co-educational	1056	27%	1058	29%
4	4	Years 9-13	semi-rural	co-educational	987	44%	955	45%
5	3	Years 9-13	urban	co-educational	1376	55%	1221	55%
6	5	Years 9-13	urban	single-sex	1029	41%	977	44%
7	5	Years 9-13	urban	co-educational	2310	20%	2359	19%
8	4	Years 9-13	urban	co-educational	1375	22%	1374	23%
9	2	Years 9-13	urban	co-educational	1420	41%	1372	41%
10	2	Years 9-13	rural	co-educational	482	82%	471	81%
10	2	Years 7-13	rural	co-educational	485	66%	457	65%
12	8	Years 7-13	urban	co-educational	1217	20%	1287	22%

Participation of facilitators

The research and professional development team worked with facilitation teams from the 12 schools. Facilitation teams include the principal and all facilitators.

⁵ Roll data are taken from the July Return as at 1 July 2004 (as contained in Ministry of Education RS43 Annual Return of Students at Secondary Schools at 1 July 2005) except for roll data for school 4, which is taken from the March Return as at 1 March 2005.

Throughout each year (late 2003 to the end of 2005), facilitation teams from each of these schools were provided with professional development opportunities with the RPD team at a series of national (comprising all facilitation teams from all 12 schools) and regional wānanga (comprising facilitation teams from within a specified region). Facilitation teams then worked in their schools with support provided by regional co-ordinators (two members of the RPD team) who visited schools on a regular, term-by-term basis. They also had access to the RPD team who visited schools on a needs-determined basis. In the first year of Te Kōtahitanga Phase 3, the RPD team expected that in each of the 12 schools they would be supporting school teams of about three people (a total of approximately 36 people), and that each team would work with a cohort of up to 30 teachers. In the second year of Te Kōtahitanga Phase 3, we expected the numbers of facilitators would increase slightly as a second cohort of up to 30 teachers, in schools where staff numbers required, was able to be introduced to the programme.

Table 2.4 below indicates the number of facilitators connected to Te Kōtahitanga in November of 2004 and their combined time allocation. In 2004 time allocation ranged from 1.5 to 2.2 and was shared amongst 3-6 people in each school.

Table 2.4: Numbers and Time Allocation of Te Kōtahitanga Facilitators

School Codes	Facilitators	Time shared (FTE)
1	5	1.8
2	3	1.5
3	3	1.6
4	5	2.2
5	4	2.3
6	4	2.0
7	6	2.1
8	6	1.9
9	3	1.9
10	3	1.8
10	3	1.7
12	3	2.0

Participation of Teachers

The participating teachers⁶ are grouped into two cohorts⁷. Cohort One refers to teachers who had baseline observations in term four of 2003 and have continued being observed in 2004 and 2005. Cohort Two refers to teachers who had baseline observations in term 4 of 2004 and continued to be observed in 2005.

There were 422 active teacher participants in Te Kōtahitanga by the end of 2005. However, it is difficult to determine a static number for participation due to the dynamic nature of secondary schools and the voluntary nature of this project. For the purposes of this report an active participant is a teacher in Cohort One who has completed a minimum of six out of nine

⁶ In this report we have not attempted to distinguish effective from non-effective teachers on the basis of implementation of the ETP. We anticipate including that analyses in a later technical report and publication.

⁷ Each Cohort consists of different teachers; each individual teacher belongs to only one cohort.

possible observations and for Cohort Two has completed a minimum of three out of five possible observations. This restriction excludes those teachers whose participation has been sporadic. Our criteria have been defined by participation in observations, as this represents a crucial element in implementing the ETP.

A total of 595 volunteer teachers have participated in the observations and the induction professional development hui as part of Te Kōtahitanga at some point since October 2003; 348 participated in Cohort One and 247 participated in Cohort Two. By the end of 2005 those actively participating in Cohort One numbered 199 and those in Cohort Two numbered 223, a total of 422.

Table 2.5 presents the attrition figures for each cohort by reason and year of departure from the professional development. The drop off in numbers over the two years, particularly for Cohort One, can be accounted for by teachers resigning from the school (51), teachers withdrawing from the project (42) and teachers taking leave of two or more consecutive terms within a year limiting their ability to participate (23). The number of teachers who withdrew from Te Kōtahitanga represents 7% of the original 595 teachers who began the professional development. However as one school in 2005 made up 40% of the total withdrawal percentage that is, 2.8% of withdrawees, the total percentage of withdrawees from the other 11 schools is 4.2%, that is some 25 teachers from almost 600.⁸ From this data it can be concluded that teacher withdrawal from the project through dissatisfaction is not a major problem. In addition, we know anecdotally, from conversations with principals, that teachers resigning from schools have used their participation in Te Kōtahitanga to secure employment at other schools.

Table 2.5: Attrition figures for participation by cohort, year and reason

	Left school	Withdrew	On leave	<i>Sub total</i>	Total
Cohort 1 2004	9	5	5	19	
Cohort 1 2005	37	36	14	87	
Sub totals	46	41	19		106
Cohort 2 2005	5	1	4	10	
Totals	51	42	23		106

Teachers who are still involved in the professional development, but have not been counted as active participants number 57. Reasons for irregular observations include internal promotions leaving teachers with no target classes for observation and inadequate resourcing leaving facilitators to pick and choose those teachers to be observed.

Table 2.6 shows the total number of teaching staff (including principals, deputy principals, heads of departments, and permanent teaching staff) and the number of active participating teachers involved in the project in the 12 participating schools for each year of implementation.

⁸ It is worth noting that most of the withdrawees from the former mentioned school voluntarily rejoined the project in 2006.

Table 2.6: Participation figures by cohort and school for Te Kōtahitanga Phase 3⁹

School	Staff 2004	Cohort 1 active participants 2004	Percentage of Teachers involved in Project 2004	Staff 2005	Cohort 1 active participants 2005	Cohort 2 active participants 2005	Percentage of Teachers involved in Project 2005
1	64	23	36%	78	21	28	63%
2	22	21	95%	25	10	6	64%
3	75	25	33%	60	20	17	62%
4	68	20	29%	70	15	10	37%
5	56	22	39%	78	10	31	54%
6	75	27	36%	68	14	20	50%
7	136	30	22%	146	21	30	35%
8	79	24	30%	73	16	28	60%
9	83	23	28%	83	21	18	47%
10	47	26	55%	32	10	4	44%
11	32	25	78%	48	20	6	54%
12	54	30	56%	66	20	24	67%
Total	791	296	37%	827	199	223	51%

It is important to note for purposes of school-wide analysis that by the end of 2004, 37% of all teaching staff in the 12 schools was actively participating in Te Kōtahitanga. The inclusion of a second cohort of teachers in 2005, fluctuating staff numbers for schools and changing participation rates has led to an overall increase in participation across the 12 schools by the end of 2005, although schools 2, 10 and 11 experienced a decrease in teacher participation from 2004 to 2005. The 422 active participants from Cohort One and Two at the end of 2005 represents slightly over half of the total teaching staff in the 12 schools¹⁰.

Tables 2.7 to 2.10 below describe the active participants from Cohorts One and Two with reference to gender, ethnicity, main subject area and number of years teaching experience.

Table 2.7: Participants by cohort and gender

Gender	Cohort One	Cohort Two
Male	73	71
Female	126	152
Total	199	223

⁹ Te Kōtahitanga schools are encouraged to bring 30 new teachers per year into the project.

¹⁰ The aim of Te Kōtahitanga is full participation of all year 9 and 10 teachers in each school that is participating in the project.

Table 2.8: Participants by cohort and ethnicity

Ethnicity	Cohort One	Cohort Two
Māori	28	28
NZ European/Pakeha and other European	140	158
Pacific	6	7
Asian	8	10
Other	1	13
Not stated	16	7
Total	199	223

Table 2.9: Participants by cohort and main subject area

Subject	Cohort One	Cohort Two
English	41	35
Maths	29	31
PE/Health	15	28
Science	28	30
Social Studies	23	15
Arts and performing arts	18	27
Business and Computers	7	10
Horticulture/Agriculture	1	1
Languages	1	5
Māori and Māori Medium	12	6
Geography/History		2
Special Needs/Careers/ ESOL	8	4
Technology (food/fabric/wood)	10	21
Not stated	5	8
Total	199	223

Table 2.10: Participants by cohort and number of years teaching experience

Years teaching	Cohort One	Cohort Two
0-5	52	82
6-10	32	36
10-15	21	20
16-20	21	21
21-25	21	21
26+	30	21
Not stated	22	22
Total	199	223

Summary

This chapter has outlined the means used in Phase 3 of Te Kōtahitanga for the implementation of the Effective Teaching Profile (ETP) in the classrooms of 422 active teacher participants in 12 mainstream secondary schools.

The ETP is implemented by way of a series of activities including an initial induction hui for project teachers which is followed by an ongoing term-by-term cycle of observations, feedback sessions, co-construction meetings and shadow-coaching sessions. Other activities that support this cycle such as new knowledge, new strategies and assessment processes are also introduced on a “needs be” basis.

This chapter then detailed who was involved in providing this professional development process in 2003 to 2005, and detailed the development of the school-based facilitation teams and the emerging role of the regional facilitators.

The chapter then posed as an hypothesis what the professional development implementation process might look like in future phases, particularly identifying the expansion of the role of the regional coordinator to one of professional developer for a cluster of schools.

The resources that have been developed over the past two years to support the in-school implementation of the Effective Teaching Profile are then detailed alongside the project structure and data gathering focus.

This chapter concludes with a detailed examination of the demographic make-up of the teachers, facilitators and schools involved in the project.

Chapter 3: Research Methodology

This section of the report focuses on the research methodology for Te Kōtahitanga by outlining the framework used for the research along with associated considerations. This section is divided into three subsections: qualitative data, quantitative data, and evaluation evidence. Under qualitative data we will report the results of student and teacher interviews. For quantitative data we will report the results of the observation tool used by facilitators when they observed project teachers, student performance data, and student achievement data. The evaluation evidence consists of tape-recorded feedback sessions and co-construction meetings and a survey of participants' perceptions. Finally, all the data will be consolidated for an integrated interpretation.

The research questions we attempted to answer through our study were:

1. Is there a relationship between the implementation of the Effective Teaching Profile (ETP) by teachers and improved student outcomes?
2. How well are Te Kōtahitanga teachers implementing the change from current practices to new practices?

Methodological Framework

Developing a methodological framework¹¹ for the research undertaken in Phase 3 of Te Kōtahitanga helped provide a lens for deciding what data to collect from whom and making sense of and understanding the data collected in the field. Methodologically this framework is under the umbrella of kaupapa Māori educational research (Bishop & Glynn, 1999; Bishop, 2005).

This umbrella provided guidance for how decisions were made, by whom, and when. Under this umbrella researchers and research participants were able to critically reflect on their positioning relative to five issues of power (initiation, benefits, representation, legitimation, and accountability) and evaluate power relations before and during the research study by reference to table 3.1 below.

¹¹ This is not a predictive model (i.e., what elements of the Effective Teaching Profile (ETP) as contained in the Observation Tool are predictors of Maori student achievement). That model will be the basis of research to be reported at a later date.

Table 3.1. Māori people’s concerns about research focuses on the locus of power over issues of initiation, benefits, representation, and accountability being with the researcher.

Initiation	This concern focuses on how the research process begins, and whose concerns, interests and methods of approach determine/define the outcomes. Traditional research has developed methods of initiating research and accessing research participants that are located within the cultural concerns, preferences and practices of the Western world.
Benefits	The question of benefits concerns who will directly gain from the research, and will anyone actually be disadvantaged. Māori people are increasingly becoming concerned about this important political aspect because traditional research has established an approach to research where the benefits of the research serve to advance the interests, concerns and methods of the researcher and locates the benefits of the research at least in part with the researcher, others being of lesser concern.
Representation	Whose research constitutes an adequate depiction of social reality? Traditional research has misrepresented, that is simplified/conglomerated and commodified Māori knowledge for 'consumption' by the colonisers and denied the authenticity of Māori experiences and voice. Such research has displaced Māori lived experiences with the 'authoritative' voice of the 'expert' voiced in terms defined /determined by the 'expert'. Further, many misconstrued Māori cultural practices and meanings are now part of our everyday myths of Aotearoa/New Zealand, believed by Māori and non-Māori alike.
Legitimation	This issue concerns what authority we claim for our texts. Traditional research has undervalued and belittled Māori knowledge and learning practices and processes in order to enhance those of the colonisers, and adherents of neo-colonial paradigms. Such research has developed a social pathology research approach that has focused on the "inability" of Māori culture to cope with human problems, and proposed that Māori culture was inferior to that of the colonisers in human terms. Such practices have perpetuated an ideology of cultural superiority that precludes the development of power sharing processes, and the legitimation of diversity of cultural epistemologies and cosmologies.
Accountability	This concern questions researchers’ accountability. Who has control over the initiation, procedures, evaluations, text constructions and distribution of newly defined knowledge. Traditional research has claimed that all people have an inalienable right to utilise all knowledge, and maintained that research findings be expressed in term of criteria located within the epistemological framework of traditional research, thus creating locales of accountability that are situated within Western cultural frameworks.

(From Bishop, 2005)

Kaupapa Māori Research

Traditionally research has been more disruptive than beneficial to Māori life, (Smith, 1999). In response an indigenous approach to research has emerged in Aotearoa/New Zealand. This approach, termed kaupapa Māori research, is challenging the dominance of the Pākehā world-view in research through the revitalization of Māori cultural aspirations, preferences, and practices as a philosophical and productive educational stance and a resistance to the hegemony of the dominant discourse. In effect, kaupapa Māori presupposes positions that are committed to a critical analysis of the existing unequal power relations within our society, those structures that work to oppress Māori people and perpetuate educational disparities among other indicators. These positions include those that reject hegemonic belittling, “Māori can’t cope” discourses, together with a commitment to the power of conscientization and politicization through struggle for wider community and social freedoms (Smith, 1997).

Kaupapa Māori research challenges the locus of power and control over the research issues of initiation, benefits, representation, legitimation, and accountability as outlined above in table 3.1, being located in another cultural frame of reference/world-view. Kaupapa Māori challenges the dominance of traditional, individualistic research which primarily, at least in its present form, benefits the researchers and their agenda. In contrast, kaupapa Māori research is collectivistic and is oriented toward benefiting all the research participants and their collectively determined agendas. It does so by defining, acknowledging and responding to Māori aspirations for research, while developing and implementing Māori theoretical and methodological preferences and practices for research in ways that are accountable to those being researched.

Investigating the Hypothesis

Te Kōtahitanga consists of two parts, research and professional development that interact in an ongoing, iterative manner; one informing the other. As indicated above, the initial research study identified the theoretical framework for the creation of a Culturally Responsive Pedagogy of Relations. The professional development side of Te Kōtahitanga then sought to operationalize the Culturally Responsive Pedagogy of Relations as an intervention in the traditional pattern of classroom relationships, interactions and Māori student outcomes. The Effective Teaching Profile (ETP) represents this operationalization and identifies what a Culturally Responsive Pedagogy of Relations might look like in the classroom. As identified above, the research then sought to identify the outcomes of this intervention in terms of the impact on classroom relations and interactions, teacher and student experiences, feedback sessions and co-construction meetings and student performance and achievement data. The hypothesis from such a situation is that there is a relationship between the implementation of the Effective Teaching Profile and improvements in Māori students educational performance and achievement. The following diagram illustrates this methodological framework.

Te Kōtahitanga Methodological Framework

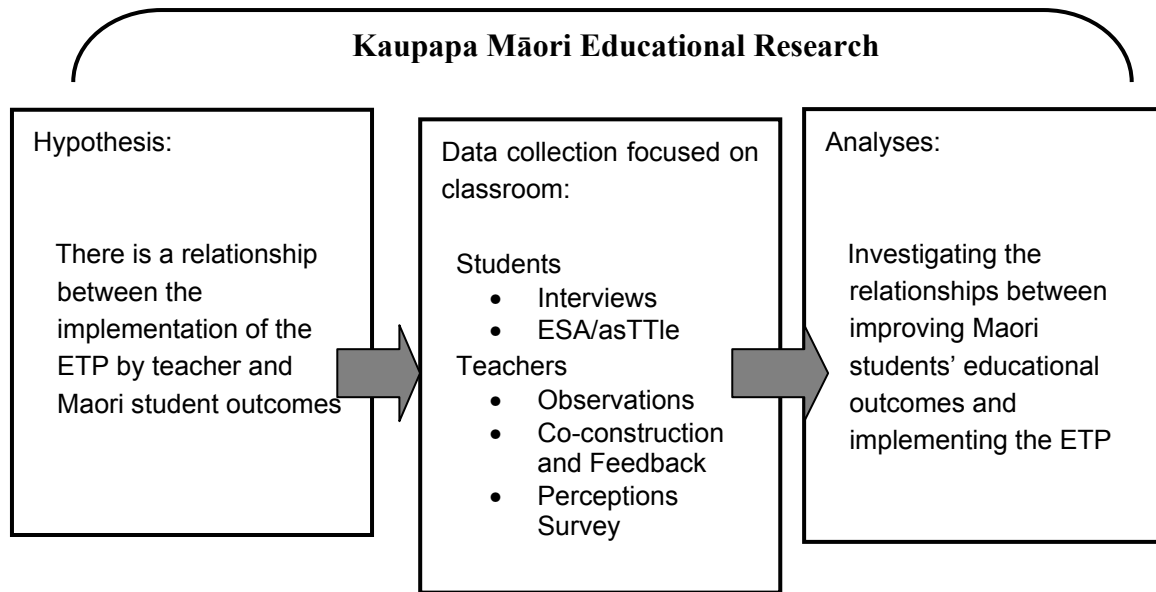


Figure 3.1: Methodological Framework for Research Conducted in Phase 3 of Te Kōtahitanga

Mixed Methods Approach

Due to the complex nature of classroom relationships, interactions and student outcomes, multiple indicators were required to measure these factors. In addition, we could not rely on single mean proficiency levels alone (Kim & Sunderman, 2005), therefore we used a mixed methods approach for this research, employing both qualitative and quantitative methods.

Te Kōtahitanga is a complex and dynamic research and professional development project. As a result both qualitative and quantitative methods were required to understand how the project principles, particularly the Effective Teaching Profile (ETP), were being integrated by project teachers into their classrooms and to what extent these teachers were becoming agentic and positively affecting Māori students through their relationships and interactions.

We utilized a “triangulation mixed methods design” (Creswell, 2005, p. 514) for this research, simultaneously collecting qualitative and quantitative data, analysing the data separately and then collectively, and finally, interpreting the integrated data to address the research hypothesis. This process provided a triangulation of data sources and allowed for one type of data to inform the other, resulting in a picture of the process of implementing Te Kōtahitanga into the classrooms of project teachers in the 12 participating schools.

Phase 3 of Te Kōtahitanga focused on the classroom as the unit of change. Therefore, we collected data from the primary participants in the classroom, students and teachers. Detailed descriptions of methods of data collection and analyses are reported in subsequent chapters as we report on each data source.

Evaluating the Change

In addition to investigating the hypothesis, we wanted to evaluate how well the 12 project schools were implementing the change from current practices to new practices. We also wanted to determine the fidelity of the use of the new practices (Hall & Hord, 2006).

First, by evaluating tape-recorded feedback sessions and co-construction meetings we were able to find out how these conversations of facilitators and teachers reflected the principles of Te Kōtahitanga across ten domains:

1. Challenging or affirming teacher's current assumptions and practices in relation to the Effective Teaching Profile (ETP).
2. Focusing on raising Māori students' achievement.
3. Rejecting or responding to deficit theorizing.
4. Engaging in agentic discourses.
5. Collaborating and sharing expertise relative to contributing to a critical examination of recent in-class practices.
6. Reflectively linking classroom experiences and evidence to more effective in-school practices.
7. Focusing on student learning by using recent evidence to inform next teaching steps.
8. Developing expectations, skills and knowledge and changing and affirming practices.
9. Sharing values and expectations about learning and achievement.
10. Engaging in teaching that is collaborative and de-privatized.

Second, by analyzing the responses to the survey of participants' perceptions, (using Guskey's 2002) framework for evaluating professional development initiatives) we were able to determine at which level the project was at in this hierarchical, cumulative framework.

1. Participants' reactions to professional development activities.
2. Participants' learning.
3. School support and change.
4. Participants' use of new knowledge and skills.
5. Outcomes for students of Te Kōtahitanga teachers.

This research design contained the rigor required to establish validity and create trustworthiness. We did that by having a theoretical framework and methodology that were consistent. We collected two types of data, qualitative and quantitative. We analyzed those data by multiple methods using multiple researchers. Based on this research design we collected evidence that supported the purpose of the study, to learn about the relationship between the implementation of the ETP by teachers involved in the project and improvements in outcomes of their Māori students. To illustrate this relationship we used the graph proposed by Elmore, (2006) to measure improvement over time of both teachers' implementation of the ETP and Māori student achievement. The graph illustrates teacher practices and Māori student achievement on the vertical axis and time on the horizontal axis. The results of this study are shown on such a graph in chapter 10. Finally, the evaluation evidence provided both an answer to our question about how well teachers are implementing the 'change' from current to new practices, and a theoretical foundation for investigating sustainability of the project in the 12 participating schools during the next phase of Te Kōtahitanga.

Chapter 4: So what happened in the classrooms? Results from the In-class observation tool.

Introduction

This chapter presents the results of the formal in-class observations conducted in the classrooms of 12 schools in 2004 and 2005. These observations focused on the implementation of the Effective Teaching Profile in the classrooms of participant teachers. The observation tool is detailed in Chapter 2. The observation tool¹² was developed to provide formative data for teachers to reflect upon with their in-school facilitation team member in order to identify the progress they are making over time with their implementing of the Effective Teaching Profile (ETP) in their classrooms. The observation tool is the first part of the term-by-term, in-class cycle of professional development which consists of an observation, feedback session, a co-construction meeting and shadow coaching (also outlined in Chapter 2).

The observation tool provides teachers with data about how effective they are at implementing the ETP. These data include classroom relationships, classroom interactions, teachers' proximity to students and the cognitive level of the class (as an indicator of expectations). Outcome data pertaining to a sample of Māori students' on-task engagement and work completion are also provided so that the teachers can critically reflect upon how they might change their teaching practice in terms of relationships, interactions, physical location and cognitive level of lessons in order to see improvements in on-task engagement and work completion. These outcome measures for Māori students are also used to predict what this evidence might look like in a term's time by setting individual goals for that period.

The results from the observation tool are presented in the following order;

- I. Shifts in classroom interactions**
 - a) Shifts from traditional to discursive interactions
 - b) Teacher use of discursive practice
 - c) Shifts between whole class, individual and group interactions
- II. Shifts in classroom relationships**
- III. Shifts in teacher and Māori student proximity**
- IV. Shifts in the cognitive level of the classes**
- V. Shifts in Māori students' academic engagement and work completion**

I) Shifts In Classroom Interactions

a) Shifts from traditional to discursive interactions

Figures 4.2 to 4.5 present graphs of the percentage of time that targeted interactions took place in the observed classrooms between the teacher and their students. These students may not be Māori students or target students in all cases. They were the students with whom the

¹² The research team is testing the observation tool for measurement reliability and validity (Morgan, Gliner, & Harmon, 2006) and will report on the results in a technical report. Informal reliability checks were conducted by team members regularly in the field to ensure the instrument was used in a reliable fashion.

teachers were interacting at the time of the specific observations. (Please see Appendix G for term-by-term shifts in teacher-student interactions.)

As explained in Chapter 2, teacher-student interactions are categorised in two ways. The first is concerned with interactions with different student groupings: whole class (W), individual students (I) or groups of students (G), i.e. more than two students at once but less than the whole class. The second category of teacher-student interactions is concerned with the type of pedagogic interactions that were observed to be taking place and are coded according to Table 4.1.

Table 4.1: Pedagogic interaction codes and their meanings

C	Co-construction	Effective teachers work as a learner with co-learners, negotiating learning contexts and content.
FFA+	Feed-forward academic positive	Effective teachers support student learning through the provision of appropriate academic feed-forward (e.g. prompting further thought on an issue).
FFA-	Feed-forward academic negative	
FBA+	Feedback academic positive	Effective teachers support student learning through the provision of appropriate feedback.
FBA-	Feedback academic negative	
P	Prior knowledge	Effective teachers support student learning through acknowledging and using their prior knowledge and experiences.
FFB+	Feed-forward behaviour positive	Effective teachers promote appropriate student behaviour.
FFB-	Feed-forward behaviour negative	
FBB+	Feedback behaviour positive	Effective teachers control students' behaviour positively.
FBB-	Feedback behaviour negative	
M	Monitoring	Effective teachers check if students know what is being taught, or what is being learnt, or being produced. Monitoring should occur in order to make sure the learners understand what they are supposed to be doing or what they have negotiated to do.
I	Instruction ¹³	Effective teachers transmit knowledge and instruct how to produce something or undertake a process efficiently.
O	Other	Any other activity that does not pertain to the actual teacher-student interaction such as preparing for the next lesson, talking to a messenger or cleaning the whiteboard.

¹³ Many of the concerns identified by M ōri students in the narratives of experience focused on there being far too much transmission of knowledge by teacher instruction. In contrast, the students suggested that while some instruction might well be necessary, giving instructions about the processes involved in learning activities would also be appreciated. In fact, what the students told us was that they wanted their teachers to use a range of teaching interactions, and not just focus on using instruction, monitoring and negative behavioural feedback.

In descending order, the codes from C to P represent more discursive style interactions, while FFB+ down to O represent more traditional interactions. “Other” includes all those activities that are not related to the teaching of the current lesson already stated on prior page. “Other” is categorised as a whole class interaction as these activities often affect the whole class in terms of limiting learning opportunities. Although “other” is not a traditional interaction as such, it has been included in the category as it often covers activities that the students in the original narratives of experiences claimed were reducing their potential for engaging in the lesson. It is significant that in all cases the category ‘other’ reduced as teachers became more discursive in their practice.

Upcoming Figures 4.1 to 4.3 present the baseline (observation 1), observation 4 and observation 8 for Cohort One (the teachers who commenced the project in late 2003). Figures 4.4 and 4.5 present the baseline (observation 1) and observation 4 for Cohort Two (the teachers who commenced the project in late 2004). Each bar on the graph illustrates the percentage of time teachers were engaged in particular interactions and the students (whole, individual or group) with whom the interactions were taking place.

Table 4.2 below presents the schedule of observations and the number of teachers who participated in each observation round for both Cohorts One and Two. As the number of participating teachers at observation five for Cohort One was not sufficient (not representative of all participating schools), subsequent data have not been included in this report for that observation.

Table 4.2: Observation schedule and teacher participation numbers¹⁴

	No. of observations Cohort One		No. of observations Cohort Two
Ob 1 Term 4 2003	330		
Ob 2 Term 1 2004	325		
Ob 3 Term 2 2004	304		
Ob 4 Term 3 2004	261		
Ob 5 Term 4 2004	102 (6 schools)	Ob 1 Term 4 2004	168 (10 schools)
Ob 6 Term 1 2005	209	Ob 2 Term 1 2005	235
Ob 7 Term 2 2005	186	Ob 3 Term 2 2005	210
Ob 8 Term 3 2005	180	Ob 4 Term 3 2005	208
Ob 9 Term 4 2005	135 (10 schools)	Ob 5 Term 4 2005	107 (10 schools)

The Cohort One baseline observations (Figure 4.1) were conducted in Term 4, 2003, prior to teachers’ attendance at the professional development induction wānanga. The most commonly observed interaction at this round of observations was instruction (38%) with the majority of this type of interaction occurring in a whole class setting (24%). The second most commonly observed interaction was monitoring (31%) with the majority of this type of interaction occurring with the whole class (13%) and individual students (10%). Together instruction and monitoring comprised 69%, i.e. just over two-thirds, of all observed interactions, illustrating

¹⁴ Observations were conducted four times a year. Numbers of observations recorded in this table vary from term to term because schools are dynamic places where often many factors combine to make it impossible to conduct observations as planned. This table in fact reflects the reality of life in 12 very busy, dynamic secondary schools.

the dominance of traditional, transmission interaction patterns. The next highest observed interaction was 'other' which accounted for 9% of all interactions. This was followed by feedback academic positive at 6% and feedback behaviour negative at 5%.

Overall, 86% of interactions observed fall into the traditional category while the remaining 14% were of the more discursive type. In addition, the division between observed whole class, individual students and group interactions were 55%, 31% and 14% respectively. This graph also shows that the two most commonly identified teacher-student interactions are the teacher giving instructions or transmitting knowledge to the students in a whole class setting (I) and then monitoring student uptake (M). To a limited extent, interactions such as academic feedback and feed-forward (FBA+ FFA+) were used. Interactions and engagements in co-construction with students comprised a smaller percentage of the observed classroom interactions.

The overall pattern of classroom interaction, however, is one dominated by instruction and monitoring; in short, transmission classrooms. Such a pattern has been described as traditional; the teacher is active, engaged in thinking and in transmission mode, whilst the students are passive, in receptive mode (Young, 1991). Problematically for Māori students, this is exactly the pattern of interaction the narratives of experience participants stated had little positive impact upon their learning. Rather, it left them learning little, copying a lot from whiteboards and getting increasingly frustrated, this was often manifested in poor behaviour in the classroom. Furthermore, it has been noted that in such classrooms, a high proportion of time is spent on disciplining individual students, particularly Māori boys (Ministry of Education, 2002). The behavioural feedback figure (FBB) being more negative than positive would tend to support this trend. This is an indication that teachers are spending more time controlling students' behaviour, than offering them positive behavioural feedback, or better still, positive academic feedback.

In addition, such traditional classrooms are characterised by the teacher having control over what constitutes the curriculum content and the pedagogic interactions. Again, the Māori students who provided the foundation narratives of experiences for this project were concerned about these practices because such circumstances do not allow for the creation of learning contexts wherein the Māori students' cultures can be legitimated. In effect, traditional classroom interaction patterns maintain the prominence of the dominant discourse in the classroom in the hands of the teacher as the agent of this discourse.

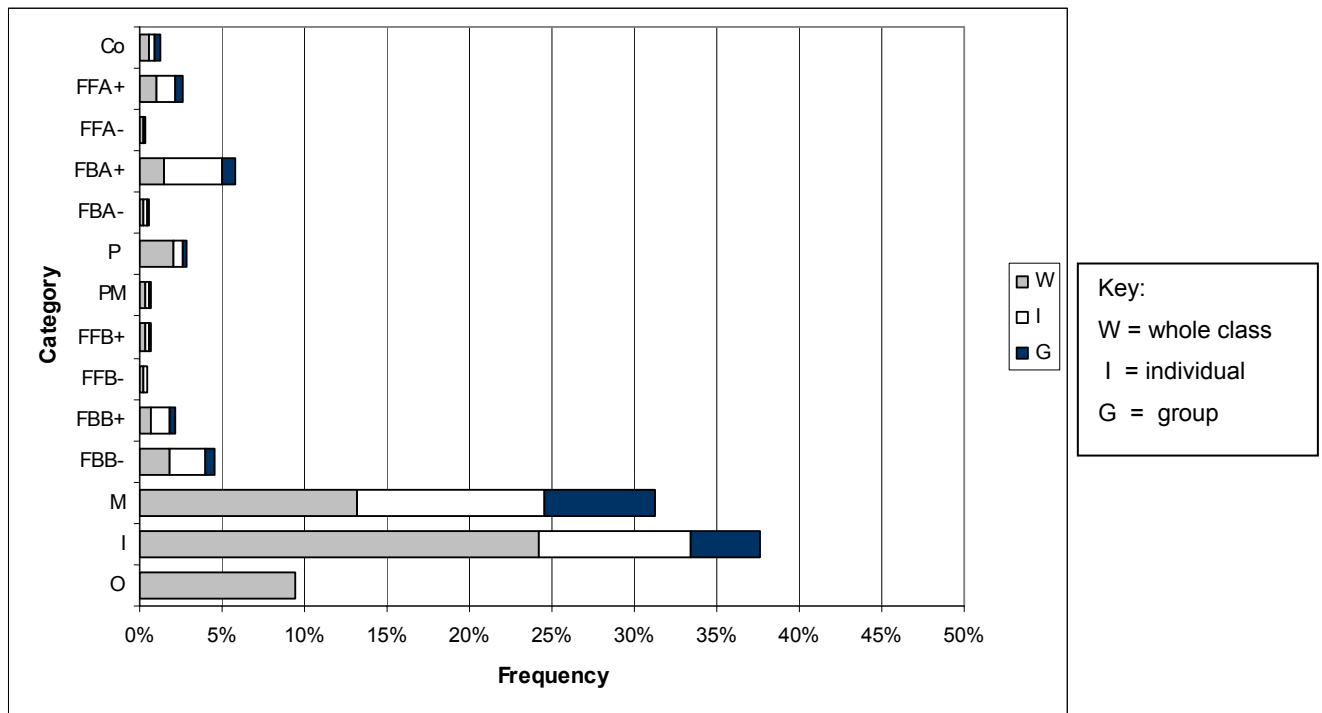


Figure 4.1:¹⁵ Cohort One: Baseline observation, Term 4 of 2003 (n=330)

Observation four for Cohort One was conducted in Term 3 of 2004 after 2 terms of the professional development cycle. Figure 4.2 shows a reduction in monitoring and instruction as compared to the baseline and although these two interactions are still the most frequent there is much more variation in interactions overall. Instruction at 23% was most commonly directed towards the whole class (two-thirds of the time). Monitoring at 22% was fairly evenly spread between whole class, individual and groups of students. Together instruction and monitoring comprised 45% of all observed interactions compared to 69% at baseline (see Figure 4.1). Feedback academic positive has increased to 19% (6% at baseline) with the majority of this type of interaction directed towards individual students. Feed forward academic positive also has increased to 13% compared to 3% at baseline. Prior knowledge and prior knowledge Māori accounted for 7% of observed interactions with a large proportion of these interactions occurring with the whole class. Co-construction has increased to 5% as compared to only 1% at baseline. “Other” interactions decreased from 9% at baseline to 5%. Similarly feedback behaviour negative reduced from 5% to 1% indicating an improvement in all students’ behaviour in class.

Overall the division between traditional and discursive interactions was 56% and 44% respectively compared to 86% and 14% respectively at baseline. This represents a 34% increase in discursive interactions from baseline. Additionally the division between whole class, individual student and group interactions was 39%, 36% and 26% respectively; a much more equal distribution compared to the baseline.

¹⁵ We have chosen not to include observation data from the intermediate observations in this report in the interest of space, but suffice it to say they show movement towards the pattern in Figure 3.3. The more specific term by term observation data is provided to each school so they can identify strengths and weaknesses for formative purposes.

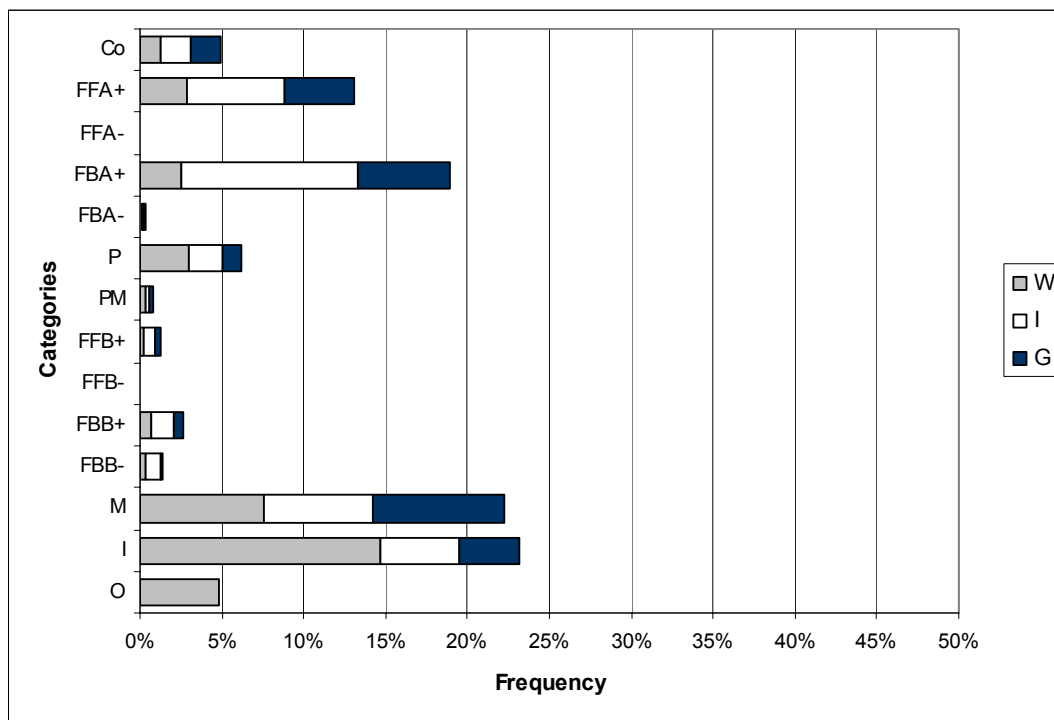


Figure 4.2: Cohort One: Observation 4, Term 3 of 2004 (n=261)

Observation 8 for Cohort One took place in Term 3 of 2005, almost two years after the baseline and one year after observation 4 (Figure 4.2). Figure 4.3 is reasonably similar to Figure 4.2 in the distribution of observed interactions. Instruction (24%) and monitoring (22%) were still the most common interactions comprising 46% of total observed interactions; followed by feedback academic positive (16%) and feed forward academic positive (14%). Co-construction at 7% continued to increase, while “other” at 3% continues to decrease.

Overall the division between traditional and discursive interactions was 57% and 43% respectively, which is almost the same as that recorded a year previously indicating that this new pattern of classroom interactions had become habitual for this cohort of teachers. Additionally the division between whole class, individual student and group interactions was 41%, 35% and 24% respectively, again very similar to the previous year and suggesting a new habitual pattern.

In particular, the graphs show a reduction in instruction and monitoring, (particularly in regard to individual students) occurred since the baseline observation late in 2003. There is a marked increase in positive academic feed-forward being provided to students and a clear increase in co-construction, particularly between the teacher and groups of students. The graphs also show an overall decline in the proportion of feedback academic and feedback behavioural interactions. This decline indicates an increasing sophistication of classroom interactions where students need less behavioural correction or direction from their teachers, and where teachers are in the position of being able to offer more in the way of feedback on student academic initiatives and suggestions as to where the students can extend their learning. The reduction in the proportion of whole class interactions and increase in group interactions indicates that the teachers are also changing the type of teaching and learning strategies they are using in the classroom.

This change in the overall pattern of in-class interactions from baseline illustrates the impact of the teachers having had time to assimilate the new learning into their thinking and practice and demonstrates the benefits of intensive support in the form of in-class feedback sessions, co-construction meetings, and feed-forward (shadow coaching) that was provided for the teachers by the professional development and research team following the observation. Similarly, the increase in co-construction interactions indicates that teachers became more familiar with this teaching interaction and were assisted to attempt this form of interaction by the shadow coaching and co-construction meetings held between teachers and members of the professional development and research team.

Overall, these data indicate that the teachers moved along the continuum from traditional to discursive teaching, from an initial pattern where the teacher was in control over most, if not all, of the variables involved in learning, to a situation where the teacher was working more with groups and individuals in such a way that they could respond to, and offer direction for students' learning and on towards situations where learning could be co-constructed.

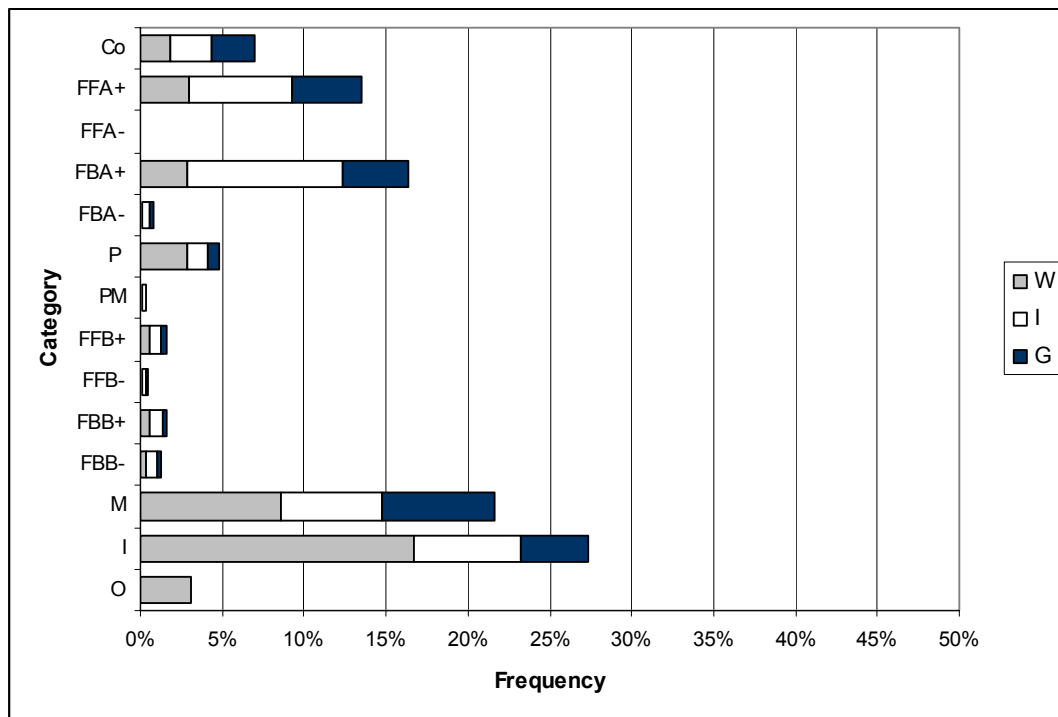


Figure 4.3: Cohort One: Observation 8, Term 3 of 2005 (n=180)

The Cohort Two baseline observations (Figure 4.4) were conducted in Term 4 of 2004, prior to this group of teachers receiving any formal professional development. The overall trends observed with Cohort Two were similar to those observed with Cohort One teachers, yet not quite as traditional. The interaction that dominated this round of observations was instruction at 32% with the majority of this type of interaction occurring with the whole class (21%). As with the baseline observation for Cohort One teachers, whole class instruction was the most observed type of interaction overall. This was closely followed by monitoring at 29% which occurred equally for whole class and individual students (10%). Together instruction and monitoring comprised 61% of all observed interactions. Feedback academic positive was

observed at 10%, largely with individual students (8%); followed by “other” at 8% and feed forward academic positive at 6%.

Overall 76% of interactions observed were of the traditional type (as compared to the Cohort One baseline at 86%) while the remaining 24% were of the discursive type. The division between whole class, individual student and group interactions were 48%, 37% and 15% respectively. These data indicate that while these teachers are less traditional in terms of interactions than the first cohort (and perhaps this is due to their proximity to Cohort One teachers) they remain focused on whole class and individuals, the preoccupation of traditional teachers.

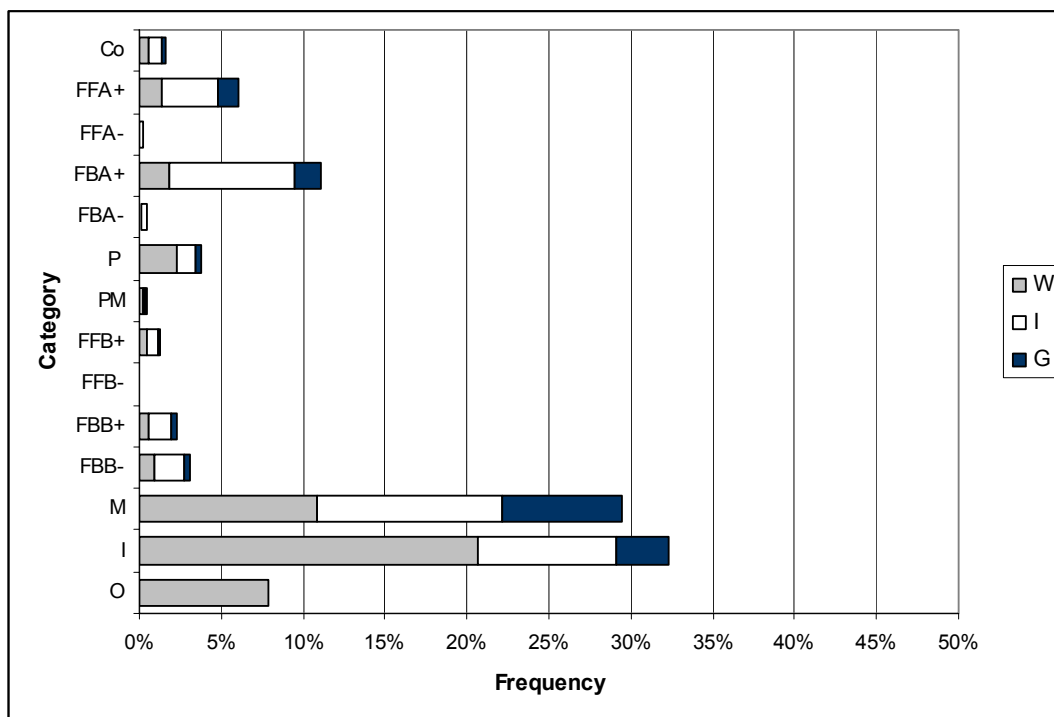


Figure 4.4: Cohort Two: Baseline observation, Term 4 of 2004 (n=168)

Observation 4 for Cohort Two took place in Term 3 of 2005 after two full terms of the professional development cycle. Figure 4.5 shows a reduction in monitoring and instruction and an increase in discursive interactions as compared to the baseline. Overall instruction was still the most commonly observed interaction at 27% with the majority of this interaction directed at the whole class. Monitoring at 22% has fairly evenly spread between whole class, individual and groups of students. Together instruction and monitoring comprised 49% of all observed interactions, as compared to 61% at baseline.

Feedback academic positive was observed at 18%, largely with individual students. This was followed by feed forward academic positive at 10% which was largely directed towards individual students, representing a 5% increase since baseline. Co-construction at 7% also represented a 5% increase since baseline. The use of students’ prior knowledge and prior knowledge Māori combined account for 7% of observed interactions. “Other” interactions decreased from 8% at baseline to 2% at this observation.

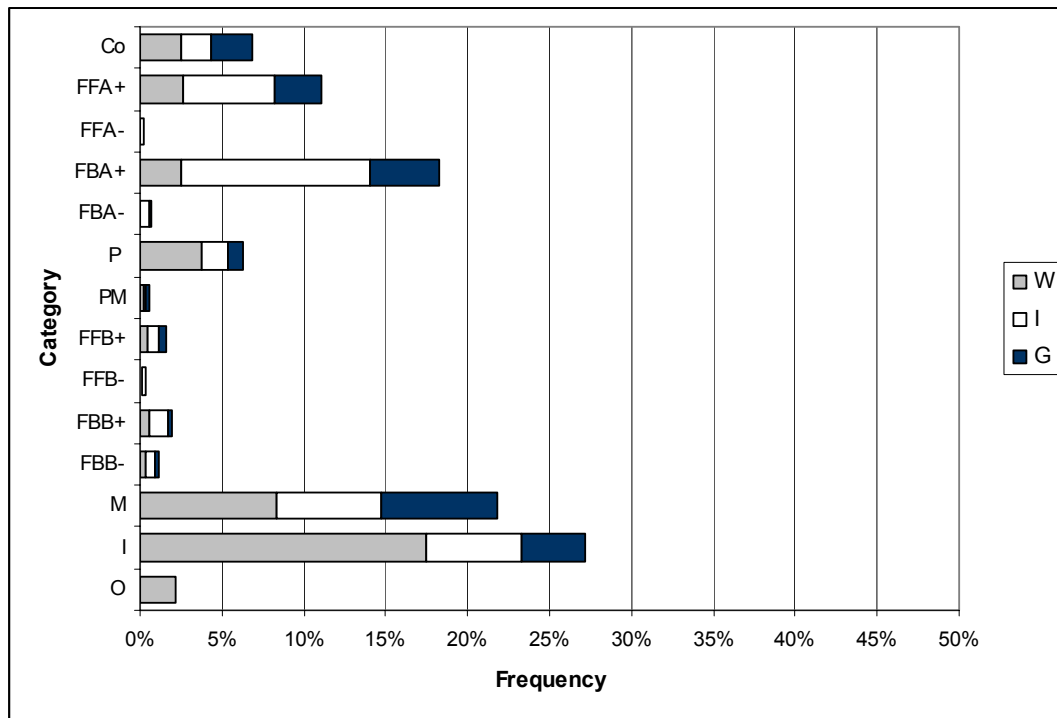


Figure 4.5: Cohort Two: Observation 4, Term 3 of 2005 (n=208)

Overall the division between traditional and discursive interactions was 56% and 44% respectively, which was exactly the same figure reached by Cohort One a year previously. This shift represents a 20% increase in discursive interactions from baseline for this cohort. Additionally the division between whole class, individual student and group interactions was 41%, 36% and 23% respectively. While we do not have enough evidence from Cohort Two to indicate if this new pattern of classroom interactions has become habitual, indications are that they are following the same trends as their colleagues in Cohort One.

Overall shift from traditional to discursive

Table 4.3 presents the average percentage of traditional and discursive interactions at each observation for Cohort One teachers. One interesting observation is that the ratio between traditional and discursive interactions in observation 2 (not shown in this report) for both Cohort One and Two was the same as their baselines. This is interesting because observation 2 was conducted after the teachers had participated in the 3 day professional development wānanga where they were told about traditional and discursive interactions in their classrooms. Despite this intensive professional development, there was no evidence of these new practices in the classrooms of either cohort. These results indicate that such professional development, the “show and tell” outside of the classroom, and indeed the school, is of little if any value in bringing about changes in teachers’ habitual teaching practices. The evidence presented here also indicates that in-class intensive support is necessary to bring about such changes; the 3 day induction hui serves a purpose, but it does not change behaviour.

Initially we were concerned that we could only provide teachers with one formal observation per term due to the sheer number of observations needing to be conducted by the facilitation teams alongside all the other tasks they have to carry out. However, these data indicate that a term-by-term formal observation is certainly adequate and our experiences with trialling two formal observations a term in Phase 2 (Bishop, Berryman, Powell & Teddy, 2005) were that

there was not enough time between observations for teachers to integrate their new learnings into their practice in a systematic manner when the observations are this close.

Also, the teachers' participation in co-construction meetings, and shadow-coaching alongside other 'new knowledge' type professional development sessions the school deems necessary, tends to provide the teacher with an adequate means of integrating the new approaches into their classroom. In addition, such practices spread over a number of years addresses the benefits that Fullan (2005) among others, sees for slow, determined interventions over time rather than short-term intensive bursts.

Table 4.3: Cohort One percentage term-by-term shifts from traditional to discursive interactions

	Traditional (%)	Discursive (%)
Observation 1	86	14
Observation 2	82	18
Observation 3	61	39
Observation 4	56	44
Observation 5	----	----
Observation 6	67	33
Observation 7	61	39
Observation 8	57	43
Observation 9	54	46

Table 4.4 presents the average percentage of traditional and discursive interactions at each observation for Cohort Two teachers. At observation one (baseline) interactions were largely traditional as was the case with Cohort One teachers. However given that Cohort Two teachers were slightly more discursive from the beginning, these results may indicate the diffusion of ideas from Cohort One teachers to their colleagues prior to their inclusion in the professional development. The overall pattern for Cohort Two teachers is similar to Cohort One, that is, successive, term-by-term observation data are increasingly discursive.

Table 4.4: Cohort Two percentage term-by-term shifts from traditional to discursive interactions

	Traditional (%)	Discursive (%)
Observation 1	76	24
Observation 2	69	31
Observation 3	65	35
Observation 4	56	44
Observation 5	55	45

b) Teacher use of discursive practice

The shifts in observed interactions were further analysed for statistical significance using the Statistical Package for the Social Sciences (SPSS). A paired samples *t*-test analysis was

conducted. Implementation ratings were compared employing a single group quasi-experimental design (Morgan, Leech, Gloeckner & Barrett, 2004). This design was chosen because the similarities between the baseline observations from these two cohorts, and those from Phase 1 and 2 teachers, constituted a form of contrast for comparison purposes.

The discursive percentage for each teacher who completed both observations being compared was converted into a rating using the following scale¹⁶:

- 0-19%=1 (limited shift)
- 20-39%=2 (developing)
- 40-59%=3 (satisfactory)
- 60-79%=4 (proficient)
- 80-100%=5 (excellent)

For this analysis five variables were created representing implementation ratings for each teacher¹⁷ at the following intervals: baseline observation¹⁸, term 1 observation 2005, term 2 observation 2005, term 3 observation 2005, and term 4 observation 2005. Data in Table 4.5 reports the outcome of a paired samples *t* test.

Table 4.5: Discursive practice of teachers (baseline to terms 1-4 observations 2005): Mean differences for Te Kōtahitanga teachers in Cohorts One and Two.

	n	M	SD	<i>t</i>	<i>p</i>	<i>d</i>
Baseline – Term 1 Observation 2005				-9.46	.000	.50
Baseline	437	1.65	0.86			
Observation	437	2.10	0.97			
Baseline – Term 2 Observation 2005				-12.7	.000	.81
Baseline	396	1.64	0.85			
Observation	396	2.37	0.94			
Baseline – Term 3 Observation 2005				-17.1	.000	1.04
Baseline	388	1.69	0.91			
Observation	388	2.71	1.04			
Baseline – Term 4 Observation 2005				-17.4	.000	1.26
Baseline	291	1.64	0.89			
Observation	291	2.79	1.03			

Note: *n*= The number of participants in the sample.; *M*= The mean is simply the average of all the items in a sample.; *SD*= The standard deviation is a measure of how spread out your data are.; *t*= The *t* statistic is a measure of how extreme a statistical estimate is.; *p*= A *p*-value is a measure of how much evidence we have against the null hypotheses.; *d*= Commonly called effect size, it is the difference between the means,

$M_1 - M_2$, divided by pooled standard deviation. The pooled standard deviation is found as the root mean square of the two standard deviations (Cohen, 1988).

¹⁶ This rating scale was developed by Te Kōtahitanga professional development experts in consultation with project facilitators

¹⁷ Because of the similarities, teachers from both Cohort One and Cohort Two were combined into one teacher group for this analysis.

¹⁸ The baseline observation was the first observation made of each teacher, whether it was before the initial training hui or after.

Table 4.5 shows that the discursive practice of teachers on average was significantly higher at observations in terms 2-4 than at the baseline observation. Further analysis of the discursive percentages revealed statistically significant differences between the baseline observation and: (a) term 1 observation $t(436)-9.46, p=.000$, (b) term 2 observation $t(395)-12.7, p=.000$, (c) term 3 observation $t(387)-17.1, p=.000$, and (d) term 4 observation $t(290)-17.4, p=.000$. The strength of these differences were: (a) typical for observation 2 ($d=.50$), (b) larger than typical for observation 3 ($d=.81$), and (c) much larger than typical for observations 4 ($d=1.04$) and 5 ($d=1.26$) (Cohen, 1988; Morgan et al. 2004).

The Te Kōtahitanga professional development emphasises implementation of all aspects of the ETP. Here we have focused on the shift from traditional to discursive interactions which represent one aspect of the data collected from the observation tool in order to test the statistical significance of the shifts occurring. The results further revealed that overall, project teachers are making significant shifts in their teaching practices from a situation where traditional interactions are dominant to one where there is a balance between traditional and discursive interactions. These results also revealed that these shifts got stronger over the school year, based on a comparison with a baseline observation. The shift getting stronger over time indicates that teachers increasingly become more comfortable at integrating their new learnings into their practice and this and other evidence indicates that it is the ongoing in-class support for these teachers that enables them to make these shifts.

c) Shifts between whole class, individual and group interactions

Table 4.6 presents the percentage of interactions at each observation directed towards whole class, individual and groups of students for Cohort One teachers. Interactions at baseline were predominantly whole class (55%) with few group interactions (14%). By observation four (term 3, 2004) these interactions were more equally divided, and while whole class interactions still remained somewhat higher than interactions with individuals and groups, over the two years there was an approximate 20% decrease in whole class teacher-student interaction; this time being equally shared between individuals and groups. This shift makes a discursive classroom more possible in that many more opportunities for interactions in the form of talk, discussion and debate are opened up for Māori students in circumstances where they feel more comfortable participating.

Table 4.6: Cohort One percentage shifts between whole class, individual students and group interactions

	Whole (%)	Individual (%)	Group (%)
Observation 1	55	31	14
Observation 2	52	28	20
Observation 3	42	32	26
Observation 4	38	36	26
Observation 5	----	----	----
Observation 6	43	33	24
Observation 7	40	38	23
Observation 8	41	35	24
Observation 9	38	38	24

Table 4.7 presents the percentage of interactions at each observation directed towards whole class, individual and groups of students for Cohort Two teachers. Interactions at baseline were mostly whole class at 48%, with group interactions low (15%). Over the course of the five observations, individual interactions remained fairly constant while whole class interactions declined by 9% from observation 1 to observation 5 and group interactions increased by 10% across the same time. Again this shift in teacher time being spent with groups of students makes a discursive classroom more possible in that there are many more possibilities for interactions that involve on - task talk, discussion and debate between students and between students and their teachers.

Table 4.7: Cohort Two percentage shifts between whole class, individual students and group interactions

	Whole (%)	Individual (%)	Group (%)
Observation 1	48	37	15
Observation 2	45	35	20
Observation 3	41	35	24
Observation 4	41	36	23
Observation 5	39	35	26

II) Shifts In Classroom Relationships

One of the developments that had been identified in Phase 2 of the project was that we needed to develop the observation tool further so that it enabled the facilitator and the observed teacher an opportunity to talk about all aspects of the ETP, beyond that presented on the front side of the tool. As a result, on the second side of the observation sheet a number of overall observations scales were added, the idea being that at the end of the lesson, there would be a time for sharing evidence gathered during the lesson pertaining to these relational categories.

These revisions included;

- Overall observations made at the end of the lesson to provide evidence of the teachers': (a) caring for the students as culturally-located individuals, (b) demonstration of their having high expectations for the learning and behavioural performance of the students and (c) providing a well-managed learning environment. Such evidence to be indicated on a 1–5 scale along with comments.
- Feedback provided to teachers noted on the form for later collation and reference.
- The teachers' own reflections on the lesson and on the feedback provided by the observer so as to allow for a reference point for the next observation and formal feedback session.
- Ideas for future lesson developments.

However, while these observations proved useful for formative purposes and proved to be extremely useful for the feedback sessions and learning conversations that developed following the observations, a number of teachers and facilitators felt uneasy about these data being reported in summative form. That is, the quantifying of the caring relational elements of the ETP proved to be problematic but the idea of identifying evidence (initially by the observer then increasingly by the teacher) of them caring for students as culturally located individuals, caring for performance and behaviour, showing quality management and

examples of cultural iconography in the lessons or allowing space for students to bring their own cultural knowledge to the classroom proved to be extremely useful for learning conversations to develop. What proved extremely difficult was for teachers and for facilitators to use the full 1-5 scale; however, as relationships develop between facilitator and teachers, this is proving to be less of a problem.

Tables 4.8 and 4.9 show an overall increase in the values attributed to teachers caring for Māori students as culturally located human beings, caring for their performance (as an indication or the expectation of the teacher), caring for their behaviour and also caring for the management of the classroom, which included the care teachers demonstrated about their subject knowledge. Whilst initially causing many teachers some consternation, once understood, the inclusion of evidence about the inclusion of cultural iconography in the lessons and the creation of culturally responsive learning opportunities showed an increase (albeit small) for both cohorts.

Table 4.8: Cohort One observations of relationships

	Ob 2	Ob 3	Ob 4	Ob 5	Ob 6	Ob 7	Ob 8	Ob 9
Caring for the student	3.8	3.9	4.2	----	3.9	4.1	4.2	4.2
Caring for performance	3.9	4.0	4.2	----	3.9	4.1	4.2	4.2
Behaviour expectation	4.0	4.1	4.3	----	4.1	4.1	4.2	4.3
Management of the classroom	3.9	4.0	4.3	----	4.0	4.1	4.2	4.3
Culture C	3.0	3.2	3.6	----	3.1	3.1	3.4	3.3
Culture c	3.0	3.2	3.8	----	3.0	3.2	3.5	3.4

Table 4.9: Cohort Two observations of relationships

	Ob 2	Ob 3	Ob 4	Ob 5
Caring for the student	3.7	4.1	4.2	4.1
Caring for the performance of the student	3.8	4.0	4.2	4.1
Behaviour expectation	3.9	4.0	4.2	4.3
Management of the classroom	3.8	4.0	4.2	4.2
Culture C	2.7	2.9	3.0	3.1
Culture c	2.7	3.0	3.2	2.9

III) Shifts In Teacher And Māori Student Proximity

Teacher and student proximity data are gathered from the observation tool to indicate what opportunities for discursive interactions are possible. The proximity of teachers to students is recorded ten times during an observation in order to gauge the time teachers spend at the front of the classroom and time spend elsewhere in the classroom. There are also opportunities to record the location of the teacher on 10 occasions. The student location recordings represent the number of students of the five observed who were seated at the front of the room or elsewhere in the class. On occasions where students or teachers were constantly moving, such as a PE lesson, location was not recorded.

These data are important because we were told in the original narratives of experience, (Bishop and Berryman, 2006) of Māori students' preferences to be interacted with discursively either as individuals or in groups rather than whole class contexts.

Table 4.10: Cohort One student proximity

	Located at front of the classroom	Located elsewhere in the classroom
Observation 1 Term 4	1.4	3.6
Observation 2 Term 1	1.3	3.6
Observation 3 Term 2	1.5	3.5
Observation 4 Term 3	1.5	3.5
Observation 5 Term 4	----	----
Observation 6 Term 1	2.0	3.0
Observation 7 Term 2	1.7	3.1
Observation 8 Term 3	1.8	3.2
Observation 9 Term 4	1.7	3.0

Tables 4.10 and 4.12 suggest that, if teachers are to interact discursively with Māori students, either as individuals or in groups, they need to move from the front of the room and move round the room more often.

Table 4.11: Cohort One teacher proximity

	Located at front of the classroom	Located elsewhere in the classroom
Observation 1 Term 4	5.2	4.3
Observation 2 Term 1	4.5	4.8
Observation 3 Term 2	4.3	5.1
Observation 4 Term 3	4.0	5.6
Observation 5 Term 4	----	----
Observation 6 Term 1	5.2	4.6
Observation 7 Term 2	4.7	4.6
Observation 8 Term 3	4.9	4.6
Observation 9 Term 4	4.8	4.4

Tables 4.11 and 4.13 indicate that there were some changes over time for both cohorts 1 and 2 in terms of their location within the classroom. However, perhaps the somewhat gross nature of this measure has not allowed for a clearer picture of what is actually happening in the project schools' classrooms which is that an increasing number of teachers are moving round the room more often than before, thus allowing themselves more opportunities to work with Māori students in a conversational, discursive manner. In other words, as the classroom interactions changed to a more discursive model, through the teachers' use of strategies that allow them more opportunity to move throughout the classroom, the teachers were able to interact more effectively with Māori students.

In traditional classrooms, teachers are more likely to be located at the front of the room near the whiteboard or overhead projector as the means of transmitting knowledge to the students and interacting with students in what Philpott (1993) identifies as the traditional “zone of interaction”. Thus, only students who are close to the front or the centre of the room are able to interact with the teacher in the conversational manner that Māori students prefer. In the baseline observation, few of the targeted Māori students were physically positioned within this “zone of interaction”; the teacher being distanced from most of the targeted Māori students, thus limiting the potential for conversation.

Table 4.12 indicates again that in Cohort Two teachers’ classrooms, the target Māori students tend to be seated away from the front of the classroom; a pattern that persists for all the observations.

Table 4.12: Cohort Two student proximity

	Located at front of the classroom	Located elsewhere in the classroom
Observation 1	1.3	3.7
Observation 2	1.9	3.2
Observation 3	1.8	3.0
Observation 4	1.9	3.1
Observation 5	1.9	2.7

Table 4.13 indicates a stronger tendency for the Cohort Two teachers to move throughout their classrooms, compared to the Cohort One teachers. This difference might be associated with the informal diffusion of knowledge and strategies between the two cohorts, a spill-over effect. Although these figures only show small movements, overall, the teachers are spending more of their time, on average, moving around the classroom than previously.

Table 4.13: Cohort Two teacher proximity

	Located at front of the classroom	Located elsewhere in the classroom
Observation 1	4.9	4.5
Observation 2 Term 1	5.2	4.7
Observation 3 Term 2	4.7	4.6
Observation 4 Term 3	4.6	4.9
Observation 5 Term 4	4.7	4.2

Since the Māori students are generally located throughout the classroom, as a result of this change in teacher proximity, there is a much greater likelihood that they will be able to engage with their teachers in a more conversational manner and in a way that they told us (Bishop & Berryman, 2006 in press) is more meaningful for their learning.

During the classroom observations and from their narratives of experience, it was clear that Māori students preferred this arrangement. The use of interactive strategies such as cooperative learning for example, that promote discursive interactions, allows the teacher time and space to interact with students in small groups or in a more one-to-one, conversational

manner. In addition it was observed that greater proximity between teachers and students allowed for better behavioural interaction between the teachers and Māori students. More importantly, as the nature of the discursive classroom began to be more clearly operationalised, the students were able to ask questions of the teacher, thus creating opportunities for appropriate specific and targeted feedback and feed-forward interactions between the teachers and the Māori students. Further, as the classroom becomes more discursive, the teacher is able to interact with more individuals and groups, rather than interacting with the whole class. Strategies that allow purposeful work for students while teachers engage with individuals and small groups are identified in the Effective Teaching Profile and these strategies allow the teachers to create contexts for learning where different interaction patterns are able to occur.

Overall, the teacher-student proximity data for 2004 and 2005 indicate a positive trend with regard to teacher-student proximity, particularly when measured against the 2003 baseline information. The findings lend further support to previous suggestions that a concerted and sustained effort is required by teachers throughout the professional development intervention to ensure the maintenance of positive changes for Māori within the classroom context. Data also indicate that careful attention needs to be paid to this particular set of evidence in the feedback sessions following observations and teachers need to be further encouraged to seek out and perfect strategies that will ensure discursive interactions are possible and become normalised.

IV) Shifts In The Cognitive Level Of Lessons

Evidence of the cognitive level of a lesson is gathered from the observation tool to provide feedback to teachers about the observable level (that is, to an outsider and their students) of their expectations for their students. The cognitive level is a subjective evaluation made by the observer (based on clearly defined and understood criteria in collaboration with the teacher) and is ranked on a scale of 1 to 5 (not challenging to challenging) relative to the year level of the class being taught.

The average cognitive level for Cohort One teachers is presented in Table 4.14. Keeping in mind that observations 2, 3 and 4 took place in 2004 and observations 6, 7, 8 and 9 took place in 2005; the average cognitive level increased over each year. These data also indicate that despite these increases, there is still room for improvement in this area.

Table 4.14: Cohort One cognitive level of lesson

	Cognitive level of lesson
Observation 1	2.9
Observation 2	3.2
Observation 3	3.5
Observation 4	3.7
Observation 5	----
Observation 6	3.3
Observation 7	3.3
Observation 8	3.4
Observation 9	3.6

The average cognitive level for Cohort Two teachers is presented in Table 4.15. Again the general upward trend is a positive movement, indicating increasing expectations from teachers of their students with scope to further increase these expectations. Reflection by teachers on data during feedback sessions provides them with a useful means of (a) critically reflecting upon their expectations for students and (b) modifying their practice.

Table 4.15: Cohort Two cognitive level of lesson

	Cognitive level of lesson
Observation 1	2.9
Observation 2	3.2
Observation 3	3.3
Observation 4	3.4
Observation 5	3.5

V) Shifts In Māori Student Academic Engagement And Student Work Completion

Māori student academic engagement and student work completion are two measures obtained from the observation tool that the teacher is able to use to inform their ongoing practice. Student academic engagement provides a measure of the amount of time during an observation that the five observed students were actively engaged in the academic activity of the lesson. Each student is observed 10 times in each lesson for periods of 15 seconds each time. The observer observes whether the student is engaged or not engaged and records their decision. The percentage of engaged time per student is calculated after the observation is complete by adding up the engaged incidents.

Student work completion is the rating given on a scale of 1 to 5 as to whether the work that was set or negotiated was completed by the target students. Observers examine students' books, papers or such once the observation is complete to determine the rating for work completion.¹⁹ These data are presented here in summary form.

Cohort One

Table 4.16 shows the engagement and work completion for students of Cohort One teachers from baseline in 2003 to the end of 2005. From baseline at 74%, engagement is improved upon over 2004 (observations 2, 3 and 4) with engagement increasing each term. This same pattern is followed in 2005 for Cohort One (observations 6 to 9). Improvements in engagement are also occurring simultaneous with an increase in students' work completion.

¹⁹ Due to this measure being undertaken near the end of the lesson, it was not possible to engage the teacher in collaborative assessment. Nevertheless, at the subsequent feedback sessions, verification of the observation is sought from the teacher.

Table 4.16: Cohort One target student engagement and student work completion across 9 observations

	Target student engagement (% of time)	Student work completion (1-5)
Observation 1	74	3.6
Observation 2	79	4.0
Observation 3	84	4.1
Observation 4	86	4.2
Observation 5	----	----
Observation 6	82	4.1
Observation 7	84	4.2
Observation 8	85	4.1
Observation 9	86	4.3

Cohort Two

Table 4.17 shows engagement and student work completion for students of Cohort Two teachers from baseline in 2004 to the end of 2005. Engagement at baseline is 81%. This percentage increases over the 2005 year peaking at observation 4 (term 3) at 88%. Similar to Cohort One, increases in student engagement occur simultaneous with an increase in Māori students' work completion.

Table 4.17: Cohort Two target student engagement and student work completion across 5 observations

	Target student engagement (% of time)	Student work completion (1-5)
Observation 1	81	3.9
Observation 2	81	4.0
Observation 3	83	4.1
Observation 4	88	4.2
Observation 5	86	4.2

It is important to note that individual differences are disguised by this averaging and for the purpose of feedback to teachers, individual results might indicate variation between engagement and work completed, that in conjunction with the cognitive level of the lesson will indicate the level of the teachers expectations, and thus might indicate an area for focused reflection and supportive professional development. For example, if the work completion figures are high, and engagement low, it might indicate a need to increase the cognitive level of the lesson.

Increases in these measures of student outcomes, on-task engagement and work completion occur in association with overall changes in teaching practice from traditional to discursive, overall improvement in the in-class relationships, changes in teacher-student proximity and increases in the cognitive level of the classroom.

Summary

The observation data gathered in 2004 and 2005 indicate that over the period of the professional development intervention, there has been a shift from the dominant traditional pattern of delivery within the observed classrooms of the targeted teachers, to a more balanced approach, including more discursive teacher-student interactions. The shift away from a traditional transmission type of classroom is indicated by an increase in the number and type of interactions of a discursive type. From traditionally concentrating largely on instruction (I) for product learning, monitoring (M) and negative behavioural feedback (FBB-), with small amounts of feedback academic, teachers were observed to be increasing the type of interactions with students that involved students' prior learning (P), responding to student initiated interactions through giving academic feedback (FBA+) and feed-forward (FFA+) and increasing co-construction (C) of the content and process of learning with students.

The observation data indicate that as teachers move towards a more discursive classroom, they change the way they relate to the students at the level of academic interactions, spending less time interacting with the whole class and being more available to interact with individuals and especially groups. This change was slowly being reflected in teachers' changing their proximity to Māori students in their classrooms from a situation where they spent much of their time distanced from Māori students to one where teachers and students were more likely to be able to communicate on a one-to-one or in group settings. This trend toward more open, interactive classrooms is one that was strongly indicated by Māori students when we spoke to them when constructing the original narratives of experience (see Chapter 1; Bishop, et al. 2003; Bishop & Berryman, 2006 in press), where they told us of their embarrassment (whakamā) in having to interact with a teacher in a whole class setting. Māori students' self-removal to the periphery of the classroom, beyond the usual zone of interaction, kept them out of this problematic interaction, but it also kept them out of the learning conversations. Indeed such aspirations were identified by Hohepa, McNaughton & Jenkins, (1996) in a study of Māori student interaction patterns in Kohanga Reo.

Māori students told us that they prefer not to be embarrassed in front of their peers, especially when they don't know answers to teachers' questions. They also told us that even when they know the answer, often speaking out in a whole-class setting is just too much and they will appear to not know. There have been suggestions that Māori students not wanting to interact verbally with teachers in a whole class setting, even when they knew the answer to a questions is an example of Māori peer groups holding back other Māori students by frowning upon any Māori who want to get ahead. An alternative explanation might be that culturally Māori students do not feel good about standing out as individuals and much prefer to work in smaller settings, only moving into whole class settings when securely supported to do so. These data indicate the increase in Māori student engagement and work completion that occurs when teachers change the way they relate to and interact with Māori students. Rather than seeing Māori culture as creating problems for Māori students, the deficit view, by being responsive to Māori culture and not insisting on whole class instruction for example, Māori students' experiences of learning become more positive as they are able to participate in learning in ways that are responsive to them, rather than impositional. The project teachers achieve this by extending their teaching and learning strategies.

Overall, the observation data demonstrated that a number of key shifts in student outcomes can occur in the classrooms of teachers in association with teachers being encouraged and supported, through a series of ongoing professional development interventions to undertake a

change from traditional, transmission type classrooms, to more interactive, discursive classrooms; to develop more caring and learning relationships with Māori students, to increase teacher-student proximity and to increase the cognitive level of their lessons.

Chapter 5: Analysis of two new institutions²⁰ established to support classroom implementation of the Effective Teaching Profile

Introduction

This chapter sets out to examine the usefulness of two of the new institutions that were established within the schools so as to support the classroom implementation of the Effective Teaching Profile. These new institutions, which have been described in detail in Chapter 2, are the feedback sessions that follows the formal observation and the co-construction meetings.

This chapter sets out to answer two questions.

1. How can we know what is happening in the new institutions established to support teachers to implement the Effective teaching Profile.
2. How can we know if the evaluation tool we have developed to address question 1 has fidelity and will be able to be used by schools to ensure ongoing sustainability.

In order to examine these two institutions, portions of feedback and co-construction meetings were tape recorded by the twelve Phase 3 Te Kōtahitanga schools and analysed to identify what was happening in the new institutions, how closely the professional development GEPRISP model was being applied in these conversations and if this evaluation process was robust and useful to the facilitators. This analysis shows that by following the suggested framework for feedback and co-construction meetings we had developed important opportunities for facilitators and teachers to engage in ‘professional learning conversations’. However to maximize the potential of these conversations for Māori students, facilitators must also apply and interrogate all other aspects of GEPRISP throughout these conversations.

At the end of Phase 2 we had been mindful of the need to avoid the emergence of what Timperley, Phillips and Wiseman (2003) refer to as professional communities of teachers, whereby teachers focus solely upon themselves and their teaching, rather than focusing on improving student learning and achievement. Accordingly, in term 3 of 2004, after facilitators had been implementing the in-class professional development for two full terms, we began a treatment integrity task focused specifically on the feedback provided after the observations and the co-construction sessions so as to identify what was happening in those institutions. Indeed it was becoming clear that one of the keys to sustainability will be the institutionalisation of the co-construction meetings in the schools.

We asked lead facilitators to tape 20% of their own feedback and co-construction meetings for analysis and also to tape 20% of their team members’ feedback and co-construction meetings for analysis. In addition to the broad questions above, we also wanted to know three things:

1. The extent to which members of these teams were using the framework provided in their Te Kōtahitanga professional development manual for these meetings.
2. How the elements of GEPRISP, were being covered in these conversations.

²⁰ This term is used here not in the more common usage of a formal establishment but rather in the sense of it being an “established ...custom or practice.” (Concise Oxford Dictionary) Why this term is a useful one to describe the feedback sessions and the co-construction meetings is that there are newly established practices that should carry on within the school once the “project” as such has finished in this way ensuring the sustainability of the reform.

3. The extent to which emerging Te Kōtahitanga evidence was being taken into these meetings and interrogated for formative purposes.

In line with the first and second order training model, the intention was that regional coordinators would analyse lead facilitators tapes and give feedback, and that lead facilitators would analyse tapes provided by facilitators in their own team members and give feedback. Given that we were trialling this activity for the first time, we initially chose to work through the regional coordinators, with volunteer facilitators who were prepared to fit this new procedure into their cycle of teacher professional development. Some lead facilitators observed the members of their team with the regional coordinators but did not tape and some lead facilitators suggested that they had neither time nor incentive to trial the procedures. In the second year, once facilitators saw the worth of this work to their own professional development and for members of their team, regional coordinators received more tapes from more schools.

This approach to professional development is, as has been explained earlier, somewhat different from more conventional approaches in that we aim to build research capacity in the schools so that the schools are able to evaluate and monitor their own progress and use the data gathered from such activities for formative and monitoring purposes within their own school in order to ensure sustainability of the reform.

The Evolving Method Of Collection And Analysis

Analysis One

After attending and observing a large number of feedback and co-construction sessions and listening to many tapes, we began to develop a series of conventions around how these tapes might be scored. Some of these conventions were easy to decide, for example it was decided not to score tapes from the very beginning of the meeting because there were a number of rituals that took place prior to the group getting down to the meeting's specific tasks. While we acknowledge these rituals of whakawhānaungatanga, or greeting and reconnecting as critical to how a feedback or co-construction meeting might develop, for the purpose of this exercise we were more interested in what was happening in the sessions focused on individual feedback from observations and individual goal setting (feedback meeting) and co-construction of common goals preferably around a common class of students (co-construction meeting). As a result a convention that emerged early on was to start coding at least five minutes into the taped session. Given that co-construction meetings usually took longer than feedback meetings it was decided to commence co-construction coding at least ten minutes into the session. This convention has been maintained.

At this early stage of analysing treatment integrity tapes, we were also particularly interested in whether the conversation was a 'professional conversation', that is whether members from these school communities were sharing ideas, sharing resources, working together and supporting one another, but with the impact being that the quality of professionals' lives may be improving with little opportunity to impact on student achievement. Or whether in fact the conversation was a 'professional learning conversation', that is, whether members from these school communities were sharing ideas, sharing resources, working together and supporting one another as well as testing the impact of their practice for its effectiveness in raising Māori student achievement through a purposeful examination of actual evidence of student achievement.

In line with this thinking we were particularly interested to know whether teachers themselves were bringing evidence from Māori students into these conversations and whether these results were being interrogated in line with the elements of GEPRISP which is focused on the achievement of Māori students. Facilitators were encouraged to contribute to the conventions as they were developing and in due course the **Taped Feedback Analysis Form** for feedback meetings or co-construction meetings was developed and time was allocated at two of the wānanga for facilitators to score recorded sessions. Scoring involved listening to the tape and applying three broad criteria:

- was feedback/ feed forward heard;
- who was talking;
- who stood to learn from that feedback/feed forward.

Side two of this sheet encouraged the person doing the analysis to collect some of the rich verbatim quotes that best exemplified what they had heard on the tapes.

As mentioned previously, in 2004 this process was voluntary. It could only be applied in the third term because many schools did not continue the full in-class cycle of observations, feedback, co-construction and shadow coaching into the fourth term due to contractual confusion toward the end of the first year. However, it is important to note that facilitators who were already challenged by their very demanding, relatively new role, did contribute. They did so by inviting regional coordinators into feedback and co-construction sessions, by contributing their ideas to the process, by taping their own team members or by supplying tapes of their own sessions. Indeed in 2004, over half of the schools (7) supplied tapes containing 49 separate sessions. Interestingly many more sessions were of feedback sessions (21) rather than co-construction sessions (4). Mostly tapes came from lead facilitators. Of concern was the large number of tapes that were inaudible and unable to be scored (of the 49 sessions supplied 24 were inaudible) indicating the need for better quality equipment to be supplied. A second analysis of the specific term-three-taped sessions, from these seven schools in 2004 began at the end of 2005 and these results are reported in this section.

In 2005 lead facilitators were again asked to tape 20% of their own feedback and co-construction meetings and regional coordinators gave formative feedback. As well as being asked to tape some of their own sessions, lead facilitators were again asked to tape 20% of their own team member's feedback and co-construction meetings and to respond to them in a similar manner. While the formative nature of this process was very much part of the *kanohi ki te kanohi* (face-to-face) feedback provided by the regional coordinators and lead facilitators on a term-by-term basis, we understood the need to better utilise the rich evidence provided by these taped sessions. It had become evident that a finer grained analysis of the conversations could be more informative rather than the three broad criteria that we had been using. There were also questions around how these conventions might be more consistently applied in the next phase of the project that was to focus on sustainability, both from school to school and within school. A decision was made to develop a new framework for analysis and to re-analyse all existing 2004 and 2005 tapes. We understood that initially this would be for summative purposes but with a view to adapting this second framework for formative purposes.

Analysis Two

For the second analysis, a framework (see Appendix B) for scoring tapes was developed that would allow researchers to further investigate the themes within the conversations that they were hearing on the tapes. As shown below, this framework follows two main themes with a number of sub-themes under each theme. Again each of these themes was contributed to by the facilitators providing feedback about what was or should be happening in the feedback and co-construction meetings.

Framework for Treatment Integrity Analysis

Theme 1: GEP

1. Te Kōtahitanga ETP principles are challenging or affirming teachers' current assumptions and practices.
2. Discourses have a focus on raising Māori students' achievement.
3. Discourses reject deficit theorising about Māori students.
4. Discourses are agentic.

Theme 2: RISP

5. Collaboration and shared expertise are contributing to a critical examination of recent in-class practice.
6. Discourses are reflective, linking classroom experience and evidence to more effective in-class practice.
7. There is a clear focus on student learning with recent evidence being used to inform next teaching steps.
8. Expectations, skills and knowledge are developing and practices are changing or affirmed.
9. Values and expectations about learning and achievement are shared.
10. Discourses show that teaching is collaborative and de-privatised.

The second analysis exercise involved strictly applying the timing convention of commencing coding feedback tapes five minutes into the session and co-construction tapes ten minutes into the session. The next ten minutes of tape were then transcribed by hand and entered into an electronic file. The electronic file served two purposes, ease of reading and accessibility to the discourses. When tapes were difficult to hear and/or understand, the transcriber called for a second opinion. In many cases such tapes resulted in their being deemed inaudible however a paper copy of any verbatim text gathered through this process was filed with all other transcriptions.

Next, a trained teacher who had received additional training in related aspects of Te Kōtahitanga and the Effective Teaching Profile (ETP) then worked with the transcribed electronic text to score transcribed text according to the framework themes (as above) until their scoring was consistently within 90% agreement. This person then scored all transcribed texts according to the themes presented in the framework for the Treatment Integrity Analysis and calculated the number of themes heard throughout the ten minutes. She also identified sections of the transcriptions that she considered to be excellent examples of themes as related to the analysis framework. A randomly selected ten percent sample overall was then checked by the original trainer in order to maintain reliability between both raters. For an example of how the themes were scored see a short, actual example in Table 5.1 below.

Table 5.1: Treatment Integrity Scoring of an excerpt from a Feedback Transcription

Feedback Transcription	Theme Type
Facilitator: Probably the most challenging thing in your lesson today was having to share, because the kids were having to work with somebody else. Some of them did that really well and some of them found that a bit threatening.	5
Teacher: They were scared of getting things wrong.	
Facilitator: That's very true but you will overcome that. This young girl here N, she was extremely hesitate about becoming involved. I don't know what her background is, she's not a behavioral problem or anything but she was engaged only about 50% of the time and when it came to peer work she was unable to share her trust with that young boy. They sat side by side but didn't exchange.	5 6
Teacher: Didn't interact.	
Facilitator: "Okay I'll go back to my seat now", she's finding that difficult.	6, 4
Teacher: Now I'm trying to think, 'N' left my classroom, I kept her back, she took off. I kept her back and I talked to her. She didn't have a book, she's got a book now.	
Facilitator: Yes she has.	5
Teacher: And she doesn't interact.	
Facilitator: I think she wants to. I think she's right on that precipice, you know. She's very unsure of herself. Lacks confidence, lacks self-esteem and she's troubled by something, I don't know what.	5
Teacher: I definitely got that feeling when I tried to talk to her. I wasn't getting very far and she was very anxious to get outside to her friends. Obviously her friends are not in that room, they are somewhere else and I get the feeling she's probably living a very different life outside of school. I need to keep trying with what I can do to get to know her better in class.	4

Each theme was scored as shown above, then combined and calculated according to a one to four rating, 1 being no discourses of that type, 2 being relatively few discourses of that type (1 to 3 examples of that type), 3 being more discourses of that type (4 to 6 examples of that type) and 4 being many discourses of that type (7 or more examples of that type). Average ratings across taped sessions for each of the 10 sub-themes from the Framework for Treatment Integrity Analysis were then calculated for each of the Te Kōtahitanga schools where tapes had been supplied.

As a summative exercise, the results from this second analysis of taped feedback and co-construction meetings provided by the facilitators' tapes have contributed further understandings to the types of conversations being generated within the feedback and co-construction meetings. This exercise has also highlighted the types of conversations that need to be generated within these sessions and further it has provided some indications of how this process may be able to be better used formatively in order to contribute to sustainability in schools.

Conversations from Feedback and Co-construction Sessions

Examples of what the scorer considered to be excellent examples of each of the ten themes, for feedback and then co-construction, as taken from the transcriptions from across the contributing schools, are presented next. These were selected on the basis of their effectively representing each of the 10 specific themes from the Treatment Integrity Analysis Framework used for scoring tapes as shown above. Of the many conversations taped it has only been practical to include one chunk of conversation under each of the themes in this

exercise. Researchers acknowledge however that there were many other effective examples that could have been included.

We acknowledge also that most of the conversations heard on the tapes did not fit neatly under any single sub-theme. Many of the conversations were constantly moving from one theme to another and back again, before heading off in still another direction. By and large facilitators were heard to be doing this in order to clarify or reinforce a point or to affirm or challenge teachers' theorising and/or practice. Where more than one discourse was heard in any one chunk of conversations, they were scored under more than one theme. The section on Feedback examples is followed by a similarly prepared section on Co-construction examples.

Feedback Sessions: Conversations from Facilitators and Teachers According to the Themes and Sub-themes

Theme 1: GEP (Goal; Experiences; Positioning)

Sub-theme 1: Te Kōtahitanga ETP principles are challenging or affirming teachers' current assumptions and practices.

Transcription	
Facilitator:	The other thing was how cognitively challenging that lesson was. From your point of view what would you say in terms of cognitive challenge?
Teacher:	Pretty easy.
Facilitator:	I have rated it the same. I thought it was a two ... They had to organise things to get the task done but it wasn't really extending them.
Teacher:	No, no.
Facilitator:	I need to ask the question, what might have happened had you said you have got twenty minutes to get some basic information on your title page and get your page ruled up and then we are going to ... so if you had actually given them quite a tight timeframe, you had actually pushed them. Have you an idea of what might have happened?
Teacher:	Well I can't give you a really a definite answer of what would have happened.
Facilitator:	Yes and that's the difficulty.
Teacher:	I know we have done that in the past with title pages. You know you give them a definite sort of time. I think most of them would respond to that but I think I would have got more who wouldn't have achieved it.
Facilitator:	Okay because that's why I was wondering about it. I'm not telling, I'm asking in the context of that lesson. The purpose of that I understand, was to get them to share something of themselves, to document it and then to share with others. Something of themselves and what it is they bring to the classroom and who they are. And what I saw was there were a number of students very engaged, they tended to be girls and they tended to be ones who did lots of different colours and nice borders and all the rest of it. There were a group of other students what I would call 'low level input' into that task. They were doing it and then they would stop and have a chat with their mates and then they would do a bit more. And then there was a group of students who were very marginal in terms of whether they were actually getting on and getting it done and my question to you would be, would you be interested in experimenting or trialing those learning expectations? what the students say in those narratives, it might be interesting to go back and read those because what they are saying is 'we want our teachers to have high expectations of us'. And I wonder whether they would rise to the occasion in terms of catching the enthusiasm of being pushed a little bit harder as a result. So my thinking here basically is that something you would be interested in? In terms of where you might go through to the co-construction meeting.
Teacher:	Yes.

Sub-theme 2: Discourses have a focus on raising Māori students' achievement

Transcription	
Facilitator:	I will ask you to give me a rating as to where you see yourself in these types of relationships?
Teacher:	Caring for the students for me is high.
Facilitator:	High for Māori students in that snapshot in that classroom? Can you tell me why? Do you have any evidence from that specific snapshot and that classroom?
Teacher:	Well for a start the students that come into my room, they all came in. For the effort that I put in I regard every student that the interaction between us has to be high for me. Those students who are struggling get the same amount of interaction as those students who are performing. You know over and above expectations.
Facilitator:	So if I added to that, or inserted Māori students, culturally located Māori students. Students that come with a different set of values, come from Māoridom, what about them? How do you respond in that respect?
Teacher:	I don't know I try to appreciate what their culture would be and how they would want me to approach them. So if there were things that were culturally insensitive to them I would actually want to know that.
Facilitator:	Caring for the performance of the Māori students in your class?
Teacher:	That's part of my duty too, the performance. I expect from the Māori students to give me the best they possibly can and it's up to me to encourage them in ways so that they want to do that.
Facilitator:	Having someone to inspire them to, the behavioral expectations, having expectations for the behavioral performance of Māori students.
Teacher:	Well sometimes if the Māori students get off task it might be my approach so I might need to make the change in a way that it could be my posture, could be my body language towards them. Could be the way I speak to them so if I'm not having some success with a Māori student then what I will do is take the student aside and say is there anyway that I might change? Is there an issue with the way I am dealing with you?
Facilitator:	So you allow their reflection and their input. You wanted that self-reflection so where would you put yourself?
Teacher:	Well my behavioral expectations would be around four?

Sub-theme 3: Discourses reject deficit theorising about Māori students

Transcription	
Facilitator:	Okay 'relationships', what evidence do you have in this lesson that you care for the students as culturally located individuals?
Teacher:	Knowing their names actually giving them individual feedback. Being physically kind to them and interacting with them.
Facilitator:	Interesting thing today your whole time was spent up the front which is not typical of you. But because you were sitting they were coming to you, why is that?
Teacher:	I knew it would be like that.
Facilitator:	This is really interesting I wondered about that, I wondered about C.
Teacher:	He sits there all the time he isolates himself.
Facilitator:	He told me that [he sits there all the time] and I'm wondering if that's a good thing.
Teacher:	You think he needs to interact?
Facilitator:	I think so I think having him out like that, I didn't see that he was working hard and didn't want to be disturbed, it was more like I just want to sit at the back and the teacher won't pay attention to me because I'm right out of the view.
Teacher:	Okay he doesn't like working in a group though.
Facilitator:	Yeah but he does in other classes.
Teacher:	Does he! Oh okay.
Facilitator:	I mean I don't know but you could try it and see. I just thought that there was an opportunity there.
Teacher:	Sometimes V sits with him at the back.
Facilitator:	And I think it's probably a way of taking them away from the lessons so the pressure of the lessons isn't on them and they can sit and not participate because the instructions you were giving C, he was not necessarily following them.

Sub-theme 4: Discourses are agentic

Transcription	
Facilitator:	So we'll look at the other side and I'll just go through the 'relationships'. Do you know how to do that? This is the fun bit.
Teacher:	Terrible bit for me.
Facilitator:	You come up with the evidence for each of these things so the first one is the 'soft caring', that you care about those kids as individuals and how you express that in the classroom in that lesson. In this particular lesson how did the kids know that you know them, like them and value them as people not just students in the class.
Teacher:	I hate this stuff it's really hard because you don't want to seem like you, I don't know it's really difficult for me. I'll give myself a three I'm one of those who can always see improvement but I always know that I've tried. Does that make sense?
Facilitator:	Yes I do know. So let's talk about it in depth and it gives you a bit more direction to know what you did to make you feel happier about this. I can think of some things you did in the lesson which shows that you are sensitive to them as culturally located individuals and I'm just wondering if you can think of them? There are things that you did in the lesson that said to me that you are sensitive to them, that you know that.
Teacher:	I meet with them individually that is one way because I know they get shamed by routine if I yell out "what are you doing here?" So I just kind of ... and that meant each person's work is valid. If you just deal with the ones that are doing very well it's ones that aren't doing as well miss out. That type of thing.
Facilitator:	Yes and what about the boy that came late?
Teacher:	M?
Facilitator:	Yes what did you do? Because there are a set of behaviours you can choose to do when a kid comes in late and is not really into work in the beginning. So what did you do?
Teacher:	I just basically tried to settle him really quickly and by doing that just checking where he was up to, what he was missing out on and explaining what I expected from him for that day and where to get some support and so in a nutshell he would be working really quickly and wouldn't interrupt the class. I forgot to ask why he was late I actually didn't think about that.

Theme 2: RISP (Relationships; Interactions; Strategies; Planning)

Sub-theme 5: Collaboration and shared expertise are contributing to a critical examination of recent in-class practice

Transcription	
Facilitator:	The other thing we do if I could ask you, are these familiar to you, these dimensions of relationships?
Teacher:	Yes.
Facilitator:	Caring for the students' performance or the soft caring manaakitanga? You have high expectations for their learning.
Teacher:	Yes.
Facilitator:	This is for Māori students.
Teacher:	Yes.
Facilitator:	... a lot of what you are doing in your classroom is really wonderful stuff. Your interactions with your students are warm, caring. You managed one very difficult young man who was openly confrontational to you. You managed to do it assertively ...but he maintained his mana in the whole situation. It also never got to confrontation... and I really want to applaud you for that. It was done in a way that was really respectful and treated him and valued him as an individual and respected his mana as a person. At the same time you actually made it really, really clear to him that you have expectations about what we do in this classroom. I would agree with that in terms of your relationships with the students as individuals. In terms of caring for the performance of the students I'm going to give you some professional feedback in terms of where to go next. I can see that, that area is the area for the most growth.

Sub-theme 6: Discourses are reflective, linking classroom experience and evidence to more effective in-class practice

Transcription	
Teacher:	It's interesting about that group of boys. I've deliberately not separated them out. They talk together and they're not always focused together but my goal is to see if they can hang together as a group and they were better with the group work weren't they?
Facilitator:	That's right.
Teacher:	They were fluttering around with something else that was a distraction for a bit, but in the old days I might have said you guys one sit here, one sit here. But I've tried to let them hang together as a group and do something with them as a group.
Facilitator:	And it's sort of showing they really did get into that and they accepted the roles really well as they picked a number and they had no problem with that. Other positive things that I've noticed, you have such a positive relationship with all the students and that really stood out. The variety of activities and the fact that you are trialing those cognitive activities involved, I think is a real shift away from the traditional style.
Teacher:	Social studies lends itself to this.
Facilitator:	And this is sort of bringing Māori into the context and the content of the lesson.
Teacher:	When I was talking to the girl who got stranded, does that count?
Facilitator:	I think it certainly did. I think we were talking about how it could have been brought in more. Using that prior experience and then bringing it into the lesson so you are comparing the similarities and differences within Māori culture and Japanese culture. So that was something we thought could have been really used within the lesson. I think that really fitted in with that sort caring. You were talking about that side of things.
Teacher:	...bearing in mind that girl felt confident to talk about what happened and she is a new student in the school. A context where they can bring themselves in is definitely the one.

Sub-theme 7: Clear focus on student learning with recent evidence being used to inform next teaching steps

Transcription	
Facilitator:	So I would like you to rate yourself with one being low and five being high. In each of these criteria we will just do this really quickly and then give me your evidence as to why you have done this later so caring for the students, caring for the Māori students as culturally located individuals. How much would that be up here?
Teacher:	What do you mean by culturally located?
Facilitator:	Recognising that when they come into your classroom that not all students are the same, that they come with their own sets of values and ideas that are very much determined by their Māori background. It might be a marae background but it could as easily be a young Māori person growing up in the city and all of the things that come with that, or it could be both.
Teacher:	Yes I can locate that in the class this time.
Facilitator:	Cool, can you tell me how you did it?
Teacher:	The evidence is the rapport I have established with students. I know a lot about their background just with talking with them and getting comfortable with them and I know for example in the class today J is a Māori boy who frequently has no pens or books and things. He had a test today and I had them sitting on his desk ready for him to go and he just got up and started and he said to me. "Can I use these?" And I said absolutely and it wasn't a big deal, wasn't overly fussed about that and it works quite well really.
Facilitator:	Cool, thanks in terms of this specific class.
Teacher:	I have already explained that it's a bit tricky in that class.
Facilitator:	If you are looking at the care of the students obviously there are not many Māori students but I noticed KH is one. I didn't realise she was identified as a Māori.
Teacher:	She is one on the programme. She had a really bad headache in that class and I noticed her work wasn't up to scratch so I asked her if she wanted to go to the canteen and put a bottle of water on my account because she has to keep drinking all day and she said no she was okay. But a friend had given her a bottle and I said go and fill it up and she went and did that and then she and J went and sat outside in the cool air and did their work out there for the rest of the period. For about twenty minutes and that's another example of just being able to be flexible, being in a classroom and coping with a student that's not right. She wasn't feeling well, she was really hot and clammy.

Sub-theme 8: Expectations, skills and knowledge are developing and practices are changing or affirmed

Transcription	
Teacher:	Sometimes now I wait at the door, greet them as they walk in, move them along like chop, chop, trying to encourage them to actually work. You know a lot of them kind of got stuck on some of the questions. You know they know the answer but we have to look at it another way. When I get them thinking and nearly there then I left them because I know they were getting on the right track and I know they are nearly there.
Facilitator:	That's encouraging them feeding forward, excellent. I noted down definitely a positive warm caring safe environment like I have seen some classes in different environments. The environment you have set up now, there's no put downs, people are supported and it's a credit you really know your students really well.
Teacher:	It helps to know them, if you don't. . .
Facilitator:	. . . it's difficult to build a relationship. The next page is caring for the performance, that's like having high expectations for the learning of the students. Then more about the hard caring, what are the kinds of things that you do?
Teacher:	The hard caring.
Facilitator:	Having expectations for them all.
Teacher:	Pushing them along, 'positive come ons', giving time which they agreed to 'yes that's enough' time, giving them time and trying to work under that, negotiate that with them. I think that's hard caring. You know giving them feedback. Encouragement and motivating, giving some clues about the work.
Facilitator:	I have put similar things, lots of feedback, feed forward, academic. Your students names on the board as well 'C' and 'D' academic contribution. You set time limits now, they were challenging time limits that showed that you do expect students to work harder and achieve your individual accountability, and like the random reporting you had thought out for all the activities. It really made these students know that they all had to know the answers, because they could be called on at anytime which showed you had high expectations for them. Also ensuring that those elements were there showed that you want them to do well, as well and you could hear that in your communications. You also had high expectations for the behaviour of students.
Teacher:	It's quite good now I just need to go 'okay guys listen up'. They are always quite good like that anyway. I think it's just practise and just over the year. It wasn't difficult to try and get them concentrating because they know that they are the only ones that are going to miss out.
Facilitator:	Because you have to keep boundaries for them as well. You were using hand signals as well as challenging students. I noticed that on a couple of occasions you would set a task and go crouch down and talk to students and challenge them to work harder and be more on task. You did it in a way where they weren't feeling embarrassed in front of the whole class and you kept the lesson going too, it didn't disrupt anything. Your management of the classroom provided a well managed learning environment. That's looking at your organisation of your planning and the activity. What do you think?
Teacher:	It's good to try new things. It's good in P.E. what I could do to improve, it was good 'cause they were engaged. It was kind of mad at the beginning just running through and enjoying it. They were enjoying it, I was quite happy with that planning. Although that took a while, it was good.
Facilitator:	A lot of hard work involved.
Teacher:	No. It kind of made it easier. There was an outline I had to work towards. It was quite good, it kind of made the lessons more meaningful and they took more ownership I guess.
Facilitator:	I will just put that in, I will put that down. I wrote, "it was obvious it was a well organised lesson, resources were well prepared, activities were really well facilitated too." I know that timed talking was the first time you facilitated it. You did it really well. You obviously put a lot of effort and preparation into that. Also and this kind of comes into the next one with culture making sure to include that into your planning as well. To ensure that students do have an opportunity to see themselves within the activity and do it from the basis of their own prior knowledge and their own positive cultural leadership, from within their culture, I think it's the invisible thing building the visible stuff and the context we create will either make it or break it.
Teacher:	When we looked at positive leadership we looked at different attributes of what makes a good leader and then asking them who are some Māori leaders? They kind of forgot. We had like George Bush. Then we had to bring it back because I knew they had the Māori leaders in the back of their heads.

Sub-theme 9: Values and expectations about learning and achievement are shared

Transcription	
Facilitator:	Right at the beginning of the lesson those girls who came late, you were quite good with them about coming to school. You made them accountable for that.
Teacher:	It's that urgency thing I like to stress with them, they might come from assembly late but show a little bit of urgency to getting changed and be all organised I suppose. I think it's important to do that otherwise it could become a habit.
Facilitator:	It was clearly articulated what you expected from the students in a way that was not aggressive or intimidating. It was a conversation with the students but you were quite clear with about what you expected. The lesson was well prepared, instructions were clear and I like it that the students felt really comfortable at asking questions to clarify. They felt perfectly comfortable about saying do you mean this, is that what you wanted? Cultural activities, the activities appeal to the students and your use of language but I did wonder if you maybe could use language more, more use of Māori language because all those kids study Māori don't they? I have no doubt that Matua has a high level, that's something you could do more of.
Teacher:	I agree. The good thing too, about P.E. there are good opportunities to incorporate te reo into the language of instruction. I suppose I see I could be using it a lot more in my lesson. Yes that's good, good feedback.
Facilitator:	I also wondered if you wanted to capitalise on those activities where the students have opportunities to negotiate. Is that a big part of te reo or do you specifically choose that activity to have that component?
Teacher:	Yes I'm always aware of choosing activities, especially with that class because it works really well with that class because they are into working closely with one another. I think they are used to that, it's part of their culture. They have been taught I think, I often try and utilise those sorts of activities into my lessons with them. I do try Māori in other classes as well. I just don't think it works as well with other classes because they are right into working out things for themselves. I should look at capitalising on that.
Facilitator:	As you say it seems to come fairly naturally to them but to give them the opportunity to analysis and evaluate what they are doing. You organised yourselves like that, how did you think it worked? Did you think that it worked well or was there room for improvement? There's been co-construction too and the kids were co-constructing between themselves. I wondered if you wanted, like to look at ways you could co-construct with your class as in giving them a range of activities to choose from and talking that through with them. They have got the idea who do you want to do that with? How will that work out?
Teacher:	Yes sure, that would work well within that class too because there are leaders, there are potential leaders in that class who could go off and be responsible for different activities.
Facilitator:	I have just put down problem solving because that's sort of part of co-construction and them working through because that's what I could see, that's what they were actually doing. I thought that would be something for you to work on. Are there any other comments you would like to make?
Teacher:	Yes, to be honest it actually looks a little bit better than I thought. That's good, I'm really happy with that analysis, evaluation thing.
Facilitator:	It's a treasure, you're a part of that lesson looking from the outside, this is what I saw. It's mainly to ask you to think about your personal goals, your personal goals for this cycle. How do you think you will go about getting to your goals and where do you think you will go with your goals?

Sub-theme 10: Discourses show that teaching is collaborative and de-privatised

Transcription	
Teacher:	I also would like to get back on track with E [another Te Kōtahitanga teacher].
Facilitator:	Well you mean like your mentoring each other?
Teacher:	Yes. We had made a commitment to do that and we haven't. It's just kind of gone out the window for the past month.
Facilitator:	Okay so...
Teacher:	After that last time when I went in and observed her, and then we talked about it afterwards.
Facilitator:	So you gave feedback?
Teacher:	Yes but how am I going to put that into practice?
Facilitator:	Develop and maintain it? I mean how often do you want to do it a fortnight, a month, a week?
Teacher:	A time goal thing. Perhaps if E and I touched base every fortnight.
Facilitator:	Yep.
Teacher:	Or each fortnight.
Facilitator:	I didn't put words in your mouth.
Teacher:	I can't think of the words at the moment.
Facilitator:	I will, each fortnight.
Teacher:	To continue to be...
Facilitator:	That's shadow coaching isn't it?
Teacher:	That's what we established early this term, we developed it from there.
Facilitator:	That's good.

Co-construction Sessions: Conversations from Facilitators and Teachers According to the Sub-themes

Theme 1: GEP (Goal; Experiences; Positioning)

Sub-theme 1: Te Kōtahitanga ETP principles are challenging or affirming teachers' current assumptions

Transcription	
Facilitator:	Thinking and sharing ideas with your colleagues outside this room, outside your thinking of Te Kōtahitanga and so it's not something that sits outside. It's something you can build on all the time so you will be catching up with each other. How are you going on identifying a group goal? That type of thing okay. That's the idea of the group goal in professional development. So we have got our own personal goals. Would you now like to think in terms of 9TM and 9WF, is there something you would like to work on as a group?
Teacher:	It's generally just raising their achievement that could be one.
Facilitator:	That could be one but if we talk about goals lets be smart. So smart being we make the goal quite specific. We make the goal achievable. You make it realistic and we may look at our timeframe and the fact that it's going to be this term. That's what smart goaling is about, that's our big picture. So what is something that is quite specific that we might like to keep touching base with each other on, that we are going to try working on this term?
Teacher:	Maybe the cultural context in our planning. Evidence would be what takes place in class.
Facilitator:	How does that sit with everybody else?
Teacher:	I don't have much control over that in a sense that I don't get to choose the books we are studying. S [another teacher] is on the programme and she's pretty up there with it anyway.
Teacher:	What about what J said to focus the direction of what their personal experiences are?
Facilitator:	And that's what the cultural context is about.
Teacher:	Yeah sharing it out there. Coming up with some strategies to get their experiences into the class and helping them to do that. Like a little activity like that, that we could all do.
Facilitator:	Cool, that might be it.
Teacher:	Something like that, but I'm not sure how to do it.
Facilitator:	Well we haven't worked it out for social studies yet and we have to work it out for science too.
Teacher:	Yeah that's good. Sometimes the topics that you have, it's sometimes really difficult to get the cultural context. I know we are trying in theory to have the cultural context all in classes.
Facilitator:	Now may I offer a suggestion here. Who can think of what interaction is probably going to bring out Māori students own experiences? You know you think about your observations. You have got all that jargon. What interaction is more likely to bring out students' own experiences?
Teacher:	One on one?
Facilitator:	One on one. That's about that relationship but if I mention feed forward, feedback, instruction, monitoring.
Teacher:	Lots of different interactions?
Facilitator:	Which one do you think is actually going to be bringing the experiences from the Māori students? So do not be continually focused on the fact that culture, is a traditional Māori cultural context. Would you agree that it's also contemporary experiences that make up the cultural context so that becomes quite specific about what kinds of prior experiences we are actually wanting to hear and what we are looking to see.
Teacher:	Yes, yes.
Facilitator:	J you came up with some things I thought, I saw you give it a go.
Teacher:	I just remember when we were at teachers' college. Every one had to link to something cultural. I saw a bit in that science once where they linked Māori legends with geology and it was really cool.
Teacher:	There are some units that lend themselves to that but the ones we are doing at the moment might be a little more difficult. There're not necessarily as many contexts even though it's about their prior knowledge it's a little difficult. Yeah but I'm not versed to it. There're some areas that it's easy like geology and plants but especially that this class is a sport class for me.
Facilitator:	But remember it brings in who they are and it is drawing upon their prior knowledge or previous experiences. Cool and one day AM [another teacher in the project] came trooping, walking alongside me and saying its getting really easy to be able to tie in the cultural context

	because he took his kids along to look at the Whare and linked it to the fact that they are going to do that in terms of their plans. He knows he's got a great legend of this area and he's going to link that with the geology section.
Teacher:	Yes, yes. I think it's relatively easy to get something out of the script and it helps if you have more year tens than year nines.
Facilitator:	That's something to think about. So is that the decided group goal then? Would be introducing the cultural context? Okay and in thinking of that then let's have a look at how we are actually going to do this, how we are going to achieve this? Looking at the reverse of the GEPRISP idea, and in terms of planning, what kind of things can you come up with in terms of our planning to do this across different curriculum areas?
Teacher:	Designing activities where they need to start off with their prior knowledge as a base.

Sub-theme 2: Discourses have a focus on raising Māori students' achievement

Transcription	
Facilitator:	All right so let's have a look at the evidence. So this is how have we identified the things we have been doing differently to raise Māori achievement? Now we are going to look at some of the evidence. What evidence do we have that Māori achievement is actually lifting? First I would like to look at what your impression in class actually is and then we can look at the hard data. So what have you noticed about your class that has changed, that makes you think Māori are achieving, that Māori are succeeding or engaging in the class?
Teacher 2:	I think there is great evidence of that.
Facilitator:	Have you got some stories, some evidence for us?
Teacher 2:	I have had a look at the results this year in comparison with previous years.
Facilitator:	Is this for Māori students?
Teacher 2:	I looked at all the kids in the class.
Facilitator:	So just thinking about the class what have you noticed about the Māori students?
Teacher 1:	I would agree with you, more students are beginning to talk up.
Facilitator:	So more Māori students are engaging, that's great.
Teacher 3:	All that I was going to say was that the test results that I've got, do show an improvement and a significant improvement which is nice as well. If you take the class as a whole then yes there are one or two who haven't but then you start looking at the individual cases. But in general terms there's an improvement. So there's that and there's also the sort of things that you notice as a teacher. You can sort of tell when the kids are engaged or not by the way they look at you even. I haven't analysed the questions but I agree with what P, and J was saying, the kids are asking more questions, better questions, higher level questions, questions that indicate they're engaged in the topic so there is a certain amount of understanding. You know those kinds of things. They're smiling.
Teacher 4:	My kids come up to me outside the classroom now.
Teacher 3:	That's a good one.
Teacher 4:	Probably more so for me. They see me and that's when they want to talk to me so I think it would be different when someone is in their face throughout the year. Maybe it is bit of a privileged position.
Teacher 3:	I might see that the other way.
Facilitator:	It's quite tough to establish a relationship.
Teacher 4:	Of course it has had lots of tough parts but that is the nice bit.

Sub-theme 3: Discourses reject deficit theorising about Māori students

Transcription	
Teacher R:	But they are very needy in that they need that consistent encouragement, the consistent attention. They are a needy group.
Teacher M:	More often than not that's probably all they need to get the best out of them [consistent encouragement]. Also it may be seemingly irrelevant to their questions but giving feed forward to the answer rather than being fobbed off will probably be a lot more effective in the long run with them than just saying '24' and that's it, having a five or ten second conversation with them certainly, the skies not going to fall in if you do.
Facilitator:	The fact that they are extreme in ability. It means you have got some bright kids in there who can enliven some small groups that they are in.
Teacher M:	I think we have identified a couple of base strategies that perhaps we can use with this class. One of them is we have learnt as a group that they respond well to lots of positive encouragement so maybe that's one of our base strategies or one of the goals to increase and continue was to continue and increase the positive encouragement we give these kids and not to ignore them. Whatever they say, spend five seconds maybe and discuss it. Maybe it will lead onto something bigger and talking with the class.
Facilitator:	J what's been your experience so far with these kids?
Teacher J:	They have been a bit of a handful but like you were saying you work real hard to get them involved and that pays off.

Sub-theme 4: Discourses are agentic

Transcription	
Teacher 3:	Right I'll use my year 10 class as a case study to go through these next points. Cognitive levels of lessons with this group I'm sort of relating back to the topic we did which was sort of about building our nation and some of the milestones New Zealand has gone through. They couldn't get enough of that, they really lapped up the topic we were dealing with and wanting detail that I hadn't used in years gone by which was really good. So I sort of kept pushing it along seeing they were buying into what we were doing and so the cognitive level of the lesson was right at the upper limit of those observation sheets which was good. It extended me, I was having to be better prepared and be ready for anything that was thrown at me. The FFB, FBB and so on, I'm slowly learning the ropes as far as that goes. I always felt as though I'm a reasonably encouraging type of person and so I haven't found it too arduous to sort of push myself in that area and you definitely get a positive response from the students. If you monitor what they doing and then give them positive feedback in what they achieved when work has been handed in for assessment. Like I said the response has been good. Co-construction like the rest of you, it's one area I'm sort of toying with. With the recent sort of topic we're doing to be moving into, we've sort of had an introductory start and I've given them a unit outline, the sort of shape where we are heading. But I'd sort of like to think they're going to come back with group discussion and sort of determine the path we're going to follow through. Bearing in mind we got those sorts of constraints as outlined in the unit, the outline I've put up on the board. So it will be interesting to see how they respond to that. One reaction was "That's your job, you tell us what to do and we'll do it". But I made a point then that they need to be given the opportunity to try and set some directions for themselves. Why not give it a go. So I hope that's the response I'm going to get from them. We would be back on that topic until the end of the week because we're just finishing off some assessments from previous topics so we'll see what they come up with. Certainly chewed through the consumables this year, you know with scissors, glue, paper and all that sort of thing. Done a lot more of the group work, but it's still like W said about a 1/3, 1/3, 1/3. But even that split does allow interaction. Once you get people teed up and underway and they've been given direction or set their own direction you've got that opportunity to go around and it's good. My response is the students really like your involvement with them. They do like you sitting down with them in a group situation and you're part of what they're doing rather than just up in front and doing things from there. So, and the learning outcomes, I don't know it's sort of early days for me too, but I think some of the outcomes may seem noisy and boisterous and there's an opportunity for people to be off target but I'm always pleasantly surprised when you've got a little bit of pressure on, there's a time constraint or something, they tend to come up with the goods.

Theme 2: RISP (Relationships; Interactions; Strategies; Planning)

Sub-theme 5: Collaboration and shared expertise are contributing to a critical examination of recent in-class practice

Transcription	
Teacher F2:	L is great. He is interested in puberty because he is really interested in that area, he really is. He was focused and he was really listening and he was asking questions.
Teacher F1:	Him and T.
Teacher F2:	L and T. L was the one who came to me. "Oh Miss," you know like he asked those questions and can we do more and really interested because he's into girls.
Teacher F1:	What, body and stuff?
Teacher M1:	Relationships.
Teacher F2:	He was just so into it like Wow, that's amazing. He wants to learn more.
Teacher M2:	How can we incorporate that into maths?
Facilitator:	That's maybe quite explicit, but it's actually a good question because it's what's happening here that we can replicate. I know we are not wanting to replicate puberty in every subject but from what's happening there we can take a message and replicate it elsewhere. That's the really crucial question.
Teacher F1:	You were talking about them in that puberty class when I came to watch those year tens that were teaching. I found those two boys responded really well to the year tens. Those year tens were great. We didn't even manipulate the groups. We just said I think okay year tens into groups of four. Okay year eights join a group. It was just an ideal group and it worked.
Teacher M1:	They respond really well to M. When M is helping them.
Teacher:	How old is he?
Teacher M1:	He's in year eleven.
Teacher:	He's not that much older is he?
Teacher M1:	And when he pops in, mind you it becomes a bit more of a one to one situation but T loves it. It's no more than L would, they're wanting to be as good as M.
Teacher M2:	I think for maths, T's ability is so low that he really needs one on one. Yesterday our numbers in class were low because of athletics and I was able to sit with them both here and there.
Teacher F2:	He really does need that.
Teacher M2:	And he was getting it.
Teacher F1:	He responds to it.
Teacher M2:	I'm not trying to make excuses but 32 in a class in an hour. Two minutes per kid.
Teacher M1:	If you are lucky.
Teacher F2:	Why does it have to be you?
Teacher M2:	Well it doesn't but ...
Teacher F1:	I don't think there's anyone in that class that he would respect in that way.
Facilitator:	Not when needing help but if you go back and think about what you have said so far as a group. You have said he responds really positively to one to one. You have said that he responds really positively to the older tutor and that he has real respect and relationship with older people and students. Is there something in there that can come out of this?
Teacher M1:	How is M's maths?
Teacher M2:	He's the same agenda he's got his own work to do.
Facilitator:	Maybe not even M. Is there another older student who might be willing to help to take on a tutor role? I mean do they still do service to school, those kinds of things.
Teacher M2:	I have got M down for service to the school.
Teacher M1:	If we could grab a year ten... oh but they are coming up to exams... but once there exams are through that's the end of the year for them. Maybe it would be a good role for some of them to take on. I'm thinking of people like M, S, S and K are names that spring to mind because they are just brilliant at maths and they are good role models to those girls.
Teacher F1:	If you made up a programme with instruction for them to teach.
Teacher F2:	Negotiating for them to work with T and L for one or two periods.
Teacher M2:	They would probably come up with something pretty good themselves, wouldn't they? They are pretty switched on.
Teacher 1:	Even if they only took what you were doing class but worked to fill the gaps that we have in that particular area in that class.
Teacher M2:	Gees, I would love to see that.
Teacher F2:	That would be cool.
Facilitator:	So how do we go about seeing whether that can happen?

Sub-theme 6: Discourses are reflective, linking classroom experience and evidence to more effective in-class practice

Transcription	
Facilitator:	So what have you actually been doing? Can you think of anything you have been doing? The conscious attempt to raise the kids' educational achievement.
Teacher 1:	I have been doing a lot of the pairs you know working together with another person.
Teacher 2:	Buddies?
Facilitator:	Do you use tutoring pairs?
Teacher 1:	No I don't use that all the time you can only use that at certain times. It's more that you have got someone to help you out when you're solving a difficult problem or "this is what you do" and "we do that" and the other one can say "no remember we did this".
Facilitator:	So you're doing this quite well, that's good.
Teacher 3:	I've been doing the expert style group work and then they come back to their group and then they go off into specialised groups so that's going quite well. They go, "Have you been talking to Mrs J? We are doing that as part of our history class. We know what to do" and they tootle off.
Facilitator:	That's good. Have you been using anything?
Teacher 4:	Just group work. They're working with other people, they've danced ... some of them don't like performing in front of other people, they hate that.
Facilitator:	So the groups are a way out?
Teacher 4:	Yeah and I mean they still don't like it but you know it's a change from what they're used to, performing in front of everyone. But we started off with just doing it all at the same time. They do their own dances and then when the music starts they do their dances in their groups, at the same, so no one is watching and now we've moved onto miming where they have actually shown the rest of the class their stuff. You know they are more confident then.
Facilitator:	They've got more confidence. So you've seen a change?
Teacher 4:	It's not a big step.
Facilitator:	But it's a step that's good.
Teacher 4:	If you don't have the right type of music they won't do it. So you've got to have the right type of music.

Sub-theme 7: Clear focus on student learning with recent evidence being used to inform next teaching steps

Transcription	
Facilitator:	Does anybody else have any ideas or anything they can share towards our goal of raising Māori students in terms of outcomes of those students. Has anyone got anything that comes to mind, any results?
Teacher 1:	I was very pleased with C's efforts last term when we did our project on Government. I had to explain how you voted on the day and how you go about enrolling and the information packs. She tried very hard and did lots of homework. I gave her lots of paper to keep her going she liked the little presentation.
Facilitator:	You got quality compliments with it as well.
Teacher 1:	I don't mind doing that at all. I was quite pleased with most of her pamphlets. Last term the majority would have passed. I was explaining to Y [facilitator] earlier about [the target student]. For quite a long time, and speaking of the terms. She couldn't do this just on any topic, nothing. It had to be serious and based on an issue. So I helped her come up with the idea for a theme and we found her a book in the library. I had to help her understand what the book was trying to say but once she got the gist of it she was away. And now she was so proud of it and she delivered it really well. And C tried to get out of it at the last minute and I wouldn't accept it, but she actually did get through on the day. She went and got somebody else's stuff and tried to say it was her own. I knew that what she was doing but I didn't want to embarrass her so I let her do it. Afterwards I said, "Okay, look I know that was not your stuff. I noticed you are a good speaker; you presented that well. But I want the evidence of your ideas and your work because you are going to get a ten. You are going to present it again on Monday." She was so pleased I wasn't going to fail her. She came on Monday ready to go and she did really great.

Sub-theme 8: Expectations, skills and knowledge are developing and practices are changing or affirmed

Transcription	
Facilitator:	It's a very high level cognitive thing to give an opinion and then to justify it.
Teacher 2:	It's very hard for our kids to do that.
Facilitator:	Yes it's hard for anyone to give an opinion then back it up, so giving a reason, but giving our students opportunities to try this is important.
Teacher 1:	Yes
Facilitator:	And they're enjoying it?
Teacher 1:	Yes.
Teacher 3:	I do my little hui with my group, we have our meeting where they air their ideas, their thoughts.
Facilitator:	And it's working?
Teacher 3:	It took a long time to get into the swing of it but if you persist its worth it.
Teacher 1:	Maybe we need to have it in each class.
Facilitator:	The hui?
Teacher 1:	Yes.
Facilitator:	If you've got social difficulties, one of the things that suits Māori kids especially is having an opportunity to talk about the problem, express how they feel and then solve problems. Solve the problems themselves rather than the teacher saying this is how it's going to be and just get on with it. If kids don't respond to that sort of thing it's a really nice way of getting them to pry into those problems because sometimes it might be a problem for us but it's not a problem for them. They're quite happy if you do whatever you do but when you sit down and say to them this is a problem for me because it gets in the way of learning.
Teacher 2:	I have a concern about some of the students here. Some of the students have come and said "I can't get my work done because of such and such". How do we deal with that with this class? What are we going to do as a class because when we start doing that together then the kids are more likely to buy into it rather than us just taking over and saying this is how it's going to be. The primary thing is about the justifying that's what reminded me. I try to encourage them to justify their behaviour so you behave like that and ...
Teacher 3:	I often turn round to kids now and say I don't really like that kind of behaviour. B he was thrown out of the class and I said "I've got you next period what are you going to be like good or bad?" "Good" he said. "Okay that's a good idea" I said and because we talked it out together quietly rather than shouting at him which is what I often used to do with poor old B.
Facilitator:	So you got a good response.
Teacher 3:	He was really good and yet he'd been kicked out of his previous class but I wasn't going to have that next period and told him and he made up his mind and he followed it through which was surprising.

Sub-theme 9: Values and expectations about learning and achievement are shared

Transcription	
Teacher 1:	That's something I hadn't thought about. That's an extra but it's not too much, it's not too much to add onto this. If I word it so that they understand what I am asking them to feedback to me helping me express what actually happened because some people can and some people can't.
Teacher 2:	Don't know what to say. They will say it was easy or it was good or hard. I could just do it now.
Facilitator:	It's giving them the pointer and the guide. It might be this or it might be this.
Teacher 2:	This was my last term last year with ICT and they did nutrition and food. I came to it because I used some of the strategies but it hadn't made a lot of difference in terms of test scores to the target students. So I looked for something else. So AD and I talked about you know both teaching the same topic and what and how we were going to organise it. He had some ideas and I had some ideas and we sort of went along the same lines but we did our own thing. I had an individualised programme where they had a selection of activities that they could do in order to earn certain things. So I had a whole range of activities, they had practical work they could copy. They could work out of a text book, I had all sorts of things that they could choose from. A little computer, video clips, using models. A range of activities and I broke topic into about three bits because they had needed a little push half way through the topic. If I had done it in one big swoop I would have lost them and it's made a huge difference to their work ethics of lots of students. But in particular the target students BJ and T just get straight into it. At the beginning of the year we did a pre-test. So that was unfortunate that K and D weren't there for the final test. I could have given it to them at a different time but I feel they are really disadvantaged when you do that. Some of them don't do very well when you do that. T didn't make a lot of gain, he's sort of on and off task a bit but I still felt he had made a difference to his on task behaviour and the way in which they approach the work. Sometimes BJ he's not confident with what to do.

Sub-theme 10: Discourses show that teaching is collaborative and de-privatised

Transcription	
Teacher M:	They [target class] don't seem to respond very well to science, they are one of those groups that questions all the time. "What is science for?" "Why are they doing it?" B was coming up the third time, "why are we learning this we are not going to use it?" I've answered that question in a four part diagram you may have seen it. So I will introduce that to confirm as to why we are here at all, that's the thing with these classes. It is an A level too, not just the people lower down. You will often get kids in the middle of the lesson they will just shout out "why are we doing this?" "What is this for?"
Teacher F:	That's really troubling them, they don't know why they are there at any time. There are some students who think they need the why questions answered. You know there's the why, the what's, the how and the what ifs. They really need to know why before anything can make a lot of sense so it's a really good question.
Teacher C:	It's one of the most difficult questions on earth to answer. As we all know, not just science why are we doing this and where does it lead to? It usually takes twenty or thirty years to sort that out.
Teacher A:	Probably with D [student] it's the times and the manner of his questioning that causes the problem rather than the questions themselves.
Teacher M:	I'm just sort of keeping them on track and keeping them doing work, it's been a challenge. My other classes that I was talking to M [Facilitator] about I have been trying to focus on the learning side. The goal thing with this class is breaking out of the sort of hum drum, just sort of getting on task.
Facilitator:	Is that increasing engagement, like you are using feed forward academic and that sort of stuff?
Teacher M:	Yes it was, last week we had a big type of test on electricity. I have just been focusing on the day and getting across the idea that everything we do actually leads to something and the piece

	of paper that we spent an hour working with, they can actually take it home and use it again and it will feed forward into their academic goals for later this year.
Facilitator:	How did you find your visit? C went to see that class as part of the shadow coaching. How did you find them in the end?
Teacher C:	I found them radically different. I mean I could see some of them had a couple of tendencies. However three students who walk around in my class, they were more engaged than I thought they could be with a longer term task, a task carrying through from a couple of weeks with engagement.
Facilitator:	From this observation I think you were more effective with feed forward particularly for them to explain why things are being done. You try to get them engaged and try to move away from the horrible negativity.
Teacher M:	Like C, I sort of observed that several are quite a bit brighter than they want to be seen to be.
Facilitator:	It's interesting there's been a bit of a revolution with this class over time and suddenly and I saw it happening in maths last week, they have got very ambitious for the test. It's quite amazing having discussions about where things need to move to. It seems to have made a real difference even if just two of the students did well and accepted it. Then it's a very academic goal you have got. It's nothing to do with behaviour they have suddenly decided to dig in and nail this subject and so the same thing is evidently happening in maths as far as tests and achievements go. There's a group of girls that have been treading water for years and now they're into it.

Overall Quantitative Analysis Of Taped Feedback And Co-Construction Sessions 2004

Table 5.2 below presents the analysis of feedback sessions in quantitative form, using the second analysis method as calculated for each of the five schools who provided taped feedback sessions in 2004.²¹ Themes (in the column on the left) have been scored and averaged across facilitators from each school. The schools are presented according to their school codes. The themes from Te Kōtahitanga theme 1 (**Goal**; **Experiences of Māori students**; **theoretical Positioning of teachers**) are shaded and separated from the themes according to Te Kōtahitanga theme 2 (**Relationships**; **Interactions**; **Strategies**; **Planning**). The sub-themes according to Te Kōtahitanga theme 2 and applicable also to professional learning communities have not been shaded. The 1 to 4 ratings that appear in the columns on the right hand side show 1 as representing 0 discourses for that theme; 2 as representing an average of 1 to 3 discourses for that theme; 3 as representing an average of 4 to 6 discourses for that theme; 4 as representing an average of 7 or more discourses for that theme. Schools have been organised, from highest to lowest, according to each school's combined means, calculated across the themes.

²¹ Two people were involved in this exercise. Prior to the commencement of this coding, the process involved two researchers working towards a 90% match of their analyses. Researcher 1 then undertook all the subsequent analysis, and a 30% sample was checked for reliability by Researcher 2. This interrater reliability check was conducted on a random sample taken across all schools.

Table 5.2: Analysis of Taped Te Kōtahitanga Feedback Sessions 2004 – Average Ratings across facilitators but within schools

Themes from the Analysis Framework	Schools (according to allocated numbers – see Chapter 2)				
	8	3	7	10	12
1. Te Kōtahitanga ETP principles are challenging or affirming teachers' current assumptions and practices	4	3	3	3	2
2. Discourses have a focus on raising Māori students' achievement	2	1	1	2	1
3. Discourses reject deficit theorising about Māori students	2	1	1	2	2
4. Discourses are agentic	2	3	2	3	2
5. Collaboration and shared expertise are contributing to a critical examination of recent in-class practice	3	4	4	3	4
6. Discourses are reflective linking classroom experience and evidence to more effective in-class practice	4	3	2	3	3
7. Clear focus on student learning with recent evidence being used to inform next teaching steps	3	3	4	3	3
8. Expectations, skills and knowledge are developing and practices are changing or affirmed	2	3	3	2	3
9. Values and expectations about learning and achievement are shared	3	4	4	2	3
10. Discourses show that teaching is collaborative and de-privatised	3	2	2	2	2
TOTALS	28	27	26	25	25

Table 5.2 shows that, in these feedback sessions, schools on the whole were emphasising collaboration and shared expertise, there was evidence of reflection on classroom practices and recent student evidence was being used to inform practices. It was also evident in these feedback sessions that values and expectations about learning and achievement were being shared and leading to change in classroom practices. However, these data also show that discourses in these feedback sessions were attending far less to the two themes focused on raising Māori student achievement and rejecting deficit theorising about Māori students. Far more attention was being given to the themes that could also be applied generically to other professional learning communities. This was despite opportunities for these themes to be introduced in the ten minutes of transcription being analysed. What happened more consistently was that the themes according to GEP, were briefly introduced right at the beginning of the tape (and therefore not heard in the ten minutes of analysis) and then they were not returned to. Sub-theme 10 (discourses show that teaching is collaborative and de-privatised) was the next lowest scored theme across all of the schools. The reason for this is likely to be the narrow definition we used for this sub-theme analysis, being teachers visiting and being visited in their classroom by other teachers. Facilitators' ongoing visits to these classes were not taken into consideration when the analysis took place.

However, given the critical nature of these feedback and co-construction sessions as being the facilitator using specific examples from within teachers' teaching environment in order to set up a culturally responsive context for teachers' learning, this component might well be seen as de-privatising teaching in itself. Sub-theme 10 therefore may well need to be changed in future to take this into account. The co-construction sessions, as calculated for each of the three schools who also provided co-construction sessions, are similarly presented and appear next.

Table 5.3: Analysis of Taped Te Kōtahitanga Co-construction Sessions 2004 – Average Ratings across facilitators but within schools

	Schools		
	12	10	10
1. Te Kōtahitanga ETP principles are challenging or affirming teachers' current assumptions and practices	2	2	1
2. Discourses have a focus on raising Māori students' achievement	2	1	1
3. Discourses reject deficit theorising about Māori students	3	2	1
4. Discourses are agentic	3	2	3
5. Collaboration and shared expertise are contributing to a critical examination of recent in-class practice	4	4	3
6. Discourses are reflective linking classroom experience and evidence to more effective in-class practice	3	1	3
7. Clear focus on student learning with recent evidence being used to inform next teaching steps	3	2	2
8. Expectations, skills and knowledge are developing and practices are changing or affirmed	2	2	2
9. Values and expectations about learning and achievement are shared	2	3	2
10. Discourses show that teaching is collaborative and de-privatised	2	2	1
TOTALS: top possible score 40	26	21	19

The analysis of the co-construction sessions shows similar trends to the feedback session. Again, less attention was being given to Theme One GEP than Theme Two RISP, which is the theme that can also be applied generically to other professional learning communities.

Overall Quantitative Analysis Of Taped Feedback And Co-Construction Sessions 2005

In 2005, 12 schools supplied tapes containing 159 separate feedback or Co-construction sessions. Again, although most of these taped sessions came from lead facilitators (81) there were also many more sessions from other members (48) of the facilitation teams. Not shown on the table but of interest is the impact that this greater number of facilitators within schools had on the school-range for the over-all combined themes within these schools for both feedback and co-construction sessions. The range in schools where more than two facilitators

were part of the sampled teams was 15 to 35 for feedback sessions and 16 to 28 for co-construction sessions. A concern was that the lower end of the range could more often than not be attributed to people who were in the project for the smallest component of time (0.2 and 0.4) as opposed to the higher end of the range being attributed to more experienced people who were in the project for larger components of time. Again, there were more feedback sessions (90) than there were co-construction sessions (39) and this time only 30 of these sessions were inaudible and unable to be scored.

Table 5.4 below presents the second analysis of these feedback sessions as calculated for each of the 10 schools who provided taped feedback sessions in 2005. Again, themes (in the column on the left) were scored and averaged across facilitators from each school. The themes from Te Kōtahitanga theme 1 (**Goal; Experiences of Māori students; theoretical Positioning of teachers**) are shaded and separated from the themes according to Te Kōtahitanga theme 2 (**Interactions; Relationships; Strategies; Planning**). The sub-themes according to Te Kōtahitanga theme 2 and applicable also to professional learning communities have not been shaded. The use of the 1 to 4 ratings has been maintained and again the 10 schools have been organised, from highest to lowest, according to each school's combined means when calculated across the themes.

Table 5.4: Analysis of Taped Te Kōtahitanga Feedback Meetings 2005 – Average Ratings across facilitators but within schools

	Schools who provided tapes for analysis: Codes represent 1-4 rating, 1 being none 4 being many										
	2	12	7	9	10	6	1	3	4	10	8
1. Te Kōtahitanga ETP principles are challenging or affirming teachers' current assumptions and practices	4	2	3	2	4	2	3	2	2	4	3
2. Discourses have a focus on raising Māori students' achievement	1	2	2	1	2	1	2	1	1	2	1
3. Discourses reject deficit theorising about Māori students	2	2	3	2	2	2	3	2	2	2	2
4. Discourses are agentic	3	2	3	2	3	2	1	2	2	3	2
5. Collaboration and shared expertise are contributing to a critical examination of recent in-class practice	3	4	3	3	2	3	3	2	3	2	3
6. Discourses are reflective linking classroom experience and evidence to more effective in-class practice	4	4	3	4	2	3	3	4	3	3	3
7. Clear focus on student learning with recent evidence being used to inform next teaching steps	2	3	2	3	2	3	3	3	3	2	3
8. Expectations, skills and knowledge are developing and practices are changing or affirmed	3	2	3	3	2	3	2	3	3	2	2
9. Values and expectations about learning and achievement are shared	2	2	2	2	3	3	2	3	3	2	2
10. Discourses show that teaching is collaborative and de-privatised	2	2	1	2	2	2	2	1	1	1	2
TOTALS: top possible score 40	26	25	25	24	24	24	24	23	23	23	23

As with the feedback analysis for 2004, these data show that facilitation teams paid consistently less attention to the first four sub-themes during the ten minutes of analysis, even though the goal of raising Māori student achievement and the theoretical positioning of teachers are critical to this goal and facilitators self report this focus as being well understood. Again the trend shows more consistent attention to the next five sub-themes and again the potentially problematic nature of the analysis of sub-theme 10 is confirmed. The combined-school data show far less of an overall range from school to school (23 to 26), than the within-school range as reported above (16 to 28).

The co-construction sessions, as calculated for each of the ten schools who also provided co-construction sessions, are similarly presented and appear below.

Table 5.5: Analysis of Taped Te Kōtahitanga Co-construction Meetings 2005 – Average Ratings across facilitators but within schools

Analysis of Taped Te Kōtahitanga Co-construction Meetings 2005 Average Ratings across tapes within schools	Schools who provided tapes for analysis: Codes represent 1-4 rating 1 being none 4 being many									
	5	1	10	12	4	3	2	10	9	7
1. Te Kōtahitanga ETP principles are challenging or affirming teachers' current assumptions and practices	4	3	2	2	2	1	2	1	2	3
2. Discourses have a focus on raising Māori students' achievement	2	2	1	2	1	1	1	1	2	1
3. Discourses reject deficit theorising about Māori students	4	2	3	2	2	2	2	1	2	2
4. Discourses are agentic	3	2	3	3	2	2	3	1	2	2
5. Collaboration and shared expertise are contributing to a critical examination of recent in-class practice	2	3	4	3	4	3	2	4	3	3
6. Discourses are reflective linking classroom experience and evidence to more effective in-class practice	4	4	3	3	4	4	4	3	3	3
7. Clear focus on student learning with recent evidence being used to inform next teaching steps	2	2	2	3	2	3	3	3	2	2
8. Expectations, skills and knowledge are developing and practices are changing or affirmed	1	3	2	2	3	4	2	3	2	1
9. Values and expectations about learning and achievement are shared	2	2	2	2	2	2	2	3	2	2
10. Discourses show that teaching is collaborative and de-privatised	2	2	2	2	2	2	2	3	2	1
TOTALS: top possible score 40	26	25	24	24	24	24	23	23	22	20

The analysis of the co-construction sessions again shows similar trends to the feedback session. Again, less attention is being given to the sub-themes specific to Te Kōtahitanga than those that can be applied generically to other professional learning communities. Again the combined-school data shows far less of an overall school to school range (20 to 26), than does the within-school range (15 to 35).

Learning Outcomes From The Treatment Integrity Procedure

In terms of treatment integrity it is important to note that the general format provided by the Te Kōtahitanga Professional Development manual is being applied in these feedback and co-construction meetings. In line with this, although only ten minutes of the tapes were sampled for this exercise, from a check on the timed length of sessions on a range of the tapes it would appear that effective feedback sessions were taking from about 20 to 30 minutes and co-construction meetings were taking about one hour. Co-construction and feedback sessions always began with some form of reconnecting, and in co-construction meetings this often involved the sharing of food and drink and a general catch-up.

Although the taped feedback sessions were in the main given as one to one sessions, it is understood by facilitation team members that they must operate as a tight unit in order to support one another and in order to be seen to be supporting their teachers. Although many of the taped co-construction sessions had two facilitators present, taped feedback sessions only had one facilitator present. The process of taping any feedback sessions that the team predicts will be tricky seems like a very sensible idea. At the very least sessions predicted to be tricky could be co-jointly approached (undertaken by a team member and observed and noted by another member). In cases where feedback is challenging, we have observed through this process teachers who were unable to remember any of the positive feedback and instead were overcome by the feed forward. We have also observed in schools that although teachers might say and write positive feedback themselves in the appropriate space on the observation sheet, they might well be thinking quite differently. This can fester, lead to future personal attacks on the person who gave the feedback and may well become a barrier for personal development and growth of both the teacher and the facilitator. Giving corrective feedback or feed forward to colleagues can be challenging but it can also be very rewarding.

Deficit theorising about Māori students was still evident on many of these tapes and there is a clear need to take care of how we respond to it. Often facilitators needed to remind or to help teachers to steer clear of, or avoid reverting to deficit theorising. This was not always done and at times this was not done very well. Facilitators who kept the Te Kōtahitanga principles in high profile throughout these sessions were able to do this most consistently and well. These facilitators embedded their discussion in the sub-themes from Theme 1: GEP (Te Kōtahitanga ETP principles are challenging or affirming teachers' current assumptions and practices; Discourses have a focus on raising Māori students' achievement; Discourses reject deficit theorising about Māori students; discourses are agentic). We would suggest that these are the themes that help teachers to focus on the goal of raising Māori student achievement and support them specifically to raise their own expectations, agency and skills to do so. These are the themes that make Te Kōtahitanga about more than "just good teaching" for all, as they are the themes that ultimately will make the difference in changing the ways that teachers relate to Māori students and their own agency to respond in ways that in turn will lead to improvements in the achievement of Māori students.

Facilitators who did not embed their discussions in these themes tended to be overly relying on Theme 2: RISP. Although these conversations maintained the themes that relate to professional learning conversations (Collaboration and shared expertise are contributing to a critical examination of recent in-class practice; Discourses are reflective linking classroom experience and evidence to more effective in-class practice; Clear focus on student learning with recent evidence being used to inform next teaching steps; Expectations, skills and knowledge are developing and practices are changing or affirmed; Values and expectations

about learning and achievement are shared; Discourses show that teaching is collaborative and de-privatised), they tended to avoid, belittle and at times even agree with the deficit theorising about Māori students that they had heard. These conversations tended to focus on discourses of relationships and interactions with all students rather than focusing on Māori students as theme 1 requires of teachers and facilitators, as well as discourses of planning to include new strategies in their classroom. We would suggest that these are the themes that are about “good teaching” but they are also the themes that have seen many Māori students fail to benefit from New Zealand’s education system because they do not address teachers’ deficit theorising about Māori students with its consequent pathologising of Māori students’ lives and educational opportunities and outcomes of low teacher expectation of Māori students.

A further finding of this analysis is that grouping teachers around a common class, where observations are done according to these groups, with feedback sessions following quickly, then co-construction and shadow coaching beginning before the next group’s cycle begins, still appears to be the most efficient and effective process for working with teachers in Te Kōtahitanga. Where the regional co-ordinators understood that this cycle was firmly in place and being conducted in a timely and consistent fashion, aspects contributing to each element in the cycle appeared from the tapes to be efficiently recalled, well synthesised and reflected upon in the feedback and co-construction sessions. Discourses of teachers around a common class of students, supporting facilitators to either affirm or reject deficit theorising of their colleagues was another advantage of this type of grouping.

Consistent with this finding, where the regional co-ordinators, for a range of reasons, understood that this cycle appeared to be being conducted in a less consistent fashion, the treatment integrity tapes and/or lack of tapes would indicate some agreement. It would also appear from the taped sessions that the shorter the time between observations, feedback and co-construction sessions the better. That is not to say that we are advocating for observers to conduct the feedback immediately following the observation. In some cases minimal, superficial feedback carried out in well below the recommended time, some less than ten minutes, is not preferable to more considered, albeit later, feedback sessions.

From the conversations heard on the tapes, it appears there is a wide range of teacher interactions and relationships in these classrooms supporting the evidence from the observations in Chapter 4. This is further supported by the student interviews in Chapter 8. Some teachers show a high level of expertise in implementing the ETP. Other teachers appear to be still requiring a lot of help, and can be heard continually resisting or admitting to having changed very little since their first Te Kōtahitanga wānanga. Teachers showing resistance to change require a lot of help. In these cases facilitators are faced with the ethical dilemma of how best to give honest, yet constructive feedback/feed forward while still maintaining the mana of the teacher involved. While facilitators understand that change is often preceded by some form of dissonance, be it cognitive or cultural, this job is not easy. To help teachers such as these to step outside their comfort zone and to change, requires a high level of confidence in the kaupapa of Te Kōtahitanga, in the process, in their own personal relationships with teachers and in their own skills and expertise. Facilitators who lack this confidence were heard to be side-stepping their responsibility of engaging teachers in the repositioning and change processes. Given that these are potentially the optimum learning times for both the teachers and facilitators it would seem that this analysis, conducted for summative purposes, would suggest that the use of analysing taped feedback and co-construction meetings for formative purposes and professional development will be useful when going in to the next phase of the project when we will be looking at what constitutes sustainability.

Overall, what is happening is that, while there are some exemplary implementers of the ETP, there is a tendency in both feedback and co-construction sessions to focus on the RISP aspect of the ETP and less so on the GEP. That is, data from these feedback and co-construction meetings suggest that rather than contextually questioning deficit thinking, asserting agency, considering Māori students' experiences and promoting Māori students' achievement, facilitators and teachers were spending more time focusing on their relationships and interactions with all students and the strategies and planning they were using to bring about change.

Chapter 6: Te Kōtahitanga 2005 Teacher Participation Survey Results

Introduction

In the second year of Phase 3, 2005, The University of Waikato Research and Professional Development Team sought to learn about the perceptions of teachers, facilitators and principals as to how well teachers are implementing the Effective Teaching Profile in their classrooms. Due to the sheer number of teachers involved in the project by this stage (422) it was not feasible to repeat the interview exercise that was undertaken during Phase 2. Therefore, a survey²² was developed and used. We found Guskey's, (Guskey, 2002) five levels of evaluation of professional development programs in schools provided a basis for creating a survey to measure project participants' perceptions about the implementation of the Effective Teaching Profile.

Using Guskey's (2002) framework as a guide, we created three separate instruments (see Appendix C), using the same basic questions for teachers, facilitators, and principals involved in the project. The Guskey framework was adapted to develop the survey instrument. However, this survey in no way addresses the multiple measures Guskey determines are necessary to evaluate a project. In this report we have, in addition to this survey, produced evidence from the observation tool, teacher interviews, the evidence analyses of the feedback sessions and co-construction meetings, along with analyses of the Māori students' experiences, performance, and achievement. Collectively these data and the survey results provide an overall picture of the effectiveness of the implementation of the Te Kōtahitanga professional development.

The Teacher Participation Survey consists of five parts, corresponding with Guskey's five levels. The first part covers questions about five Te Kōtahitanga professional development activities: (a) initial three-day hui, (b) observations, (c) feedback following observations, (d) co-construction meetings, and (e) shadow coaching. The second part has questions about the knowledge and skills teachers have gained as a result of their participation in the project. Part three asks questions about each school's support for Te Kōtahitanga, particularly regarding the structural changes required. The fourth part focuses on teachers' use of the new knowledge and skills in the classroom, and the fifth part is about how the shift in teacher practice has affected student outcomes. Parts two and four were specifically based on the Effective Teaching Profile (ETP). The rating scale for each question ranged from 1=strongly disagree to 5=strongly agree. Results below 4.0 were noted as areas for possible improvement.

In addition to questions in the five parts of the survey, ten demographic questions were asked. The survey contained areas for written comments at the end of each part and the five areas of part one.

Using this survey instrument, data were collected in term four of the 2005 school year from principals,²³ facilitators, and teachers in ten of the twelve schools involved in the project. The quantitative data collected from administration of the survey were analysed using the

²² Although we have labelled this instrument as a "participation" survey because we were investigating the level of participation in the implementation of the ETP, we note this is a measure of perceptions about levels of participation.

²³ The category of Principals includes Deputy Principals involved with the facilitation teams. Two DPs responded to the survey.

Statistical Package for the Social Sciences (SPSS) (Creswell, 2005). The qualitative data were analysed by content analysis (Merriam, 1998). These data were analysed formatively to give each school feedback about the reported strengths and weaknesses of their involvement with the project. For summative purposes these data were analysed for this report and for other academic publications.

Summatively the quantitative data were also analysed to identify differences among the three survey respondent groups (principals, teachers, and facilitators) (Morgan, Leech, Gloeckner, & Barrett, 2004). The qualitative data were analysed across schools for themes and patterns that help explain and give depth of understanding to the quantitative results (Creswell, 2005).

This survey was also used to focus on understanding issues pertaining to teacher positioning. In reference to discursive positioning the survey contained ten questions measuring this shift in two of the surveys' sections: the knowledge and skills teachers gained from being involved in Te Kōtahitanga, and the impact of this new knowledge and skills on professional practice.

Results

Survey responses were obtained from principals (n=13), facilitators (n=20), and teachers (n=236, a 56% response rate)²⁴ in the 12 project schools. Descriptive analyses of the data collected regarding the demographic questions revealed the following results. 87% of the respondents were teachers, 7% facilitators, and 5% principals or deputy principals.²⁵ 65% of the respondents were female and 34% were male. 81% were non-Māori and 17% identified themselves as Māori. Half of the respondents taught both in years 9 and 10, while 16% taught only year 9 and 10% only year 10. The respondents were about evenly divided between participating in the project for one year (45%) and two years (49%). The amount of teaching experience ranged: 1-2 years (15%), 3-5 years (17%), 6-10 years (22%), 10-20 years (17%), and 20 plus years (27%).

Quantitative Data Analyses

Analyses of the quantitative data was first conducted for the five areas of Part 1 (Professional Development Activities) of the survey: A. Initial three-day hui, B. Observations, C. Feedback, D. Co-Construction Meetings, and E. Shadow Coaching²⁶. Second, analysis was conducted of the five parts of the survey: 1. Te Kōtahitanga participants' reactions to professional development activities; 2. Te Kōtahitanga participants' learning; 3. School support and change; 4. Te Kōtahitanga participants' use of new knowledge and skills; and 5. Learning outcomes for students of Te Kōtahitanga teachers. Third, inferential statistical analyses were conducted to investigate those areas of significant importance. Finally, analyses were conducted of those questions pertaining to teachers' discursive positioning in terms of deficit thinking and agentic positioning.

Analyses of Part 1 of the survey

Analyses of the quantitative data in the five areas of Part 1 of the survey revealed that, according to the experiences of the teachers who responded to this survey, the professional development activities at the school are doing well. In particular, the participants' ratings for the initial hui, observations, feedback and co-construction meetings were outstanding; that is,

²⁴ We can be confident that such a high response rate constitutes a representative sample of the whole population. etc.

²⁵ The cumulative percentage for each variable will not add up to 100% because some people chose not to respond to the question.

²⁶ Only Part 1 of the survey had subsections.

survey respondents indicated agreement that these activities were useful and meaningful. An area for possible improvement was shadow coaching. (See Figure 6.1) In the area of shadow coaching improvement is suggested in the following areas: (a) making certain time is well spent; (b) providing useful materials and information; and (c) creating well-planned and meaningful meetings.

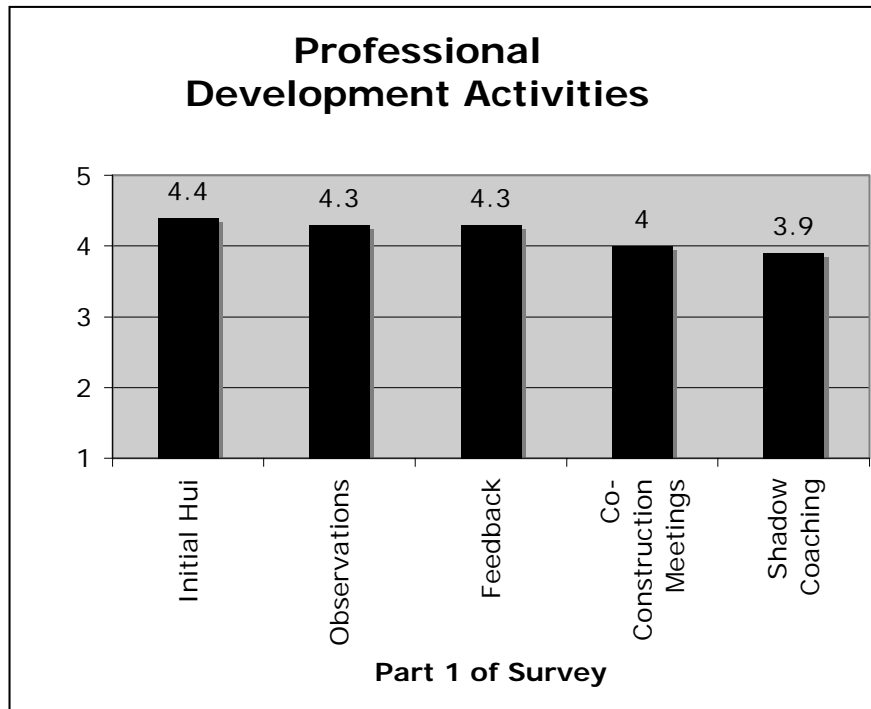


Figure 6.1: Mean scores for five sections of the first part of the survey

Analyses of Parts 1-5 of the survey

Further analyses of the data from the five parts of the survey (see figure 6.2 below) revealed that teachers have a high level of knowledge and understanding of the Effective Teaching Profile, and feel that they have done a good job of applying those skills in the classroom. However, the teachers report that school support is not as high as they would deem necessary, and they do not rank student learning outcomes as highly as they do the actual professional development activities. In this regard, Guskey (2002) notes that where student outcomes are not at the same level as parts two and four, school support for the project needs to improve. In other words, it is that which is beyond the classroom that needs to catch up with and support the changes that are taking place in the classroom. Therefore, we have suggested to the schools ways to: (a) develop a school-wide culture that honours and shares the successes achieved through Te Kōtahitanga, (b) provide sufficient resources for implementing the project, including time for sharing and reflection, and (c) efficiently address problems and issues related to the implementation of the project.

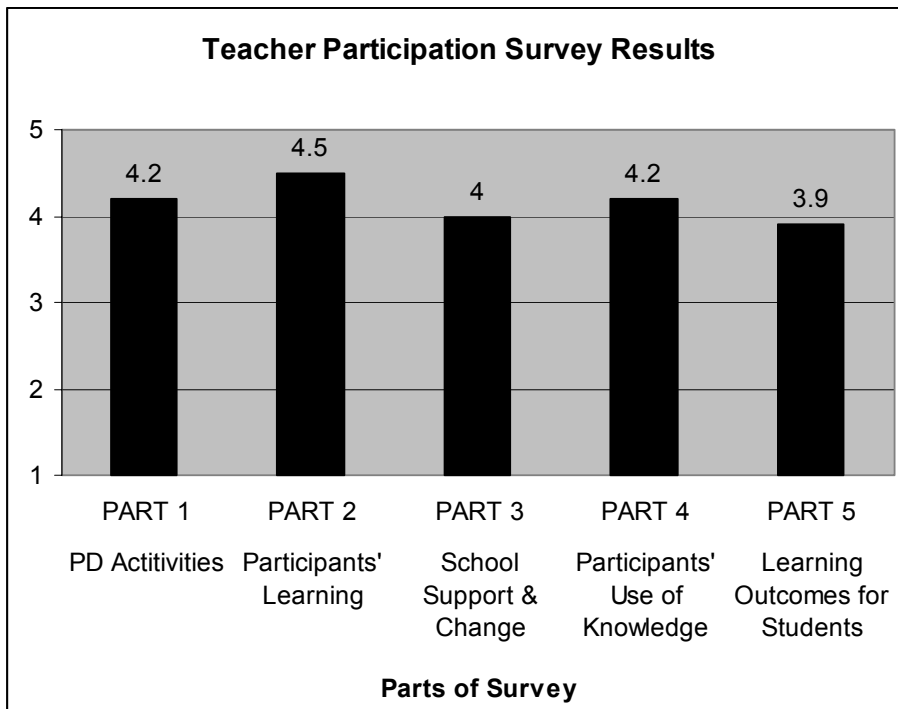


Figure 6.2: Mean scores for five parts of the survey

Inferential statistical analyses of survey questions

Further analyses revealed there was a statistically significant difference among the perceptions of the principals, teachers and facilitators regarding the support of schools for Te Kōtahitanga. Principals generally ranked school support for the project higher than the other two groups. In particular these significant differences involved: (a) the changes promoted by Te Kōtahitanga being in alignment with the mission or strategic planning of schools $F(2, 260) = 8.348, p = .000$, (b) the schools having a school-wide culture to honour and share successes achieved through the project $F(2, 264) = 4.302, p = .015$, (c) the schools being effective in advocating and facilitating the implementation of the project $F(2, 262) = 3.956, p = .020$, and (d) the schools supporting teachers working together in a structured manner $F(2, 265) = 7.355, p = .001$. Table 6.1 shows the mean scores for the three groups in the four areas of school support. Games-Howell post hoc tests revealed significant mean differences among principals, teachers, and facilitators on the four questions as follows: (a) the changes promoted by Te Kōtahitanga being in alignment with the mission or strategic planning of schools, between principals and teachers, much larger than typical ($p = .000, d = 1.0$) and between principals and facilitators, much larger than typical ($p = .001, d = 1.44$); (b) the schools having a school-wide culture to honour and share successes achieved through the project, between principals and facilitators, larger to much larger than typical ($p = .018, d = .94$); (c) the schools being effective in an advocating and facilitating the implementation of the project, between principals and teachers, typical to larger than typical ($p = .010, d = .65$) and between principals and facilitators, smaller than typical to typical ($p = .009, d = .37$); and (d) the schools supporting teachers working together in a structured manner, between principals and teachers, larger to much larger than typical ($p = .000, d = .91$) and between principals and facilitators, much larger than typical ($p = .000, d = 1.42$).

When these questions regarding school support for Te Kōtahitanga were analysed by aggregating the results across the seven questions in part 3 of the survey, a statistically significant difference was found among the three groups of survey respondents (teachers, facilitators, and principals) on the aggregated results $F(2, 266) = 6.63, p = .002$. Table 6.1 shows that there were significant mean differences among the principals ($M=4.48$), teachers ($M=3.96$) and facilitators ($M=3.62$). The Games-Howell post hoc test revealed the significant mean difference between principals and teachers was much larger than typical ($p = .000, d = .8$) and the significant mean difference between principals and facilitators was much larger than typical ($p = .001, d = 1.19$).

Table 6.1: Means and Standard Deviations Comparing Principals, Facilitators, and Teachers on Survey Results for Specific Areas of School Support of Te Kōtahitanga

	Principals			Facilitators			Teachers		
	n	M	SD	n	M	SD	n	M	SD
3.A. The changes promoted by Te Kōtahitanga are in alignment with my school's mission or strategies direction.	13	5.0	.000	18	4.0	.907	232	4.34	.677
3.C. My school had a school-wide culture to honour and share successes achieved through Te Kōtahitanga.	13	4.08	.76	20	3.15	1.08			
3.E. My school addresses issues and problems related to implementing Te Kōtahitanga quickly and efficiently.	13	4.23	.599	20	3.3	1.08	232	3.63	.933
3.F. My school supports teachers working together collaboratively in a structured manner.	13	4.85	.376	20	3.65	1.04	235	4.06	.883
Part 3 (7 questions)	13	4.48	.3	20	3.62	.894	236	3.96	.662

Note: The referral to Principals also includes 2 Deputy Principals who responded to the survey. n = The number of participants in the sample; M = The mean is simply the average of all the items in a sample; SD = The standard deviation is a measure of how spread out your data are.

* Alpha set at $p \leq .05$.

Further mean score analyses revealed that teacher improvement is suggested in the area of Māori student outcomes: (a) positively affecting achievement, (b) positively influencing physical and emotional well-being, (c) increasing confidence, (d) improving attendance, and (e) increasing engagement.

In order to address the specific tasks outlined by the GEPRISP professional development model, statistical analyses were conducted regarding the three groups responding to the survey (teachers, facilitators, and principals) on two sets of questions related to teacher positioning: (a) the ten questions in part 2 of the survey and (b) the ten questions in part 4 of the survey.

A statistically significant difference was found among the three groups of survey respondents (teachers, facilitators, and principals) on the aggregated responses to the ten questions in part 4 of the survey $F(2, 264) = 8.01, p = .000$. Table 6.2 shows that there were significant mean differences between the teachers ($M=4.27$) and facilitators ($M=3.8$). The Games-Howell post hoc test revealed that the significant mean difference between teachers and facilitators was much larger than typical ($p = .000, d = .90$).

Table 6.2: Means and Standard Deviations Comparing Facilitators, and Teachers on Survey Results Regarding Part 4

	Facilitators			Teachers		
	n	M	SD	n	M	SD
Part 4 (10 questions)	18	3.8	.364	234	4.27	.535

Note: n = The number of participants in the sample; M = The mean is simply the average of all the items in a sample; SD = The standard deviation is a measure of how spread out your data are.

* alpha set at $p \leq .05$.

In order to address the specific tasks outlined by the GEPRISP model, statistical analyses were conducted regarding the three groups responding to the survey (teachers, facilitators, and principals) on two questions related to teacher planning: (a) question 2.G. “In order to be an effective teacher I need an overall approach to planning, including units and lessons, and to use student outcomes to inform my practice” and (b) question 4.G. “I have an overall approach to planning, including units and lessons, and use student outcomes to inform my practice.”

A statistically significant difference was found among the three groups of survey respondents (teachers, facilitators, and principals) on question 4.G $F(2, 258) = 10.28, p = .000$. Table 6.3 shows that there were significant mean differences among the principals ($M=4.85$), teachers ($M=4.63$) and facilitators ($M=4.5$). The Games-Howell post hoc test revealed the significant mean difference between principals and teachers was smaller than typical to typical ($p = .037, d = .33$) and the significant mean difference between teachers and facilitators was smaller than typical to typical ($p = .001, d = .33$).

Table 6.3: Means and Standard Deviations Comparing Principals, Facilitators, and Teachers on Survey Results Regarding Teacher Planning

	Teachers			Principals			Facilitators		
	n	M	SD	n	M	SD	n	M	SD
Question 4.G	13	4.85	.388	18	4.5	3.57	234	4.63	4.29

Note: The referral to Principals also includes 2 Deputy Principals who responded to the survey. n = The number of participants in the sample; M = The mean is simply the average of all the items in a sample; SD = The standard deviation is a measure of how spread out your data are.

* alpha set at $p \leq .05$.

Analyses of teacher positioning questions

Due to the importance of anti-deficit thinking and agentic positioning for this project, we looked at survey questions related to teacher positioning. Therefore, analyses of questions related to deficit thinking and agentic positioning in parts 2 and 4 of the survey were conducted separately. The questions related to deficit thinking were: 2a – “Deficit thinking about Māori students has a negative effect on their achievement,” and 4a – “I am aware of the negative effects of deficit theorizing about Māori students and my teaching practices reflect this knowledge.” The questions related to agentic positioning were: 2b – “I need to relate to Māori students from an agentic position,” and 4b – “My teaching practices reflect a more agentic attitude towards Māori students.”

Figure 6.3 shows at the end of Phase 3, survey participants believe project teachers are at a high level of understanding about the negative effects of deficit thinking about Māori students and are applying that knowledge in their teaching practices. Figure 6.3 also shows survey participants believe project teachers have a high level of understanding about the importance of relating to Māori students from an agentic position and ensuring their teaching practices reflect an agentic attitude towards these students.

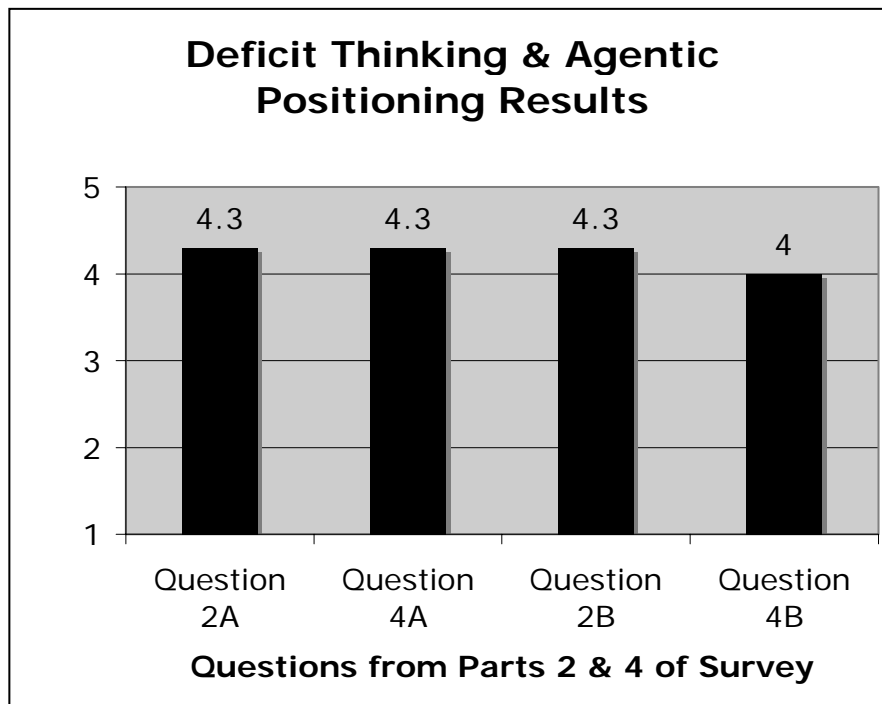


Figure 6. 3: Mean scores for questions 2A, 4A, 2B, and 4B of the survey

Qualitative Data Analyses

Analyses of the qualitative data were first conducted for the five areas of Part 1. Second, an analysis was conducted of the five parts of the survey.

Qualitative analyses of the data collected through comments in the five areas of Part 1 of the survey revealed respondents were generally positive about the professional development activities involved in Te Kōtahitanga. The observations, feedback, co-construction meetings, and shadow coaching were considered to be beneficial. Participants said the initial hui was generally enjoyable, informative, and provided an overview of the project and an opportunity to build relationships.

However, they commented that facilitators needed to manage the time better, consider when the best time of year is to hold the training hui and clarify ideas raised at the sessions. In addition, they supported the idea that observations needed to be evaluated in terms of appropriateness, length, and frequency; feedback needed to be clear, concise, and brief so it fits well into teachers' timetables; and co-construction meetings needed to be focused and relevant. The key factors underlying a successful co-construction meeting were participant willingness and tolerance for differences in personality (See Table 6.4).

Table 6.4: Thematic Analyses of Survey Comments for Five Sections of First Part of Survey.

Part 1 of Survey	1. A. How useful was the initial hui? (n = 293)	1. B. Observations (n = 154)	1. C. Feedback (n = 190)	1. D. Co-construction Meetings (n = 199)	1. E. Shadow Coaching (n = 139)
Complimentary Themes	<p>Respondents generally enjoyed the hui. Many said the hui was informative, provided a good overview of the Te Kōtahitanga programme and enabled participants to get to know one another better.</p> <p><i>Very, gave an overview of programme. Most importantly allowed time to get to know colleagues and share ideas.</i></p>	<p>The majority of respondents found observations beneficial.</p> <p><i>Excellent – once I got over the initial visits and got used to someone else professionally in my class I recognised the benefits to myself and assisting in unlocking the potential of my students.</i></p>	<p>The majority of respondents found feedback beneficial.</p> <p><i>It goes hand in hand with the observations. The observers were positive and encouraging, being very clear about their aims and giving me useful information and tools to use following on from that.</i></p>	<p>The majority of respondents found co-construction meetings beneficial.</p> <p><i>My experience was positive, as this was a great chance to find out what happened with the students we all taught and how they related, reacted, learnt in various subjects. Each teacher made a contribution and we were able to share.</i></p>	<p>The majority of respondents participating in this activity found shadow coaching beneficial.</p> <p><i>A really valuable time. Excellent support and sharing of ideas – developing ideas, planning lesson content and learning outcomes. All lessons shadow coached went very well – both teachers and students.</i></p>
Suggestions for Improvement Themes	<p>Many noted that there was a need for better time management during the hui and perhaps reducing the time from three days to two days.</p> <p><i>I felt that three days was too lengthy. When hui are held at the start of the year they should not interfere too much with planning time.</i></p>	<p>Many questioned the length, frequency and appropriateness of the observations.</p> <p><i>No attempt was made to understand the nature of the different types of lessons in different subjects. They often arrived late and left early. Lack of sensitivity by the observers here.</i></p>	<p>Facilitators were said to be unclear at times.</p> <p>Sessions were said to be too long and needed to be structured to fit in more effectively with teachers' timetables.</p> <p><i>Positive but always squeezed in say at lunchtime which is quite presumed and makes information harder to digest. Because there is so much feedback I would prefer it to be narrowed to one lesson and shown how to focus on this one essence of Te Kōtahitanga.</i></p>	<p>Some material was irrelevant (to certain subject areas).</p> <p>Meetings were often too long and lacked focus.</p> <p>Many said that the quality of co-construction meetings depended largely on the willingness and personalities of the participants.</p> <p><i>Would be great if the leaders came to the meeting with a focus for us to discuss sometimes. Dominant people dominate the time. Others say nothing. There needs to be equal time spent talking by all those involved with the class.</i></p>	<p>Many did not participate in shadow coaching.</p> <p>Facilitators need to be able to distinguish between shadow coaching and observation roles.</p> <p>Many questioned the organization and effectiveness of shadow coaching.</p> <p><i>Shadow coaching did not happen for me this year. Three times I packed up to get to meeting only to find the room locked and all had gone home !!</i></p> <p><i>I would find it useful to have the facilitator assist me in the lesson. My shadow coaching tended to be more of an observation, rather than helping with problems or ideas that arose.</i></p>

(n=Number of responses.)

Qualitative analyses of the data collected across the five parts of the survey revealed the following findings:

Part 1 – The participants generally had positive things to say about the professional development activities. However, some said they believed that with good preparation and effective use of time, the initial hui could be held in two days, rather than three. Others thought facilitators need to be aware of the impact of observations on teachers in terms of how long the observation session is, how often they are held, and whether the purpose of the observation was appropriate. Shadow coaching appeared to be an area that needs attention so that all teachers can benefit from this activity.

Part 2 – Generally the teachers felt the knowledge and skills they learned by being involved in the project were beneficial and helped them to be more effective teachers. However, some teachers felt Te Kōtahitanga did not involve new pedagogies; rather, the project supported strategies they already knew. They believed these strategies were good for all students, not just Māori.

Part 3 – Survey respondents had mixed perceptions as to whether their school's priorities were focused on improving Māori student achievement or the achievement of all students. However, they were in general agreement that the motivation for their school to participate in Te Kōtahitanga was to improve Māori student achievement.

Part 4 – Responses to the application of this knowledge and skills in the classrooms were similar to those noted above. Many of the respondents have applied the new strategies in their classrooms. Others said they reinforced prior pedagogies and these strategies were applicable to all students, not just Māori.

Part 5 – Since becoming involved in the project participants perceived marked improvement in Māori student motivation, enthusiasm, and confidence, particularly when Māori students were allowed and encouraged to draw on their own culture and prior knowledge (See Table 6.5).

Table 6.5: Thematic Analyses of Survey Comments for Five Parts of Survey.

Parts of Survey	1. Professional Development Activities (n=662)	2. Participants' Learning (n = 69)	3(a). The Primary goals of my school are: (n = 198)	3(b). My school is participating in Te Kōtahitanga because: (n = 184)	4. Participants' Use of New Knowledge and Skills (n = 103)	5. Specific examples of how changes in your teaching practice have improved Māori student achievement? (n = 218)
	<p>Overall, comments were generally positive (rather than negative).</p> <p>Many respondents however were able to readily identify problem areas in all professional development activities.</p> <p>Many respondents did not participate in shadow coaching (although they participated in the other professional development activities).</p> <p><i>The feedback and feed forward was enlightening and facilitated meaningful adjustments in teaching practise and in implementation of learning activities. My teaching practise developed as a result and moved me out of my comfort zone. This was great!</i></p>	<p>Many found the Te Kōtahitanga programme extremely beneficial and said that Te Kōtahitanga has successfully identified what contributes to being an “effective teacher”.</p> <p>Some however found that Te Kōtahitanga did not teach new strategies but reinforced strategies they already knew and that Te Kōtahitanga strategies are applicable to all students not just Māori students.</p> <p><i>I feel like I have a thorough understanding of the principles of Te Kōtahitanga, and what sort of things I need to do to bring about change. However I still feel unconfident about particular strategies and techniques to use to promote these ideas (especially how to bring about feed forward/back conversations).</i></p>	<p>Responses were generally mixed as to whether the primary goals of the school are to improve the achievement of Māori students or all students.</p> <p><i>The school's strategies plan and mission statement in essence wishes to give all students a well-grounded education – academic, social, cultural and sporting. So as to produce good citizens who can pursue further opportunities after secondary school. One of the strategic goals / objectives is to increase Māori achievement.</i></p>	<p>An overwhelming majority said that their school is participating in the project to improve the achievement of Māori students.</p> <p><i>We believe in teachers reflecting on their practise in the classroom and developing strategies to improve the academic achievement of Māori students. We have a strong commitment to this kaupapa.</i></p>	<p>Respondents have generally enjoyed participation in the Te Kōtahitanga programme and have applied the strategies to their own existing teaching methods.</p> <p>Some however found that Te Kōtahitanga did not teach new strategies but reinforced prior skills, and the strategies were applicable to all students not just Māori students.</p> <p><i>To completely change my teaching practises after 20 odd years has been amazing. I was becoming very bored with the job and now I love meeting the challenge of finding and using different strategies frequently in the classroom.</i></p>	<p>Many teachers who have applied Te Kōtahitanga teaching strategies have noticed a marked improvement in the motivation of Māori students and found that generally encouraging students to draw more on their own culture and prior knowledge proved beneficial towards raising the enthusiasm and confidence of Māori students.</p> <p><i>My liking for my Te Kōtahitanga class has steadily increased. Possibly in tandem with our mutual respect and the enjoyment of learning and wider interest in other aspects of language. Students engagement now typically includes discussion, (with peers and teachers) questioning and a willingness to dig deeper to find out real answers.</i></p>

(n=Number of responses.)

Based on these results we make the following findings. This project is reaching the target audience with the vast majority of participants being non-Māori. In addition, we need to be cognizant of the fact that a substantial number of teachers in the project come from outside New Zealand. Based on the perspectives of the survey participants the following recommendations are made. In the area of professional development activities, shadow coaching needs particular attention. These data indicated that either shadow coaching is not taking place, or if it is taking place, it closely resembles observations. Facilitators need to make sure initial hui, feedback sessions and co-construction meetings are well planned, relevant, focused, and well executed.

Facilitators need to promptly address problems related to motivation and personality differences at co-construction meetings. They also need to understand the differences between observations and shadow coaching as well as ensuring all teachers are participating in shadow coaching, with either a facilitator or peer.

Survey participants believe teachers have a high degree of knowledge and skill about implementing the Effective Teaching Profile (ETP) and other fundamental principles of the project, and also exhibit a high degree of implementation of this knowledge and skill in the classroom.

However, some teachers fail to identify these skills as being part of the ETP, which was created based on Māori student narratives of experience. They believe the ETP is the same as skills they have learned in the past, without realizing the ETP is more than strategies and skills. It involves a profound change in the way they think about, relate to and interact with Māori students. Of concern is the indication that some teachers fail to appreciate that the kaupapa of the project is to improve Māori students' achievement. If instead the emphasis of this project becomes one of focusing on improving the achievement of all students, the kaupapa will be lost and research shows (OECD, 2000) that such a focus will maintain the status quo resulting in continuing disparity for Māori students.

The results of major significance focused on two of the elements of the GEPRISP model, positioning and planning. Under the element of teacher positioning we were able to determine that teachers understand that they are making the shift to agentic positioning and discursive teaching by acquiring the knowledge and skills outlined in the Effective Teaching Profile and subsequently applying that knowledge and skill in the classroom.

Our analyses also revealed that teachers differed significantly from facilitators in their perceptions of how well they are applying their knowledge and skill in the classroom to create the shift in agentic positioning and discursive teaching. Teachers' perceptions in this regard were significantly higher than facilitators. This difference was strong enough to be of practical concern to schools and the subject of future co-construction meetings.

As to the element of planning under the GEPRISP model, one of the questions in the survey addressed teachers' overall approach to planning, including units and lessons, and using student outcomes to inform practice. Our analyses revealed that teachers differed significantly from facilitators and principals in their perceptions of how well they had developed an overall approach to planning, including units and lessons, and using student outcomes to inform their practice. Principals' perceptions in this regard were significantly higher than teachers, and teachers' perceptions were significantly higher than facilitators. These differences were strong enough to be of practical concern to schools. The differences of perceptions between

principals, teachers, and facilitators regarding teacher positioning and planning are a useful subject for further discussion in schools. Co-construction meetings are one useful context for these discussions, but a project-wide facilitated meeting would profitably consider the implications of these findings.

These results revealed that part 3 of survey (school support) is of concern. Those who responded to the survey indicated that support for the project needs improvement in four areas: (a) creating a school-wide culture that honours and shares the successes achieved through Te Kōtahitanga, (b) providing sufficient resources for implementing Te Kōtahitanga, (c) including time for sharing and reflection, and (d) efficiently addressing problems and issues related to the implementation of the project. Also of concern are the differences in perceptions among the principals, teachers, and facilitators. The strength of these differences was of practical importance, and it is recommended that these differences be the basis of further discussion in schools as to why these differences in perceptions exist.

Conclusions

These results indicate that teachers report a high level of satisfaction with the induction wānanga, that they have a high level of understanding of the components of the Effective Teaching Profile and are applying that knowledge to their teaching practice. However, the teachers are less sure that their schools are supportive of their efforts and that Māori students are making the necessary gains in achievement. These results suggest that the schools have not yet reached a situation of school-wide structural support that will ensure sustainability of the project, and remain reliant on outside support from the University of Waikato Research and Professional Development Team to support the implementation of the Effective Teaching Profile²⁷. The concern about Māori student achievement gains may well reflect the overall problem seen in schools regarding the lack of consistent, across-class or level, accurate and standardised measures of achievement for year 9 and 10 students.

In addition, these findings was very useful for planning for the 2006 school year by principals, facilitators, and teachers. Principals have been asked by the RPD team to develop plans for their school to take over ownership of Te Kōtahitanga, particularly by focusing on the systemic changes required to support the project. Facilitators are constantly supported through national and regional wānanga (3 a year) to improve the planning and execution of the professional development activities they lead, particularly regarding co-construction meetings and shadow coaching. Further, it has been suggested that many of the items mentioned in this report can be the basis for co-construction meetings between the project teachers in the school.

This survey also indicates that teachers need to be supported to help improve Māori student outcomes by deepening their understanding of and appreciation for the kaupapa of the project, to improve Māori student outcomes by realizing that the kaupapa is much more than a collection of strategies and will not be accomplished if the vision is shifted from improving Māori student outcomes to improving the outcomes of all students. Albeit we have found when Māori students do well in the classroom, so do all students. On the other hand, as history has demonstrated, focusing on all students has left Māori students over represented in negative educational indices and under-represented in the positive.

²⁷ While this interpretation of the results is based on our field experience, these results could also suggest the process is not robust enough or there are other components needed.

Chapter 7: Teachers' experiences of the Effective Teaching Profile

Introduction

The Te Kōtahitanga professional development programme for teachers has been in place in the 12 Phase 3 schools since the beginning of 2004. During this time teachers as participants have undergone professional development which asks them to evaluate their theoretical positioning regarding the achievement of Māori students, and to submit their classroom practices to inspection via term by term observations. Observations are then followed by feedback, co-construction meetings, the setting of individual and group goals, and shadow coaching, all with the aim of improving Māori students' achievement. Examining the experiences of teachers who have been part of this approach is essential to understanding the impact the professional development has had on teachers. This examination was undertaken by survey (Chapter 6) and interviews. These interviews provided an opportunity for teachers to reflect on their involvement in Te Kōtahitanga in terms of their philosophical positioning, the professional development cycle, the support they received from the facilitation team and the impact of their new practice on Māori students. They were also provided with an opportunity to make suggestions about the future direction of the project.

Method

This section explains the approach followed for both the teacher and student interviews as the process was the same for both groups and teacher interviews were reliant on the content of student interviews.

Qualitative purposeful sampling (Creswell, 2005) was used to select teachers who could provide rich data about Te Kōtahitanga. In order to select a purposeful sample that would allow the research team to gather experiences from effective teachers and the experiences of students with effective teachers, the facilitation teams in each of the 12 schools were asked to select a small number (2-3 per school) of teachers whom they considered to be successfully implementing the ETP to a high degree.

We restricted the number of teachers that facilitators could recommend to the RPD team due to time and resource constraints. Interviews needed to be conducted in the second half of the school year to allow teachers time to implement learning from the professional development. Similarly students needed time to experience the practice of their teachers before they could comment on this. While it is necessary to conduct interviews in the second half of the school year this can be problematic for ensuring that both teachers and students are available for this exercise. In a number of instances there were teachers (and their students) we would have liked to have spoken to but they simply could not meet our timeframe. Therefore, the number of teachers validated by both facilitators and students as being highly effective for this exercise alone should not be considered as the total number of effective teachers in this project as the teachers we interviewed represent only a restricted group of highly effective teachers in Te Kōtahitanga. The purpose of this exercise was to highlight what effective Te Kōtahitanga teachers looked and sounded like in practice not to quantify the number of effective teachers in the project.

In 2005, 32 teachers were recommended as being effective implementers of the ETP. Facilitators then approached Māori students from the classrooms of those teachers to be interviewed about their experiences with those teachers. From these interviews with students, 19 teachers were spoken of in ways that illustrated their being highly effective implementers of the ETP. Of these 19 teachers considered by both facilitators and students to be highly effective, 13 have contributed to this chapter.

Of the 13 teachers interviewed for this exercise, four were male. One teacher identified as Māori, one as Indian and one as European/Samoan. The remaining ten teachers identified as European, Pākehā or Non-Māori. Teaching experience ranged from one year to over twenty years (5 teachers were in the 1-5 year range, 2 teachers had over twenty years experience). Four of the interviewed teachers were Cohort Two; that is they were in their first year of involvement in the professional development, while the remaining nine Cohort One teachers were in their second year of involvement. The subject areas taught by these teachers included art (2 teachers), English (2), core subjects (1), drama (1), Maths (3), Physical Education (1) and Social Studies (3).

The interviews were conducted as focused conversations with six areas for inquiry. Although the students, in their interviews, focused upon the ETP in their classrooms, the teachers spoke about; the initial professional development hui and the reading of the narratives; their gaining knowledge of the ETP and how this can be implemented in their classrooms; the professional development cycle (observation, feedback, co-construction and shadow-coaching); support teachers received at each of these stages; future direction and how the benefits of the ETP might be sustained were also seen as part of this inquiry.

An interview schedule outlining the focus and purpose of interviews was shared with teachers prior to the interview taking place (see Appendix D).

Framework for analysis

Teachers' interviews were coded using the understandings and observable characteristics of the ETP and by other emerging themes related to the implementation of the ETP (Creswell, 2005). This analysis is presented according to the following themes:

- Experiences of the Te Kōtahitanga professional development and narratives
- Teachers' philosophical positioning
- The professional development cycle
 - Observation
 - Feedback
 - Co-construction meetings
 - Shadow coaching
- Support
 - Facilitation
 - Collegial
 - Senior management
- The impact of Te Kōtahitanga and focusing on Māori
- Suggestions for facilitators about the professional development
- The Te Kōtahitanga difference

Analysis Of Interviews

To reiterate, the following interviews were analysed against this framework and came from teachers who have been identified by two sources, Te Kōtahitanga facilitators and Māori students from their own classrooms, as being *highly effective implementers* of the Te Kōtahitanga ETP. The analysis presented here reflects the implementation and process of change teachers have undergone during their involvement in Te Kōtahitanga; it does not include examples of the ETP in practice. This detail has been excluded for the sake of brevity; however a full and detailed report that explores the discourses of teachers more thoroughly has been produced as *Technical Report #2: Teachers Experiences of the Effective Teaching Profile*.

Experiences of the Te Kōtahitanga training and narratives

The ETP was first introduced at the initial Te Kōtahitanga professional development hui and is largely based on the Phase 1, Te Kōtahitanga narratives of Māori students' classroom experiences. Teachers interviewed were asked to reflect on their expectations of Te Kōtahitanga. Some teachers reported positively on the overall experience:

Well I went into this programme not knowing whether I was doing the right thing. But once I enrolled myself in it and went through the three day training session and had the opportunity of applying the philosophies of the programme this year, I think this is the best thing I have done for myself. Before we went into it we only knew very little about it. We were told what it was about and we were given the narratives book to read, but when I read that I was actually a bit depressed about the things some students had written and I never in my so many years of teaching experience had ever read something like this. Some of those things sort of... I mean I put myself in the students' perspective and it was really, really quite a different experience for me as a teacher to see that "is this what the student's feel?" And so I went with all these apprehensions in my mind, but two years later I tell myself this is the best thing I have ever done in terms of my professional development. It's just changed my whole outlook as a teacher and my relationship to my students. (Teacher 8)

It was quite an emotional time for me I think because I learnt a lot and I was inspired and it seemed to me an education that every teacher should have. It sort of, it was a wonderful sort of cultural insight. There was a lot of learning in it, it was a really good way to start the year for me. (Teacher 2)

While teachers had some knowledge of the content and purpose of the professional development going into the hui, they still experienced feelings of apprehension and reluctance. This reluctance eventually gave way to acceptance of Te Kōtahitanga philosophies but on reflection a number of teachers revealed this only happened when changes in their practice impacted upon their Māori students in positive ways. Guskey's (1986) model of teacher change advocates that following professional development teachers' classroom practices change first, student learning outcomes change secondly and teachers' beliefs and attitudes change last.

I must admit the hui that I attended a couple of years ago I found quite overwhelming in those couple of days and thought you know, "oh my gosh what have we let ourselves in for?" But I think a lot of the things that were being promoted were

what I believed in... Over the last couple of years, I have just really sort of felt my way with it and realised that when I put more effort into doing those sorts of things then it does seem to make a difference over all. (Teacher 3)

I used Te Kōtahitanga to create lessons and things that would better help our Māori students. I didn't know what I was in for but after seeing the results and getting to know the kids and doing Te Kōtahitanga it was encouraging. I found it really beneficial. (Teacher 10)

I was just unsure so I went. And then out at the marae was fine. And probably I thought it was a day off school anyway, to be honest. And then when my class started this year...and I think it all started with [the facilitator] coming to me and she sat down and observed the class and we discussed it...and it was just her suggestions and I just thought I will try it one day and it has just made such a difference. But these kids have just responded and they have just totally turned with me. I mean [a student] said to me that he didn't like the teachers at all last year because he was just so badly behaved. Well he is just a lovely kid now. So it has certainly been good for me. (Teacher 5)

A common notion amongst teachers was that the teachings of Te Kōtahitanga were logical, reasonable approaches for engaging Māori students as these ideas were not totally new and were accompanied by practical strategies for introducing these ideas into a classroom context.

I had my doubts, reservations, but that is a good thing. I think it is partly because a lot of people saying, 'ah you know it is common sense' and all this kind of business. It of course is not common sense. It is only after you have been on the course, taken part and listening to the speakers and stuff.

You see if it is common sense why are we not all doing it?

Precisely, I mean it is the 'relationships is the key'. So there were certain things which I thought, well you know we have been around for a little while but we didn't know the practical technique to make it really effective. As effective as the other stuff which you traditionally do in classrooms. But also it is the involvement of the culture counts. Things like how exactly? I think that probably that is a key thing. (Teacher 12)

So things like, you know the whole relationship thing about really getting to know your students well and spending that time chatting with them. Things like having high expectations for all students and having a learning environment that was sort of well managed. All those sorts of things sat really well with me. And so I found that I didn't have to make a lot of changes there. (Teacher 3)

For others, the primary focus on Māori students had been the challenge.

And I think why I was a bit reluctant in the beginning was because I thought what about the Pākehā kids. Because in my class there are both Māori and Pākehā kids. (Teacher 5)

I came away from the first hui actually totally petrified. I think because I went into it feeling a little bit apprehensive almost, and to be honest a little negative and thinking oh gosh, like I felt that I wouldn't be able to if that makes sense. But as I got going

and through the support from the facilitator it came clear to me that basically it was just reinforcing the teaching practice that I already had in my classroom, to raise Māori achievement. So it actually turned for me something that I was really sort of scared of to something really, really positive and almost empowering for me. (Teacher 4)

Of the narratives teachers remember:

I was just blown away because I couldn't believe that someone would be a teacher and do things like this. I can't for the life of me remember what the exact story was but it was very negative and it was very sad. You know for me, you know this teacher talking I could see why that student wasn't achieving and didn't like school and didn't want to be there because the teacher made no effort to make that student feel that it was important to be at school. Good for them to be at school you know? So that is the main one that astonished me. And I found it quite amazing. (Teacher 4)

It was good getting the narratives. Even reading that information made me think, I can change this and I can change that in how I am teaching. (Teacher 2)

I actually didn't expect it to be in some respects as enlightening as it was for me. I had read my narratives which I found interesting, however, I had also heard children that I have worked with here over the past eleven years talking the same way and when they have spoken to me I have had to say things like, I can't discuss other people, it is not professional. And it just really emphasised for me that children, Māori children in other parts of the country feel the same way about their learning and their teachers as the kids do here. (Teacher 10)

Many found the focus on Māori students' achievement exciting because it challenged them to critically reflect on their own past experiences with Māori students. However they were also expecting Te Kōtahitanga to offer them support and some solutions.

Quite often in teaching, I think what is missing is that you are not supported. You are not supported in your goals and you are not reflective in your practice, you are just surviving. And it felt like for the first time ever in my teaching career that I had those things, that I had support. I had goals and I had a group of people, colleagues that I was working with to achieve that. And that for me was magic. It was about achievement for the kids for the first time ever, rather than just survival. And it was just wonderful. So that was what was new. That was what was new for me. And a whole lot of other things, yeah cultural sort of tikanga, which wasn't just token, which was they were integrating this for the kids, that would be useful for them. So yeah, I mean you go through teachers' college and there, it is such a Pākehā focus and there are Pākehā teachers teaching about Māori concepts. And this is the first time I actually felt like we had Māori people coming in and saying, "this is what we would like you to do, this is how you can teach these kids. This is what will be effective." So that worked for me and that was new. That was good, yeah. (Teacher 2)

The impression I had was that it was basically going to tell me how to teach Māori students. I went in with the idea thinking 'oh, this is going to be strategies and is going to tell me what to do directly.' But it was more of a, what's happening with

Māori achievement, what the students, their impressions of how teachers approach their learning, and what is going on there. And a starting place, where we need to start from. I left kind of thinking there's lots to do, a little bit uncertain, but obviously I had more of an idea of what direction we were heading in. But there wasn't that kind of here's the lesson plan, because I am a first year teacher as well. You know, I was thinking, oh this is going to tell me what to do, because obviously there is a problem. I knew that from doing a Bachelor of Teaching.

But, that just really showed me that there is a huge area to work with. But it was all pretty positive, that two day hui. And this year of Te Kōtahitanga, definitely with our group work, co-construction groups there have been heaps of changes from others. Especially from teachers I have noticed who have been teaching for years. Obviously I have been fresh and I would be open to new ideas. But yeah, lots of stuff. (Teacher 7)

Some of my expectations about becoming involved in Te Kōtahitanga were that it was professional development; it was research based, but with the main focus of improving Māori achievement. And looking at things from what I understand that we have control of, rather than the things we have absolutely no control of. So I have always been a believer in that anyway. And so really the only thing that we have control of is what happens in our classroom. And so that excited me and so I said, "Yep I want to get involved in this." Also because my expectations were that, ok I will become involved in this because I was going to change my practice, it was going to cause me to reflect. (Teacher 1)

This teacher also acknowledged that despite working in a school with a high Māori student population and doing so for some time, there was still a need to learn about improving relationships with Māori students and changes in practices that would enhance Māori achievement.

I have enjoyed teaching, I love teaching, and in the schools that I have taught in I have taught about 90% Māori. And so I believed I developed, because I don't think it was something I was born with, but I think I developed certain skills and was able to communicate and relate with Māori students. And yet, I don't know whether I had. Even at a school with 90% Māori, we struggled and we did have a challenge, in terms of meeting the needs of that tail end of the children in the New Zealand educational system. And so I was excited about that because it has kind of caused me to reflect on that and challenged me to look at my practice. And there were some things that I knew I didn't do very well, but I got caught up with the business of teaching and I knew that if I got involved in professional development from what I heard, it was pretty well resourced and that there was definitely something in there that I could gain. But the positive feature of it [Te Kōtahitanga] is that it is well resourced, it is well structured and it is done professionally. (Teacher 1)

General experiences of Te Kōtahitanga and reasons for doing the professional development were expressed in the following ways.

Well I think, because I trained in New Zealand for four years. I think is a very positive thing for the New Zealand system. There was only, I was really looking forward to the Māori part of those courses. Particularly this course because I am originally from Australia. So that was an incredibly exciting thing for me to turn up

these classes. However, it was very, the result was very disappointing. Because it was just a light brushing and it didn't introduce me well enough to the culture of the people. You know they are beautiful people, but I just didn't learn anything and certainly didn't get into the details of the strategies which I am learning now. (Teacher 6)

I actually pulled out of Te Kōtahitanga for some time. I was very upset with the political situation and I don't wish to down anybody with what I say but I was hurt by a certain decision that was made and I thought, I don't need to do this. I don't need to share this with anybody else, my classes are my classes. And if my HOD is happy with what I am doing then that is that. However, they both talked to me and I soon said, well because I do it for the kids and that is why I am here. I think we are lucky to have two facilitators. And I think they have both been on a huge learning curve too. (Teacher 10)

Teachers' philosophical positioning

Critical to the implementation of the ETP is teachers rejecting deficit explanations of their experiences with Māori students. An essential element of the first Te Kōtahitanga professional development hui challenges teachers to critically examine their own theoretical positioning with regards to Māori students' achievement. The comments that follow illustrate the diverse positions of teachers involved in Te Kōtahitanga from those who have always rejected deficit theorising to teachers who were unaware of their deficit theorising.

I have never believed in deficit theorising. I always have had a very positive out look. I believe that I can make a difference to children's learning and after 23 years in the job, I am absolutely convinced that if I am not making a difference and I can't do it the proper way and I don't score highly on some of the things in Te Kōtahitanga then I shouldn't be teaching and I am not the right person. (Teacher 10)

Through a critical examination of their own theoretical positioning teachers begin to understand the impacts of deficit theorising on Māori students and on others within their own practice.

I totally reject deficit theorising. I have advocated this for a long time. How do I put it? Get into a position and accept the fact. Control the things that you can control and do those things well. And not get caught up in the fact that these kids and their home life is so poor and that they haven't had breakfast and they have got no books or something like that. And that is just finding excuses or finding reasons or finding explanations for why such students cannot achieve. You can control how you are in the classroom. You can control your attitude. You can control how you teach our kids and how you relate to them. And I think obviously that is an important part of Te Kōtahitanga. And that is what I have tried to advocate right through my teaching career. And of course, being involved in Te Kōtahitanga has just given me a bit more insight and validation to that belief that I already have. (Teacher 1)

I am a very experienced teacher, but I probably was very much of the thought that why are they not brought up better at home, you know? And I have really had to take a look at myself and think perhaps this is my attitude in the classroom and that I have to change that in the classroom. I actually didn't go into this willingly. I mean I am

not anti-Māori at all. But I thought what about Pākehā? I was just so unsure but I went. (Teacher 5)

Theoretical repositioning helps teachers to begin to accept the importance of respecting the specific ‘cultural location’ of students. Teachers begin to understand and respect the unique cultural experiences of their Māori students as essential contributors to their classroom learning experiences rather than impose the constraints that come from expecting that all of their students are the same.

And the whole issue of deficit theorising, I can see I didn't know much about it before I came into teaching. Then when I began, I realised how it could be so easy to fall into that pattern, especially if you are tired and you have got a lot on, instead of finding the good things and emphasising them, it can be so easy to fall and look at the bad side. And it has made teaching for me and looking at the ideals of Te Kōtahitanga, it has just made it a lot more I suppose magnetic. (Teacher 10)

I still find with the deficit theorising, I think teachers have a culture of deficit theorising, even in the staff room you will hear it all the time. So I think I will probably still do it sometimes but my theory of deficit theorising is that it has more to do with the management rather than the kids themselves I think. But I do think that in South Auckland it is a problem that as teachers we can do so much in our classroom, but there are other issues as well so I guess that is sort of deficit theorising. (Teacher 13)

I think the first step is just recognising that culture counts. That again as a group, on average Māori kids don't achieve at school. And it is basically saying that, yes, there are the factors explaining why. One critical factor is that we as practitioners have the influence over what goes on in the classroom. Recognising that culture counts and look at the ways of making a classroom a welcoming place for Māori kids to bring their own culture into the classroom, to engage them in tasks and activities which they are going to enjoy. (Teacher 12)

While talking about deficit theorising and the influences on Māori education one teacher questioned the timing of Te Kōtahitanga being introduced at secondary level given that some students have already absented themselves from the schooling environment. Although teachers are made aware during the professional development that years 9 and 10 are the critical years for Māori students this particular teacher queried the introduction of Te Kōtahitanga at primary schools.

Well for example if I could be a great teacher and really care about the students, but they don't turn up with a book and a pen, they are hungry and have been out all night. That sort of stuff, or they don't turn up at all. And that is another thing I think with the TK, it probably works with the kids that are in school, but there is that hard core of kids that are already by high school they don't come to school. And it is not working for them. Because you know I have got a total number of absentees and they are all pretty much Māori kids.

Ok and that hasn't made a difference to them at all? None of them wanted to come to school or?

Well I don't know why they are not here. But there are obviously other reasons, and it has happened before they got to high school. Because there are year nine kids who are not coming to school, so that is the other thing. I thought that maybe TK should be brought in at primary school. Because for many Māori kids by the time they get to high school it could be too late. They have already, you know, "school is not for me." But I do think that somehow the family, I don't know. I think all parents want good things for their kids but sometimes they don't know how to do it. Because you know I have got seniors that don't know how to study. (Teacher 13)

The professional development cycle

Term by term observations followed by feedback, co-construction, goal setting and shadow coaching ensures that facilitators continue to be responsive to and supportive of teachers as they work within Te Kōtahitanga to change both their theorising and their practice.

But definitely the observations, the feedback and the shadow coaching is good. We don't have too much. Because I know that I am first year and I am getting heaps of observations. And it has made a difference. It has made me more aware and I have heard other teachers say, you know you hear lots of other sorts of things. I have heard teachers say that it has made them more aware of what their Māori students are doing and where they are at and how they could structure their lesson as well to suit their learning. (Teacher 7)

How have you found that, the whole cycle?

Ah, really good, really positive. Having the facilitator coming into my class sort of on a regular basis has been useful, sorry it has been excellent. He has been able to really help me with this feedback academic and feedback on behaviour etcetera. And it is something that I have been able to carry on through to my other classes too, which has been positive in a lot of my classes. And doing it on a regular basis has been good as well. (Teacher 9)

The observations

Using classroom observations, theoretical repositioning is observed in practice through the teachers' implementation of the ETP. Teachers recounted how the observations focused them and made them aware of what was going on in their classrooms. The process of being observed gave teachers an opportunity to reflect on their practice and the confidence to try new approaches.

Oh my baseline, I wasn't particularly pleased with my result. Because I really didn't think I spent so much time in the monitoring and this part of it, the non-discursive stuff. I didn't think I did, but obviously I did. And I have gradually been really aware and I have personally focused on moving right along out of there and trying to become as discursive as possible. And I am a person who also likes to know the outcome, my learning outcome. And I wanted to see and I have asked for the perfect graph. And as I have been told and have realised, well there isn't the perfect graph and I don't believe you could sustain discursive teaching every hour on the hour. I

think that is not reasonable, physically or emotionally actually. I think you have got to have a bit of a mix up of stuff. (Teacher 10)

What sorts of shifts have happened for you?

Giving much better feedback academic and certainly feed forward academic as well. And feed forward with the behaviour. Certainly making sure that you praise someone for good behaviour and make sure it goes noticed for the good work. (Teacher 9)

I really like having somebody come into the classroom because it really... I think as a young teacher as well, to have someone actually give you feedback, lets you know where you stand and what you are actually doing. Yeah that was really useful, because sometimes you are so busy teaching you don't actually think about what you are doing. Also I have been willing to try things with [the facilitator] in the room that I wouldn't necessarily try on my own. So I really liked having her, just having someone else there, having her there. And she has got heaps of experience so we tried some drama things and stuff that I wouldn't have the confidence to do on my own. And it didn't always work but we tried it, so yeah it was good. (Teacher 13)

I am trying to move to more feed forward, less behaviour and more academic. The lessons, they have changed. They've change hugely from the observations. I think they're important, I look at the on task [behaviour] and how engaged [the students] are because I find that when they are engaged they just work through it. And that is to do with my conversations that I try and work in. There is more of a, tell me why this is not working kind of [interaction], and the instruction, I mean obviously, depending on what unit it is. But I don't want to be the one speaking all the time. (Teacher 7)

This teacher also referred to the second side of the observation sheet which relates to relationships.

And this part, the back of the sheet. Yeah well the big C and little c are really hard. Obviously with the little c it is more because they are bringing their own life experiences into the class and in health they did that really well and they do it in dance. In kapahaka they brought that [in to class]. And with their sport you know? They play touch on the marae then they will bring it in. But not a lot of the big C I have always found it really difficult. And I have always said that with Te Kōtahitanga, and I have asked. But there is still that relationship I have got with them so I don't get upset. These are all really high (speaking in relation to the sheet at hand) well that's what I like them to be. So I let them express themselves and there is always that fun. I think it has to be otherwise you are in the wrong job. And it is funny, they will crack me up some days, you know. And I let them know, oh look girls I am having a bad day I've got a short wick today, and so they just know straight away. They know. (Teacher 7)

Feedback

Feedback from the facilitator occurs soon after the observation has taken place.

Again just sitting down with the facilitator and getting the feedback from her and then we would reflect on things, she would say okay lets try this thing differently.

You found the feedback useful?

Oh absolutely. A lot of it was affirming, because it was what I believed anyway. Because there was this article on feedback and I had read this thing by John Hattie and what John talks about as being the most important thing about agentic change, if we want to use those neat words, in terms of the teacher and the quality of feedback that they give students. So I wanted to try that, because it's quite interesting you don't realise what you are doing in the classroom unless someone else is watching you. (Teacher 1)

Teachers also remarked on some of their individual goals that came out of the feedback sessions.

I think it is still feeding forward academically. Making sure that I am questioning the kids and trying to stretch them that little bit further. Making sure I am you know, noticing the good intelligent comments that they are coming up with and then I am trying to stretch myself that little bit further with my questioning. You know? Give me an answer and then asking, "well why do you think that? Why did you come up with that etcetera?" (Teacher 9)

Well some of my personal goals have been to lean towards that discursive style of teaching, rather than the traditional. So I probably geared a lot of lessons towards that co-operative group work. But the preparation involved is quite huge. The setting up the conditions but then once you set it all up then it is the students working on it and you are just going round and facilitating really. So I guess that is the main thing that I have been trying to do in those lessons, plus work on things like the co-construction, feed forward academic and things like that. (Teacher 3)

Co-construction meetings

An essential part of the professional development cycle are the co-construction meetings, where the teachers from across the curriculum co-construct their own group learning goals about how they are going to improve Māori students' learning outcomes.

The co-construction you know brings out the group goals. I have found these really important because over a short period of time you cover a lot of things with different desired outcomes. (Teacher 6)

Well I have been in two different [co-construction] groups. Sometimes it is helpful, sometimes it is not. Usually we [as teachers] are on a similar wave length, but sometimes I listen and I think, I don't know what kids you are talking about. And then I shouldn't open my mouth because they never do that in my class and I don't want to put down anybody else. And I am not the most tactful person, I get fed up. And I sometimes I have to sit there and chew the lollies because I don't want to open my mouth. When you are on the same wave length as every body else and you can come up with your group goal, that everybody is actually going to follow through with and not just pay lip service to it, they are great. We have had some good laughs too and that is always good medicine at the end of the day. (Teacher 10)

Co-construction meetings aim to focus teachers' attention on a common group of students around whom common goals can be set.

It has made me more aware of the other teachers who are working with the same students and what is working well and what is not and you know everyone is able to voice what they are doing and what is successful. And in particular I have been interested to hear how some students are acting in other classes with other types of learning and the same thing with the colleagues. You know you are more aware of what is going on with those students. And then you can help them. But from the meetings we have learnt strategies, more strategies to try. Like I say it is a really good class. You know they just seem to be great and we seem to have a good relationship.

In terms of your co-construction, what have been the goals this year?

Of our group meetings more of the conversations with the students you know? Getting that relationship and negotiation, and giving them more responsibility. And a goal is obviously to increase their achievement. We have had a few goals [but] those have been the number ones. Taking responsibility for themselves, you know saying, oh I want to be here and I want to do this, I want to come to class. I want to be here and this is for me. (Teacher 7)

Yeah well to be honest I found the [meetings] last year quite challenging and difficult and the co-construction meetings were different from last year to this year. Last year you were in a group who taught that one class. And I found that some of the teachers had more what I'd call a waffly approach to where they wanted these students to be and came up with all these sorts of things like "we should do this, we should do this, we should do this" but I didn't feel comfortable with that really. So often I found that the group goal was a little bit too over-whelming to where I wanted to be. And it wasn't as defined. I need a group goal that is really defined that you can actually go away and do something with. This year I found that the goal that we came to was more structured and defined. (Teacher 3)

Bringing evidence into the co-construction meeting to show how goals are being attained and to inform new goals is an important but challenging part of the co-construction meeting for many teachers.

Have you noticed that people are bringing more evidence?

Yeah definitely. A lot of the people have said things to do with behaviour. And also with their behaviour they have just tried like games and the kids are just more on task and are just more willing to focus on tasks and more fast. Um, and just they have been speaking about the strategies they use. But so with the behaviour thing they are starting to achieve in class and in groups. It has basically just been feedback, but nothing on paper, no graphs or anything to show. Yeah mainly the conversation has been about behaviour and type of work activity. Like the group just, or class work. (Teacher 7)

One of the goals was to promote excellence in the school in a positive way in the classroom. Because we tend to promote a lot of sporting things. But we don't always promote the academic. And so the other staff were aware for example someone did really well in the test that was sat. You would let the whole staff know "well so and so sat this maths test the other day. And they are normally only a merit student and they achieved an excellent, so if you see them make sure you congratulate them." (Teacher 3)

Nobody shares these which I find really interesting (referring to own observation sheet data). Like I suppose if they were all pretty stink ones then you wouldn't want to, but then again I think I couldn't care less because then I would say, "oh my gosh I only got a three, what could I do to fix that up." But if I got a one I wouldn't be sitting here. But they don't, and I know it is personal but it kind of like helps, with all the things that are written down the sides of mine might help someone else and what they have got written on theirs might help me. Don't know. And I am a bit of a jabber jaws so sometimes I am primed to go, "go on share that." I like sharing things but I think some people think it is boastful but it is not. It is look what these kids can do, isn't it brilliant. I want them to see how good the kids are. (Teacher 10)

I'd like to see more of the co-construction perhaps with more level, those groups. I mean this year it was like who has time and when because we had so many other PD things that were going on it became quite difficult to try and get people. So I guess people who are more matched with their teaching philosophy so that they can have the chance to expand. Does that make sense what I am trying to say? (Teacher 4)

Shadow coaching

Co-construction meetings are followed by a facilitator working with each of the teachers in ways that seek to achieve the set goals.

It has been really good actually, the shadow coaching. One of my goals was the conversation. I tended to ask a lot of closed questions, what is that co-construction conversation where you would kind of negotiate more. And that was one of the goals early in the year with my facilitator. And she came in and shadow coached one lesson and wrote down everything that I was saying. And so I was totally avoiding the closed ones and we negotiated heaps. And it worked really well and I have been trying to do that with my lessons. (Teacher 7)

Really positive experiences. The reason why I think it is valuable is because of the process of being observed, talking about their observations, shadow coaching and reflecting upon your own teaching. And here of course we are talking about lifting Māori achievement in education. The facilitator has been giving me observations and following through with a chat straight afterwards, and that has been really good. We work well together as well. And then of course she has helped me to develop my objectives which you know has helped me to develop my practices with the Māori students in the class. And that has really helped as well. And then that brings me on to the group meetings we have as well with the other teachers involved. (Teacher 6)

Facilitation, collegial and senior management support

Facilitation support

These teachers were very complementary of the support provided from the facilitation team. They indicated that this support had been crucial to their ability to implement a pedagogy built on relationships and aimed at raising the achievement of Māori students. School-based facilitators were spoken of as passionate, positive and committed to their role of working with teachers in their classrooms.

I was so impressed with our head facilitator in the school. It is obvious that she is passionate about the whole programme. And her passion and desire to get us all on board just came through loud and clear. Her dedication just is catching as well. She works extremely hard, and it is a case I suppose for me personally, you know because she is doing it I want to do it. And I want to please her, and that sounds pathetically childish but I think my classes want to do that too. And she is an active listener and then she will think about it and then she will challenge what I think. And then we can think about it and reflect and it is good professional intellectual discussion you can have with her. (Teacher 10)

Without the facilitator I would have struggled and would not have achieved the success which is evident now. The facilitator has made a big difference. I could not have survived this year. I mean the wonderful strategies that she has told me to follow. I don't think I would have got those ideas on my own. So this whole professional development, why it's so different from other ones, it is the constant support from the facilitator. I know I have got a rock to lean on, I know I can go to her and say, now look, I did this, where have I gone wrong? She has played a big part in bringing about the change. (Teacher 8)

I feel very lucky to be working with the facilitator. Firstly she is an amazing, an amazing person. And her gentleness and positiveness has really helped so much in the school environment where people can become volatile at times, because they are being challenged. And I guess that has happened for me a little bit as well. But because the close relationship with the facilitator has developed, she has allowed me to choose the purposes and objectives that I need to do in the classroom to try and improve the achievement of Māori students. She hasn't tried to impose upon me at all. She has guided me, which has really helped me with what I am trying to do with my students as well, which is to try and facilitate their learning. So she has helped to facilitate my learning. (Teacher 6)

Oh it has been wonderful, she is just great. I've been in a system where I have been in the school for five years with no feedback, and that has been so neat, I mean the facilitator might come up to my class, and we go on about how we want the students to feel good and expectations and every thing like that. But there is the teacher too. And if the teacher is not getting that, they feel a bit lost. And they sort of lose the gist of why they are at school and why they are in this profession. So having the facilitator here is great, she just affirms you. Not just as a teacher but as an individual and for me reminds me that I am the great teacher and I am doing a good job. (Teacher 4)

Collegial support

Teachers spoke positively about getting to know colleagues from other curriculum areas and working with them more.

I tended to work in isolation. I'm way over behind the whare. So you know I have got that sort of physical barrier where I am not always with my colleagues and I tend to work through my lunch hours and things like that. But you know one colleague that I meet sort of matched up with him through the Te Kōtahitanga project. When I do manage to catch up with him then that is great because we do have a bit of a natter.

So he sort of gives me some ideas to share like plans and stuff which is great. So yeah when it does happen it is fantastic, it just doesn't happen enough. (Teacher 4)

So it has been wonderful working with people and talking about your teaching approaches. Like if you have a problem saying, I have got this problem, how should I deal with it? That whole thing of being an effective teacher and the kids actually learning, how can I help these kids learn? Asking that question with a group of colleagues hadn't happened before, because you're so often isolated. Yeah I really appreciated the collegueship that has kind of been created. (Teacher 2)

I would like to see whereby some PD time could be used in specific areas. So in maths it could be like, ok lets get the maths teachers together today and look at some co-operative strategies we could use, lets just choose a topic that we teach [like]algebra and we are teaching this, this and this. What sort of things could we use which would be co-operative learning and lets develop them and actually produce resources for them and then they are all there ready to go. And all so I just think it would help other people in the department who maybe don't have the time or maybe don't have the experience to come up with the ideas. I think at the moment it is too individualised. (Teacher 3)

But colleagues that is where I have found it really good, when you have got your HOD doing TK it means that it all works together, we talk about what we are doing. I tried this, I tried that. So just when you come to talk together in the staff room, I did this, I did that. Also it is supportive it means that, like quite often in TK you need big bits of paper and vivid's. And you have got to have someone who is willing to provide that stuff. Also he is willing to accept that we might not get through all the curriculum because we are doing other things. So it is all integrated across the department.

What about your colleagues who may not be on Te Kōtahitanga? What is your relationship there? What is the impact there?

Um, there I don't think it really affects your relationship with other people. Like people wouldn't talk to you because you are TK or whatever. But there are people who are just not at all interested. But you have to look at their reasons and really if they don't actually care about Māori achievement then why would you want to do it? You know and that is what it really gets down to. Why are you here? And if you really are here for the kids then...

Why not join?

Yeah. (Teacher 13)

The conversation with this teacher continued.

So I am just wanting to understand what your relationship would be like with those who are not into it?

There are a few people who are a bit anti.

Yeah so how do you deal with that?

Well I don't. I just don't associate with those people. But in fact I wouldn't associate with them anyway because they are different sorts of people to me. You know? I think there are some people on T.K because they have to be

Yeah, does that cause problems

Well they can be a bit negative and I think that, what happens is when people who are not on it speak to the negative people and find out what it is like, then they don't get a positive.

Do you think it is a good idea for people to be made to go on Te Kōtahitanga?

No, because I think it only works if you want it to work. So why bother putting all your time and energy into people who are not going to. Well you know they think that nothing that they do is going to fix the problem. They don't actually even recognise that they might be contributing to it. So you can't change people's mindset you know?

Which is quite interesting given the composition of this school. Why they would even want to be here?

Yeah. (Teacher 13)

Bringing all teachers into Te Kōtahitanga was seen as important.

It is more difficult to talk about your colleagues even if you are the head of department and you have those regular meetings and you know the people who are not on board, and that is just what concerns me more than the people who are on board with some reservations, but still are having a crack at it. It's the people who you know are reluctant to join up. I try and do my bit and on the professional development days I looked at the first part and covered the TK and said 'look this is what the whole thing is about.' It's quite interesting because the responses ranged from "oh this could be really good" and a couple of people who really wanted to get onto the scheme and somebody else "oh, I am a really bad teacher" You know? So I think we just need to get some more people missing playtime as well, to look at attendance which in itself can impact on achievement. It has been nice to have a space that we can sit down with colleagues where we do these little TK sessions where we get into small groups, or we get together. Sharing ideas is the important thing, really practical stuff. What teachers like, what works in the classroom, all this kind of stuff. (Teacher 12)

Principal and senior management support

Support for Te Kōtahitanga by principals and senior management was experienced by teachers in different ways.

In general if you take most of them (facilitators) are very friendly and even the senior management. And they have been very supportive of Te Kōtahitanga. Any time I needed any extra support for example the photocopier. There is a huge budget of photocopying for these worksheets so the maths department has not had that much to cater for it. Our Principal said to me not to worry you just go ahead with your worksheets, don't even think twice about it. So huge support, huge, huge support from him. He has always supported Te Kōtahitanga. And he has always told us go ahead and do it. (Teacher 8)

And I would like to see management more involved. You know maybe them coming to an observation or co-construction meeting or just so they look like they are interested as well. That it is not just another tick box type programme. It is actually

very, very important that they are supporting it, 'cause I didn't see that happening. And that might just be me, but I didn't see that happening. (Teacher 4)

The impact of Te Kōtahitanga and focusing on Māori

The students and teachers alike were certain that being responsive to students as Māori and allowing them to bring their own cultural experiences to the learning context was vital. Teacher positioning that acknowledged and affirmed a cultural identity that in most cases was different to their own, provided the platform for the development of mutual respect and caring relationships. The way these teachers treated Māori students was understood to be an essential precursor to the quality of in-class relationships and subsequently, Māori students' participation in classrooms.

So particularly focusing on that issue, it allows you to be more prepared, it allows you to be more focused and more importantly it allows you to get to know a significant number of students who you may not have come to know too much about. So it is fantastic because you are getting to know students as in all cases. First, you are getting to know students in a better light, and finding out who they are and how they are. And you know what they like and what they don't like. Developing a really good bond and relationships that has a positive impact on the learning, raising the classroom expectations and makes things easier for everybody. (Teacher 6)

I don't care whether it is a high population of Māori or very few, or none whether it is a high or low decile. The idea of culture counting and the idea that co-operative learning which I think is another one of the key strands of TK is very important. And they need to work in teams and seminar situations, peered and grouped research...you know, tutorials and things. The idea of, you know, you are doing group work and co-operative learning. They are going to have discussions, it's about people talking to one another and that is absolutely vital. I think the people who are sceptical of the concept need to discuss it. Being a school teacher, it is much easier to talk about the relationship with kids in your class. You can say that it is positive; it has built lots of trust and respect. It has got the kids highly motivated and they know what they are doing. They are sort of learning all kinds of strategies of how to become better learners. You know to become smarter. (Teacher 12)

Suggestions for new teachers

Teachers provided some suggestions for teachers who have not been a part of Te Kōtahitanga.

I would tell them [non-Te Kōtahitanga teachers] to do it. I would suggest that it would be good for them professionally to go onto this program. That it will help their teaching practise and it might give them a boost like it did me to want to be back teaching in a classroom. (Teacher 10)

Please each one of you, enrol into this programme. That is the best thing you can do to yourself as a teacher. That is what I would say. I feel it should be made compulsory in teachers training; this should be part of your training. To be a member of Te Kōtahitanga. We are working like a big team here. There is so much support, which professional development programme gives you that support? My

advice would be it should be a must. It has changed me as a teacher. That is how important it is. Absolutely important. (Teacher 8)

To enjoy themselves. Enjoy the process, and to be open to the process. Particularly with the first six months when they won't really know what they are doing. Find out what the project is about really and that to expect support and advice. But to be willing to try everything they are given in their classrooms and with their students. To get to know their Māori students, find out what they like and what they don't like. To be really positive about your observations, you know that is happening in the class and the communication. And that co-construction will happen afterwards. Because the first co-construction methods were a little bit strange I thought because no body really knows what exactly you are supposed to be doing. (laughter) So I probably would just say relax and enjoy the process. (Teacher 6)

Well I think, I would just say to read everything, you know read all the narratives and go and do everything and just make a real effort to do all those things. I mean, and just see what benefit you get out of it. But don't beat yourself up about it if you can't do stuff every day of the week. Because you can't, some lessons have to be straight up teaching style, instruction lessons. And actually kids don't mind that. I will be honest, at level one, two and three, mine are all instruction based, go in there. This is what we do and whatever. I am still teaching for the whole period, I am never ever sitting down at my desk, I am still up teaching and wandering around the room. But it is full on instruction and learning. And it works brilliantly and those kids are happy for that. But so if you have lessons like that even at the junior level it is no big deal. (Teacher 3).

Go for it really. I think it is awesome and when I first went in I was just like I had my own ideas and I thought that I would know the way to go with setting up my strategies and the way my classroom worked. But, having had the training and doing things and testing things out and seeing how it goes and actually seeing the huge response from the kids, like even when you are just working in class and you set up groups and you get kids to collaborate and you give roles to some of the boys who would usually sit back and let someone else do it. And their confidence grows, the kids work better together and when I have let it slip and I haven't put emphasis on those strategies, I have actually had to make sure and go back and check and do that again because it actually does change the dynamics in your room. It is definitely something that I think everyone should get in to. And even with the time constraints, really try and at least give it a go and test it out. It is something that I will keep working on. (Teacher 10)

Certainly get involved because as I say it has only ever been a positive experience for me this year. So certainly don't duck out of it because I think it adds so many things to you as teachers. But come in with an open mind, don't come in with any preconceptions and make sure you enjoy it. Because you know that is when you will get more out of it as a teacher. And your students' will get more out of you as a teacher. If you are enjoying yourself and they are enjoying themselves, hey it has got to be good. (Teacher 9)

I would say do it, the program. But think about it. But really it is about reflection I think. And it is about reflecting on what you do and taking action after reflecting. You

know like think, “what do I do, how can I change it?” and think, “why did I do that?” you know what would I do to change this? And at the end of the day if you are a teacher, well I am a teacher because I like kids. And I think education is important. And I don’t really care about social studies or geography or whatever you know? But at the end of the day it is about kids you know? And if you are in teaching for any other reason then you shouldn’t really be a teacher and I think that T.K. makes you realise that because it actually is about your relationship with the kids. (Teacher 13)

That people care. That yeah, that it’s worthwhile and you can use it in your classroom. It’s effective and you can put it into practise straight away. You don’t need any flash skills, you just need an eagerness to want and try and do things and to step out of your comfort zone occasionally. So yeah I think it is the most worthwhile PD that I have got out of the three programs that we have had because it is useable and you see results straight away with the kids being engaged and wanting to learn. (Teacher 4)

To the ones who have taken up the plunge in doing it, then it is just the case in keep going because it takes time, you know to incorporate this stuff into your practise. You are not going to master it inside of a term; it is going to take longer than that. (Teacher 12)

I would say be open, be open and don’t be precious. Don’t be precious about your teaching. Be really open to making changes and enjoy it. Enjoy learning, because that whole thing of teaching, doing your business and shutting the door means that you are not accountable. So for the first time ever it for me it feels like you are accountable and it feels wonderful. You know. And if Bevan or Steve says that you are a shit teacher, accept it. But you know it is sort of like accept it and really listen. Keep your mind open and your heart open, yeah I reckon. (Teacher 2)

Advice to give them coming in? I think it is really important that I mean I wouldn’t tell them in these words but I think there has got to be an interest there to start with. You know there are people out there that do this heaps you know? And deficit theorising. They do it heaps and I think you have to come with an open mind and be positive and want to make a change like you said in the beginning. And be open to try different things. Be aware that this is really important and that it is working. (Teacher 7)

Suggestions about the professional development

Teachers provided some suggestions about the professional development.

I mean I think we are still a bit individualised, like we are working as individuals and I think it would be really good to get us a bit more departmentalised. (Teacher 3)

Do you think it is a good idea for people to be made to go on Te Kōtahitanga?

No, because I think it only works if you want it to work. So why bother putting all your time and energy into people who are not going to. Well you know they think that nothing that they do is going to fix the problem. They don’t actually even recognise that they might be contributing to it. So you can’t change people’s mindset you know?

Which is quite interesting given the composition of this school. Why they would even want to be here?

Yeah. (Teacher 13)

I think though just something for the future that would be really good is just if I could work along with other people in my subject area because I think that I could probably you know, gain more talking to colleagues. Well I would anyway as a sole charge, talking to other people in art who have used different things within art. Like I am always looking outside for other ideas and things, but yeah, it has definitely highlighted the different issues that my colleagues have and also they might know a few things about how a student likes to work that I have utilized and it has worked for me so yeah. (Teacher 10)

What I would suggest to facilitators if they want a really high success rate, is to get those new people to focus on one thing as a part of Te Kōtahitanga and get that right and then introduce the next thing. Like choose, get the person to decide, “Which part of this am I going to focus on?” Because I could see there would be people who would try and do this, and scoring possibly, mediums, low. You know between one and three and never seeing themselves succeeding. Ok one they might get a four. And they will be really excited but the next time they might go back to a three, because it is probably not established and habituated and perpetuated. And taking maybe the c’s and just focusing on the c’s. (Teacher 10)

It has worked so perfectly for me I don’t know what other way for them to improve. I mean I wish we had 10 of [the facilitator]. She can’t go everywhere; she has to be there for us. I hope that we get the same support next year. If it’s going to be now my third year on Te Kōtahitanga I still freak and there will be some new ones coming in. We still feel that we need those facilitators, we need that co-construction ... Everything is going beautifully; I wouldn’t like to change it. I just want it to continue. (Teacher 8)

Well I was kind of thinking what would be fantastic would be to get the kids involved in giving me some feed back. So often there are things I wonder, “maybe I didn’t do that so well, maybe there is another way of doing it?” Not really knowing. Yeah. To kind of get some kind of written or verbal response from the kids and to ask them how it is, how effective it is that whatever it is that I have been doing. I mean often you will do a review of something at the end of a unit but to kind of get some way of getting some ongoing feedback from them would be really useful I think. (Teacher 2)

With senior management I don’t really think that they are involved. And I think that would be one of my recommendations with the senior management although I am not really sure how they could become more involved. (Teacher 6)

Well the first half of the year it was really good because it was all new and you were trying them. And everyone had all these great ideas. But then like I said it was a bit repetitive. It got to the stage where it seemed like we were talking about the same stuff. You know? So maybe the first half, three quarters of it was good because you were learning strategies and you are listening to each other and there was that enthusiasm to try and be successful, or to try and have your students achieve.

There may be a little bit. In the co-construction meetings maybe, I mean there is definitely direction, you have to take the same and work through something together. But perhaps maybe you can only produce so much as a group and if you are stuck and you need some more strategies. Maybe update, you know what we see happening from everyone. And on paper, is there anything we can see? Is it working, is what we are doing [working].

Like I said for my class, but some of them are still at stage one, they have even noticed a bit of a back slide. So you know, you can't say "this is how you teach Māori students and this is how they are going to do really well" There is no, you know there is just no one strategy.

But there is something, I don't know there is just something missing and there just needs to be something after that three quarters of the year or half the year when you get to a point where you are just like "what else do we do?" that is the feeling and feedback that I have got from the rest of the group. We need a little bit more direction, maybe some more ideas or maybe a guest speaker, I don't know. (Teacher 7)

Interestingly, one teacher spoke about his expectation that there should be more 'traditional Māori culture' within the training context. Importantly, this teacher learned two important things about Māori culture. That is, that Māori culture is different, and that people from that culture can feel free and 'be themselves' in classrooms.

Well I think, because I trained in New Zealand for four years. I think it's a very positive thing the New Zealand system. There was only, I was really looking forward to the Māori part of those courses. Particularly this course because I am originally from Australia. So that was an incredibly exciting thing for me to turn up to these classes. However, the result was very disappointing, because it was just a light brushing and it didn't introduce me well enough to the culture of the people. You know they are beautiful people, but I just didn't learn anything and certainly didn't get into the details of the strategies which I am learning now. So preparing teachers for... they must somehow learn about the Māori culture.

That doesn't mean that you have to know everything about Māori culture. But you have to be open to the effect that Māori culture is different to other cultures and that as a teacher you have to prepare to allow for that culture emerge and grow. So if you are a classroom teacher it has to be allowed to be merged into your classroom so that the people from that culture can feel and be themselves. That is my aim. (Teacher 6)

Staff turnover in secondary schools and the impact of this on the success of professional development initiatives was seen to be a potential problem.

I think that the project is really awesome and with the changing climate of the school things have been really cool. But the one not so good thing is that a lot of the staff have been in it and gone, so it is, it seems like an up hill battle. But if we can keep the interest there then everything will be ok and we will do well. (Teacher 10)

Part of the problem is the turnover of staff that you get at a senior school. Given the proportion of Māori people are poor, compared with other ethnic groups. The dominant group of Pākehā people especially, it means you know we are talking low decile schools. You know with low decile schools you get a higher turnover. Higher decile schools people they come and they stay and then they you know retire. Where, here people burn out I am sure. So the hard thing is to get the individual's who are committed to it, you know and stay. Because you just get a constant turnover. I get other things with people who are moving from career ambitions or whatever it might be. Or they are just sick and tired of a certain thing and they just get up and go. I would go with what we have got, because it is not too onerous. It is an extra burden, you know in terms of time and stuff. But we overlap in lessons. You know there are four terms. That is how we do it; it is nice to have someone else in the room, to observe and give you feedback. (Teacher 12)

I had some shadow coaching. I think in some ways it would have been more helpful, I mean the facilitator was great but it may have been more helpful having someone in my subject area, so maybe a different facilitator. Maybe in my subject area because I don't know if we did shadow coaching, I can't remember, no I don't think that happened. Just observations and feedback based on that, but it was still magic. And what else? The only things that I feel that didn't work for me, and maybe it was because I was a part-time teacher, but it was more about the focus of this. Sometimes the focus of this, the focus gets swallowed up with the rest of school activities and the curriculum and everything else you know? So it is almost like there needs to be more space. There needs to be more space to really support and nurture this. And it needs to be integrated right through the school, you know? Starting with the principal. He needs to be the foundation, 'cause that is where the wheel comes from sort of. That's my primary thing really. I mean the roots level is fantastic, the practical level is fantastic but it just needs to be inside the school a bit more. Instead of a separate unit. (Teacher 2)

The Te Kōtahitanga difference

Finally these teachers talked about the essential points of difference that Te Kōtahitanga has brought to their classroom practice.

From a base point of view of course there will be a new class of Māori students to get to know. Now I think I will have more patience, because the initial meetings probably can be a little bit difficult because of expectations that students have had throughout education. You know they have these expectations. And they turn up to classes and you can see that they don't know what to expect and they are not watching the teacher and they don't care. And so I will be very much aware that they will be looking into that situation with a certain amount of discomfort. So my objective from day one will be to make the Māori students terribly comfortable. And I will do that as soon as they walk through the door. So that is my number one thing. And then I will include Māori culture into the classroom from day one, as a part of normal life. (Teacher 6)

And this is what Te Kōtahitanga has made me realise, how important those relationships are with your students... that I only realised from Te Kōtahitanga. Because of that constant support you have, you feel like going ahead and doing it

more and more because you have got that constant support. Which professional development programme, you tell me, you go to that one day course, you come back, you have got all these hundreds of ideas in your head. Who is there to see how many of them you monitor and want success you get or you don't? And it's because we have got that constant support; that is what makes it different from other programmes. (Teacher 8)

So you know I trust the kids in my room now. So you know your Te Kōtahitanga project has changed the whole atmosphere. It has made my life so much easier this year and more relaxed and more enjoyable because the kids are so much more on task. (Teacher 5)

Yeah I think that TK has really, like I try things in the classroom and if it doesn't work I will go, "oh well it didn't work." You know? And that is o.k. You know at least we are trying things. Like the pictionary thing wasn't really working but I thought you know at least I know and we can try it differently. But it has given me the confidence and the inclination to go, "well how can I try this differently?" You know. Because I think learning should be fun. And if you make it fun then the kids will get into it. (Teacher 13)

I guess it takes time to master those new ways of teaching and learning. I've done group discussion work, I've done co-operative learning before, but never as effective as under the TK scheme. Just because there has been very practical advice given...I think the nice thing about TK is that it has brought everything together. It means unity. It simplifying, unifying best practise.

Being told that you know that TK, the twelve schools taking part has made an impressionable difference. Then you see it make a crucial difference in your class. It's then you know that you are on to a winner. I think it has been a good thing that you feel that you really are making a difference, an added difference. (Teacher 12)

Actually I did not practise Te Kōtahitanga last year because I didn't have a class that was predominately Māori. I had only three Māori students in a top stream class. They were really good, as they followed your way of teaching. My actual practice of Te Kōtahitanga only happened this year when I got a difficult class and if I would have continued with that traditional way, I don't think I would have had any success. I probably would have lost complete interest in teaching. (Teacher 8)

Summary

These teachers spoke repeatedly of how Te Kōtahitanga fitted with their personal philosophies of teaching and while they had some knowledge of what was important to Māori students in a classroom, these teachers had been operating from instinct and were unsure of the positive impact of their approach. Te Kōtahitanga empowered these teachers to reflect and to act with assurance.

So things like, you know the whole relationship thing about really getting to know your students well and spending that time chatting with them. Things like having high expectations for all students and having a learning environment that was sort of well managed. All those sorts of things sat really well with me. And so I found that I didn't have to make a lot of changes there. (Teacher 3)

And so I believed I developed, because I don't think it was something I was born with, but I think I developed certain skills and was able to communicate and relate with Māori students. And yet, I don't know whether I had. Even at a school with 90% Māori, we struggled and we did have a challenge, in terms of meeting the needs of that tail end of the children in the New Zealand educational system. (Teacher 1)

I have never believed in deficit theorising. I always have had a very positive out look. I believe that I can make a difference to children's learning. (Teacher 10)

Other teachers came into this professional development unwillingly and unaware of their own deficit theorising.

I am a very experienced teacher, but I probably was very much of the thought that it is "why are they not brought up better at home?" you know? And I have really had to take a look at myself and think perhaps this is my attitude in the classroom and that I have to change that in the classroom. I actually didn't go into this willingly. I mean I am not anti-Māori at all. But I thought what about Pākehā? (Teacher 5)

These teachers indicated that they were prepared to change:

That excited me and so I said, "Yep I want to get involved in this." Also because my expectations were that, ok I will become involved in this because I was going to change my practice, it was going to cause me to reflect.

And there were some things that I knew I didn't do very well, but I got caught up with the business of teaching and I knew that if I got involved in professional development from what I heard, it was pretty well resourced and that there was definitely something in there that I could gain. (Teacher 1)

Quite often in teaching, I think what is missing is that you are not supported. You are not supported in your goals and you are not reflective in your practice, you are just surviving. And it felt like for the first time ever in my teaching career that I had those things, that I had support. I had goals and I had a group of people, colleagues that I was working with to achieve that. And that for me was magic. It was about achievement for the kids for the first time ever, rather than just survival. (Teacher 2)

And I remember those three days of our training. That was our first real insight into what this whole big project is going to mean in future. Although we were given good training in those three days, but didn't have the actual student-teacher scenario in front of us. We could only visualise how it would work in a class room situation. I was thinking of the changes that I would need to make in my classes. (Teacher 8)

The importance of relationships was reiterated numerous times.

Like say for example in the past although I probably considered that it was important to have good relationship with students, but that has become my first focus after Te Kōtahitanga. (Teacher 8)

...you know about the whole whānau, about the whole community working together like a big group, and everybody goes and helps each other out. She gave me a lot of

these examples and I think that was a big turning point in me realising that look, I am part of this. I am one of them. I am not a separate identity here. I belong to them, this group, my place is also right here. I share my experiences with them, just as they share theirs with me. (Teacher 8)

I think at the forefront of my mind is really the relationships that you make with the kids and you know retaining the interest, especially with the Māori boys. They can have their own identities going on and can be quite staunch sometimes. So it has sort of, we have all come from different backgrounds but just to create an atmosphere where they feel they are able to express who they are. I have had some really cool things happen. Getting to know them and starting off with a few of the kids really not being willing to do anything in class but by the end of it having a little bit of a joke around and getting to know them and then they are in there and absorbed really. And producing work that they are proud of and they are not ashamed to put it up on the wall and are happy. It is kind of, yeah I just have to kind of take on all the values of Te Kōtahitanga. And you know I am anyway, but just to make a... to emphasis it and by doing that the kids are making better work and all the other kids in the class, you know Māori or not, are feeding off that. (Teacher 10)

This really comes into the relationship thing also, is that you teach who you are. And to develop a good relationship with the kids you have to be who you are, you can't be somebody else. You can't maintain it. So really you just need to be yourself and you will get a good relationship with them. (Teacher 13)

The importance of the kids, of Māori students, was highly motivating for teachers who took part in this professional development.

Well because I do it for the kids and that is why I am here. (Teacher 10)

But you have to look at their reasons and really if they don't actually care about Māori achievement then why would you want to do it [Te Kōtahitanga]? You know and that is what it really gets down to. Why are you here? And if you really are here for the kids then...

Why not join?

Yeah. (Teacher 13)

Conclusion

The Phase 1 narratives, from Māori students and teachers who taught Māori students, both hypothesised about the types of teacher relationships and interactions that would encourage Māori students to engage in learning.

Teachers emphasised that the reasons they believed Māori students could not engage in education were because of the multiple community influences. These influences were external to their own classrooms and therefore external to their own domain of agency. A few teachers looked at what they were doing in their classrooms to engage Māori students. Māori students on the other hand considered that their teachers needed to reject their deficit theorising about Māori. They saw this as an essential precursor to the development of respectful and caring relationships between Māori students and teachers. They told us that this was the necessary condition for their own engagement with learning. Clearly, there was a mismatch between the

discourses of these two groups who continued to talk past each other despite spending a large proportion of most days in each other's company.

Importantly these Phase 3 interviews are the actual experiences of a new group of teachers from across the 12 different schools that have all received professional development in the Te Kōtahitanga ETP and strongly affirm the hypothesising of the Phase 1 students.

The Phase 3 interviews clearly show that teachers who use the entire range of relationships and behaviours to be found in the ETP can teach Māori students more effectively than otherwise. In the conversations with these teachers, they talked about the things they were doing as a result of their participation in Te Kōtahitanga.

These interviews informed us of their positive experiences with the professional development induction hui, the in-school professional development cycle and the support they received from the facilitation team members. They had also been discursively challenged and responded positively because they could see the impact upon Māori student learning that came from their changing the way they related to and interacted with Māori students. Teacher re-positioning into spaces of agency and the development of mutually respectful, caring relationships created positive experiences for all involved. As teachers and Māori students begin to feel more secure in themselves and with each other, both groups can get on with learning and benefits will ensue. These teachers also provided important messages for teachers who have not begun to participate in Te Kōtahitanga and for those schools who have yet to be given an opportunity to participate.

Chapter 8: Māori students' classroom experiences of highly effective teachers: 2004-2005

Introduction

The experiences of students are fundamental to Te Kōtahitanga and have already made a significant contribution to addressing the dilemma of raising Māori students' achievement. As explained in Chapter 1, the original narratives of experience (Bishop, Berryman, Tiakiwai & Richardson, 2003; Bishop and Berryman, 2006 in press) informed the development of the Effective Teaching Profile (ETP). This being the case it seemed most appropriate to return to Māori students to discern their understandings and classroom experiences with effective Te Kōtahitanga teachers. To achieve this we undertook focused interviews with groups of students (focus group interviews) that looked at this study question, "What is like to be a Māori student in the classroom of an effective implementer of the ETP?"

Student interviews have been conducted in all phases of Te Kōtahitanga. In Phase 1 the aim of the narratives of experience was to understand the schooling and classroom experiences of Māori students and their wider educational context. An analysis of those interviews led to the development of the ETP which forms the foundation of the Te Kōtahitanga professional development intervention.

The Phase 2 student interviews were conducted at a time when teachers participating in the professional development had been involved for two years. The aim of these interviews was to broadly explore the educational experiences of Māori students in the classroom and in a school context that had implemented the reform process. This exercise was limited to one school and looked at the range of experiences Māori students had with both Te Kōtahitanga teachers and non-Te Kōtahitanga teachers. (See Bishop, Berryman, Powell & Teddy, 2005.)

Rather than attempt to replicate the Phase 1 narratives of experience or the Phase 2 interview exercise, the focus of Phase 3 was a specific exploration of the experiences of Māori students in the classrooms of highly effective implementers of the ETP as a means of investigating if the ideas presented to us in 2001, that had been framed into the ETP, were able to be transferred to other settings. Having said that, as described in the next section, we began with an open ended interview schedule and were amazed at how clearly the Māori students were able to describe their experiences with these very effective implementers in terms of the components of the ETP.

Method

Qualitative purposeful sampling (Creswell, 2005) was used to select and identify Māori students who could provide rich data about their experiences in classrooms where the ETP was being optimally implemented. In order to select a purposeful sample where students would be able to talk about their experiences with effective teachers, the facilitation teams in each of the 12 schools were asked to select a small number of teachers whom they considered to be successfully implementing the ETP and doing so to a high degree.²⁸ A cross-section of

²⁸ The selection criteria were not defined by the RPD team beyond asking facilitators to select highly effective implementers of the ETP. Indeed, what constitutes effectiveness is a matter constantly being considered by the RPD team.

Māori students from the classrooms of these teachers was then invited to participate in a one hour focus group interview to discuss their classroom experiences with this teacher. Congruent to principles of transparency and gaining informed consent these teachers had the purpose of the interviews explained to them and consented to their being talked about in the students' interviews. Similarly the purpose of the interviews was also explained to the Māori students and consent was obtained from the students as well as their whānau prior to the interviews being conducted.

In October and November 2004, 31 focus group interviews were conducted at 12 schools, involving 153 Māori students. In August and September 2005, this same exercise was carried out with 30 focus groups of students at 12 schools involving 167 Māori students, representing a total of 320 Māori students as shown in Table 8.1 below.

Table 8.1: Student participation by year level

Year level	Number of students 2004	Number of students 2005	Total
Year 7	4	0	4
Year 8	8	0	8
Year 9	73	105	178
Year 10	67	57	124
Year 11	0	5	5
Total	153	167	320

As the process and the questions for student interviews were the same for 2004 and 2005 the content of these interviews have been analysed together. In addition, the content of the interviews over this period did not differ; that is the comments students made in 2004 could not be differentiated from comments made by students in 2005 in terms of effective teaching and students experiences of effective teachers.

The interviews were organised as in-depth, semi-structured conversations guided by four open-ended themes; experiences, achievement, attendance and goals (see Appendix D). During the interview each theme was explored in turn in relation to the experiences of the students in the classrooms of the particular effective teacher under study. At the beginning of each interview the purpose of the interview was again explained to students. Confidentiality, anonymity, consent to participate and students' right to withdraw at any time were detailed. The teacher was identified and the interview commenced.

In all a total of 73 teachers were identified by facilitation teams as being successful implementers of the ETP for this exercise. We restricted the number of teachers that facilitators could recommend due to time and resource constraints. Interviews needed to be conducted after the teachers have had sufficient time to implement the new learning from the professional development. Similarly students needed time to experience the practice of their teachers before they could purposefully comment. Therefore it was necessary to conduct interviews in terms three and four. However, this proved too problematic for ensuring that both teachers and students were available for this exercise in terms of the time together, because of the nature of class and teacher changes in years 9 and 10 option subjects such as art, music, technology among others. In a number of instances there were teachers (and their

students) we would have liked to have included but they simply did not meet the time criteria. Therefore, the number of teachers suggested by the facilitators as being highly effective should not be considered as the total number of effective teachers in this project as we did not ask the facilitators to identify all of their effective implementers. That would have been a different exercise and for a different purpose. As it was, we probably invited too many student groups because it soon became clear that group after group, in different schools, were having similar experiences in the classrooms of these highly effective teachers. This snowballing effect (Patton, 1997) is a very valuable means of ensuring that the purposeful sample had fulfilled its purpose. The purpose of this exercise was to highlight what effective Te Kōtahitanga teachers looked and sounded like in practice, not to identify how many effective teachers there are in the 12 schools.

The teachers of focus are shown by subject in Table 8.2 below. The number of teachers who were the focus of interviews is greater than the number of groups of students who were interviewed because some students had more than one teacher of focus.

Table 8.2: Teachers of focus by subject

Subject	Number of teachers 2004	Number of teachers 2005	Total
English	10	7	17
Maths	8	10	18
PE/Health	3	1	4
Science	7	4	10
Social Studies	9	5	14
Options	4	5	9
Total	41	32	73

Framework for analysis

Interview data were analysed using an iterative qualitative process (Creswell, 2005). The focus group interviews were recorded and later transcribed allowing the researcher to review the transcripts multiple times. It is important to note that the interviews were not focused on the ETP; rather they were open-ended, seeking to find out about student experiences. It was only on reviewing the data multiple times that it became clear that these students were talking about that which the participants in the original set of narratives had identified for us, that is the elements of the ETP. It was almost as if this group of Māori students were talking about the other side of the coin from those Māori students we had spoken to in 2001.

In 2001 we had asked the students to tell us about their ideal teachers, and about what we should do if we were able to coach their teachers to assist their learning. They told us very clearly that classroom relationships needed to be based on teachers caring for them as culturally located human beings, needed to signal teachers' high expectations for their learning and needed to be predicated upon teachers caring about how they managed the classroom and the curriculum. They were also convinced that if teachers talked with them more often, if they were able to discuss work with their peers, that if teachers used a range of strategies and that their outcomes guided both their and their teachers' next actions they would learn more. They also indicated that these teacher practices were most likely to be undertaken by teachers who saw them in a positive (non-deficit) light and also were those

who saw themselves as being able to bring about change in Māori students' learning no matter what.

As explained above, our professional development intervention with teachers was based on implementing these suggestions as outlined by Māori students from five non-structurally modified mainstream secondary schools in 2001. Of course we were delighted when the Māori students in 2004-2005 began to tell us about all of these components and about how wonderful it was to be in a classroom where this profile was the basis of their relations and interactions with the teacher.

Therefore, from their actions it is clear that these effective teachers are implementing the ETP because the Māori students in their classes talked about all the components of the ETP as being clearly evident in their teachers' practice.

During this review process it was determined how the underlying meaning of the data fitted with the ETP framework. Students' comments from the interviews were then coded and organised according to themes from the ETP which consists of two philosophical understandings and six observable characteristics. The philosophical understandings premise that effective teachers:

- a) positively reject anti-deficit theorising as a means of explaining Māori students' educational achievement, and
- b) approach their professional commitment to teaching from an agentic position.

These two understandings are demonstrated on a daily basis in the following observable ways:

- Manaakitanga - caring for the student
- Mana motuhake - caring for the performance of students
- Ngā whakapiringatanga - teachers are able to create a secure well-managed learning environment
- Wānanga - teachers are able to engage in effective teaching interactions with Māori students as Māori
- Ako - teachers can use strategies that promote effective teaching interactions and relationships with their learners.
- Kōtahitanga - teachers promote, monitor and reflect on outcomes that in turn lead to improvements in educational achievement for Māori students.

In Bishop et al (2003) we presented a case for what such a profile would look like in detail. Here we use that template to show what it looks like in practice for a large group of Māori students in 12 different secondary schools located in different settings. It is very important to note that the six relations and interactions that make up the body of the ETP are predicated upon two understandings and that what students are speaking of is in fact the relational manifestation of these understandings. As Bruner (1996) and Elbaz (1983) identify, the images we have of others determines the relationships and interactions that we develop with these others. However, it is difficult to ask students about teachers' understandings, therefore we spoke to them about the relationships and interactions they were part of, and by inference, we identified that these relations and interactions are those that are based upon anti-deficit thinking, anti-pathologising practises and agentic positioning.

Analysis Of Student Interviews

The following analysis of the students' interviews is presented in terms of the visible aspects of the ETP. It is based upon the students' comments about the highly effective implementers, and centres upon the 48 teachers whom both students and facilitation teams agreed were demonstrating both caring and learning relationships as well as positive experiences students had with other teachers identified for this exercise.

In the sections that follow the characteristics of each component of the ETP is bulleted and then illustrated by the inclusion of a quote from the students. A full and detailed report that explores the discourses of these students more thoroughly has been produced as *Technical Report #1: The Experiences of Māori Students in Classrooms of Effective Te Kōtahitanga Teachers*. While the following examples capture the essence of what the students had to say about their effective teachers the technical report comprises detail that has been excluded here for the sake of brevity.

Manaakitanga

Above all else teachers care for their students as culturally-located human beings. Mana refers to authority and aaki, the task of urging someone to act. It encapsulates the notion of building and nurturing a supportive and loving environment in order that one can learn to act with authority towards realising one's own self determination. Effective teachers of Māori students demonstrate manaakitanga on a daily basis.

The voices of the students make it clear that this is a fundamental prerequisite for teachers, a base on which all other characteristics rest. Therefore effective teachers of Māori students:

- treat students and whānau with respect leading to reciprocity
*You can tell he respects us, because when it comes to learning big time he's always there, if we don't understand something he doesn't talk to us like little babies, he talks to us like young adults.
 And you can rely on him, he's there. Like some teachers are distant to you but he's always there.
 I suppose if you wanted to talk to someone you could talk to Mr H. (School 1: Group 2, 2004)*
- are compassionate
*And she like never really singles us out and picks on us and stuff.
 Yeah she never like puts people down. (School 10: Group 1, 2005)*
- understand the world of the students as Māori and as teenagers
A teacher in my opinion is good if they can relate to their students, like life experiences. With Mrs G often we hear about how, what she did when she was at school, which was helpful because she was like I could do this when I was at school, so you should be able to do it, which was reassuring I suppose. (School 7: Group 1, 2004)
- have a sense of humour
She laughs with us too.

Some teachers don't have a sense of humour.

Like they don't get us like how Mrs D does, she laughs with us. (School 2: Group 3, 2005)

- can be trusted to keep confidences

*She is cool as, 'cause I go to her every morning.
Yeah she jokes around too and she is cool.
Yeah like and when I got in trouble she like knew what was wrong and stuff.
Yeah cause like you can talk to her like the counsellor. But she don't tell anyone like the counsellor does.
Yeah, that's lies, they tell. (School 10: Group 3, 2005)*
- are giving of themselves

*Mr H's always willing to go that extra little bit.
He also gets behind the class, like goes out of his way to make fun things for us, like ideas about going for a trip and fundraising for it, like sausage sizzles.
He makes an effort in everything we do, if he knows stuff is boring he tells us this is boring but if we get through it we can do something else. (School 1: Group 2, 2004)*
- act in a just and fair manner

Fair to all students, she doesn't treat them differently, like have favouritisms and that like other teachers do. She talks to us like how we talk to other students, she don't talk to us differently or say big words so we don't understand. (School 9: Group 2, 2005)
- are friendly and firm in relation to students

*She wants to be like a good teacher. She doesn't want to be your friend or that sort of thing. She's like a friend, but not a friend.
She never ever picks her favourites.
She doesn't have favourites.
Like the whole class are her favourites. She treats everyone the same.
Then if you're good and if you still haven't done your homework that doesn't mean diddly, you're all in trouble. You gotta do it. (School 10: Group3, 2004)*
- learn and ensure Māori names are pronounced properly

*Oh do you know what I really like? She read the whole of Whale Rider out and she tried her hardest to say the Māori words. It was so cute.
Yeah it was so cute... she was like "kaaa huu" it was so cute.
Yeah and she's like guys how do you say this word? And then you would see her at the end of the day saying it.
Yeah she just kept saying it and saying it and practising. (School 10: Group 1, 2004)*
- ensure actions are culturally located

*Yeah and we correct her and she corrects us too like with manners and that.
Yeah, we had a discussion about what their manners are and what our manners are.
In their family they got their ways so we abide by her ways and we got our ways so she abides by our ways too. So it goes both ways. (School 3: Group 1, 2005)*
- participate with students in a variety of ways

And sometimes she likes to join in with the games.

And have fun.

Yeah. She's a crack up too. Like we were playing softball and every time like she hit the ball she'll go, 'aargh,' sound effects, it cracks everyone up. (School 1: Group 1, 2005)

- want to be in the classroom with the students

She's dedicated to what we do in our class.

I think it's just her passion, that she likes seeing kids achieving instead of failing.

Feels cool, that we've got someone who's gonna help us get through school. (School 3: Group 1, 2005)

Mana motuhake

In modern times mana has taken on various meanings such as legitimation and authority and can also relate to an individual's or a group's ability to participate at the local and global level. Mana motuhake involves both the development of personal or group identity, and independence.

Within the context of the ETP mana motuhake personifies teachers who care for the performance of their students in the following ways:

- having high expectations and voicing and/or writing this often
*She thinks that we must be that brainy that we can do 5th form work.
She pushes us
I think she believes in us. (School 2: Group 3, 2005)*
- having clear teaching goals and communicating/negotiating these with students
Yeah, we have...on the board she's got 'we are learning to...' so we know what we're gonna do, and then 'how will we know if we've succeeded...' What we've done. At the end of the test we see if we've learnt what we've done, instead of just copying our mates. And she's got this tally board next to the dates and our subjects and she puts all the things...like we have quizzes on Wednesdays and Mondays and she recaps on what we've learnt on that week. (School 3: Group1, 2005)
- having a strong commitment to developing students' learning (understanding and growth, i.e. both quantitative and qualitative)
*He'll be able to tell if something's wrong, and if we don't understand it he just explains it really detailed, or if we need him he'll be at his desk or something.
Or he'll make you think about it, sometimes you write something down and he says are you sure that's right, and you check it again.
Sometimes when you ask a question the teacher will slip out the answer but he doesn't do that, he's really careful about what he says, he makes us think hard.
(School 1: Group 2, 2004)*
- having a strong commitment to teaching students how to learn
Yeah like we would get the answer but we had to try and work out how they got the answer if we didn't get it. Like if we do something she'll make us do the working, so that she knows that we know how to do it. (School 7: Group 2, 2004)

- continually and critically reflecting on their own teaching
At the end of every unit and the end of our test she gives out a piece of paper to the whole class and you have to write what's hot and what's not, with what you liked about the unit and what you didn't like about the unit. (School 6: Group 1, 2004)
- constantly supporting and rewarding efforts and learning by students
*And she congratulates you. She's like well done on your test you've got this much and this is the average of the class and ...
 She encourages us.
 'You're getting higher and higher every day' and ...
 She helps us.
 She just helps us understand it.
 She helps us until we get it. (School 4: Group 2, 2005)*
- taking personal and professional responsibility for student learning
Like if we had a test and one of us got a real low mark, he will talk to you in private and he ... in class... but he will pull you out of what you are doing and he will talk to you and he will say like this is your score you only got this and this wrong you need to go back and you have to think about what you have done wrong and then fix your mistakes and then I will remark your test. (School 4: Group 1, 2005)
- clearly identifying what is expected of students or what such learning actually involves
*And for our exams we had last week she made us two sheets of just random questions of about two per unit for exams for revision and yeah that was really helpful because you had something to base your revision on rather than just opening your books and not knowing where to begin.
 Yeah that was really good
 Cause all of the questions were in the test as well
 And none of our other teachers did that
 So that was cool. (School 6: Group 1, 2004)*
- being passionate about their subject or for what is being taught
*He's passionate about Enterprise Studies and that helps a lot. Like we come across a teacher that's really passionate about science because Mrs S is really into her class, she's absolutely passionate about her class and I'm not that great at science but I've learnt so much in her class because she's really into her subject, and Mr H's like that with Enterprise.
 Because you can go to a class and they're all textbook this, and textbook that, but the passionate ones are like I want you to do this.
 If they're not really passionate about something you won't put that extra effort in, and if you don't enjoy it you can't get much from it. (School 1: Group 2, 2004)*
- adapting their teaching, if teaching needs to be in small bits, being willing to do so
*She helps you, she's always helping.
 Yeah, she does actually, she walks around and like ...
 And when she gives us something to do she takes us through it step by step, so we know.
 And if you get it wrong, she'll give you another chance to do it, not like 'Oh you failed already, so ... get out of my class!' (School 2: Group 1, 2005)*

- making homework relevant and checking it carefully and responsively
*She's practically the only one who gives us homework
 But the homework's not like all this hard...
 Its stuff that makes you think
 Cool stuff
 She checks it
 Sometimes if you don't do it she'll give you an imposition
 Which is fair enough, she gives us plenty of time to do it too.
 Like if you don't bring it the next day, she's like, just do it tomorrow
 That's a warning, bring it tomorrow. (School 3: Group 3, 2005)*

Ngā whakapiringatanga

Whakapiringatanga involves specific individual roles and responsibilities that are required in order to achieve individual and group outcomes. In this instance they refer to teachers' roles and responsibilities including classroom management and curriculum knowledge. Within the context of the ETP this enables teachers to create a secure well-managed learning environment in the following ways:

- having a clear and negotiated set of rules and consequences for quality behaviour and relationships
*Like she will say "ok, you can be in your seating plans the way you want it but the deal is you have to listen when I'm talking and do your work. And you can talk quietly but make sure you are doing your work and it doesn't disturb anyone else"
 And when you are naughty and you get told off she makes you think about what you have done. Like if you got to go to her for something she makes you think about like why I did this and all that. And then you don't want to do it again next time because she made you think about it. (School 7: Group 1, 2005)*
- stressing the importance of respectful relationships (no put-downs)
*She says to treat people with consideration
 Treat others with consideration
 That is our rule in our class
 Nah it is just consideration that we have for each other
 And we are not allowed to use foul language
 Yeah like swearing and stuff. (School 6: Group 2, 2004)*
- having excellent classroom management
*She likes to be organised
 She understands our problems and tries to help us and stuff
 She always gets us to get our stuff out and do the work that's on the board, the 'do now'
 She likes to keep stuff planned; she doesn't like unorganized people (School 2: Group 3, 2005)*
- using non-confrontational classroom management strategies
*Well he doesn't exactly tell us off, but tells you what not to do, and it's not a growling sort of thing, it's just like "don't do that".
 And it's like you listen to him, because he's not being like "Get out of my classroom!" (School 8: Group 1, 2005)*

- having a clean, tidy, organised room
Like someone would get equipment and she always had stuff like if people didn't have like pens or pencils or whatever, she'd always have stuff up the front in a box. (School 7: Group 2, 2004)
- inviting whānau to be involved at a variety of levels
*She tells you if you've done good
Like she sometimes rings your mum if you've done good
Like if you've got 50 or 60 or 75%. (School 12: Group 3, 2004)*
- seeing their classroom as part of the whole school
*Good, cos our class used to mess up in all the other classes, Miss J would always be the one to tell us what to do. She'd always expect higher of us
She'll punish us...like if we don't get high in our other classes she'll punish us for that as well. (School 8: Group 1, 2004)*
- ensuring that lessons are well-planned and structured
*We do the same thing everyday, like the same routine every day.
Like we'll start off with ... say if we have a new topic we'll go through examples about that new topic and we'll just go over that ...
And write notes ...
... write notes about it and then after that we get into our groups ... we have groups of four, five and we do exercises about that topic. (School 4: Group 2, 2005)*

Wānanga

As well as being known as Māori centres of learning, wānanga as a learning forum involves a rich and dynamic sharing of knowledge. With this exchange of views, ideas are given life and spirit through dialogue, debate and careful consideration in order to reshape and accommodate new knowledge. Wānanga in terms of the ETP allows teachers to engage in effective teaching interactions with Māori students as Māori.

- **Co-construction**
He'll tell us the actual topic that we have to learn, and we'll pick what we want to do, like at the beginning he'll ask us what we would like to do with the subject and we did like plays and stuff. (School 12: Group 2, 2004)
- **Feed-forward academic**
*She tells us how we're doing
She goes off our marks and tells us how we can improve
She shows us our test and how we can improve in the test if we didn't really do good.
If you didn't do so well she'd go over it
She wouldn't tell the whole class, like you suck, she just comes to us quietly or she calls us up. (School 2: Group 3, 2005)*
- **Feedback academic**
She also marks like [she] got us to hand our books in and she would mark it and it don't really matter if you've got it wrong or right, just as long as you tried. But like if

you didn't try then she would say this isn't enough D you can do better. But if you tried she'd say that was okay but its done like this and explain it. (School 7: Group 2, 2004)

- **Prior learning**

He gets us to brainstorm our ideas.

He'll say does anybody know about this or this, and if someone says yes, he'll say well what do you know about it? He'll ask us specifically, not as a class. (School 1: group 2, 2004)

- **Feed-forward behaviour**

Before we enter the door and she goes 'Morning guys, I hope you haven't got no jewellery and I hope you have correct uniform'. (School 8: Group 2, 2005)

- **Feedback behaviour**

Yeah, he says please don't behave like that, I'll have to ask you to leave. (School 1, Group 2, 2004)

- **Monitoring**

With her starting it off, pretty much and she'll show us how to start off, yeah, and then we'll carry on from there. She'll keep walking around and showing us how to do the rest.

She doesn't like ... lean over your shoulder every time and being that dark shadow or something that some teachers do, and it drives you nearly crazy. (School 2: Group 1, 2005)

- **Instruction**

Well like she can explain things easily to us but if we don't get something she explains it better in a way that we can understand.

Yeah, cos she'll try to put it in a way that so that we know it better. (School 5: Group 1, 2004)

- **Culture (Big C)**

We don't like people sitting on tables, she won't sit on tables if we're around, if her husband does it she gets all moody 'cos she's used to us telling her "don't sit on tables." She don't mind if we're not there but if we are there she'll go "can you get off the desk please, sit on a chair" (School 3: Group 1, 2005)

- **Culture (little c)**

She treats us all the same

Just the way she talks

She's not racist

She says like 'kia ora, koutou katoa'

And she says yeah, I'm from the Nga Puhi tribe

She's really positive towards Māori students

But she treats us all the same

She's not, I like you but I don't like you

If we're doing something naughty, her warning is like, this look. (School 3: Group 3, 2005)

Ako

Ako means to learn as well as to teach. It is both the acquisition of knowledge and the processing and imparting of knowledge. More importantly ako is a teaching-learning practice that is culturally specific and appropriate to Māori pedagogy. In ako the teacher learns from the student just as the student learns from the teacher. Within the context of the ETP ako refers to teachers' use of strategies that promote effective teaching interactions and relationships with their learners.

- Narrative pedagogy
And she tells us about her family, like her daughter and her husband. She told us about this when we were learning about genes and how her family came about. And she talked about what genes were more dominant. (School 2: Group 2, 2004)
- Co-operative learning
Mrs R changed like everything she could. We're all used to teachers teaching us all together like if there's a few that know everything and there's a couple of dumb ones we had to wait for them. But what she does is she puts us all in groups and ... And we help them out, she teaches us to teach the other people. She puts us in groups and then we learn this and that and we go on to our group and teach them that and then that group will teach the rest of the group. Yeah, it's better that way. (School 10: Group 3, 2004)
- Formative assessment
Sometimes at the start of the topics we have a test to see how much we know before we start the topic and then we get our marks back and we learn some more about the topic we have another test and then we see the grades that we get. (School 7: Group 2, 2004)
- Student-generated questioning
*Yeah and we are allowed to ask questions
 Yeah we made the questions
 Usually we make up our own questions and find the answers
 Its all research
 Yeah we make questions we want to know the answers to and we use that as homework and we have to find it out by a certain time. (School 12: Group 2, 2004)*
- Oral language, literacy across the curriculum
She makes us think, she doesn't give this one formula that we have to use throughout, so we don't remember. She makes us think about it and figure it out and then if we don't she'll like take a few of us away and like try and get it in their heads. But she like breaks it up and like just remember this word adjacent, add is like to connect and so it's another word for connected, she uses stuff like that, which helps us remember. (School 10: Group 3, 2004)
- Integrated curricular
*He likes to spice things up
 And he wants to know what we want to be doing like he asks us, what do you want to be doing in drama?
 Yeah like our opinions on stuff*

He incorporates it into [the class] (School 3: Group 3, 2005)

- Ako
She did this one activity and we were in some groups and we had to teach the lessons ourselves, and she gave us the topic and we had to plan the whole lesson ourselves because she wanted to actually see what we would do if we were teaching a lesson. And so she did, she was taking ideas from us to improve through her own lessons. That's what she said and we ended up teaching exactly like her. (School 7: Group 1, 2004)

Kōtahitanga

Kōtahitanga is a collaborative response towards a commonly held vision, goal or other such purpose or outcome. Within the context of the ETP Kōtahitanga refers to teachers who promote, monitor and reflect on outcomes that in turn lead to improvements in educational achievement for Māori students. We asked students about their performance and experiences in the following areas in relation to effective teachers:

- Student aspirations and goals
I've got goals that I can achieve, that I can do, I'm one of the top in my class and not at the bottom and I can help people instead of them helping me... I've never helped anyone at intermediate before, it's always been me getting helped but it's been a change that I'm helping my new mates this year. (School 3: Group 1, 2005)
- Student attendance and retention
I used to hate social studies and now I love it, we used to be, 'should we wag it eh?' (School 3: Group 3, 2005)
- Academic engagement
*Yeah and I enjoy learning in her class [better] than other classes.
Yeah because students teach.
Yeah, we're not ashamed to make mistakes and stuff. We help each other.
Yeah. For the first time in school I actually like maths. (School 10: Group 3, 2004)*
- Student achievement
*We just keep on getting higher and higher
We are getting higher in our marks; cos last year none of us passed, none of us. And now this year we are getting like 87%.
Yeah it's good (School 7: Group1, 2005)*

Summary

We asked facilitators to identify teachers who were high implementers of the ETP. In 2004 and 2005 we then interviewed 320 Māori students (61 focus groups) from 12 schools in order to gain insight into students' classroom experiences with these teachers. In this chapter we then used the ETP as an analytical framework to present examples of how the ETP was being implemented by these teachers and its impact on Māori students.

Facilitation teams had identified 73 teachers as effective implementers for the purposes of this exercise. Interestingly, the students only agreed with two-thirds (48 teachers) of the

facilitation teams' choices. These Māori students provided further insight into the complexity of teaching and learning when they talked in detail about some of the remaining teachers who they suggested may appear to be effective but from their discussions were in fact only concentrating on parts of the ETP. According to the Māori students interviewed these teachers were either focusing more on caring and less on teaching or vice versa. We have included this example of the difference in understanding what constitutes effectiveness between the facilitators and the students as an indication of the need for all of us to focus on all aspects of the Effective Teaching Profile. The students in the original narratives were very clear about this necessity, and this current group of students have confirmed their understandings; that is, really effective teachers for Māori students truly maintain an anti-deficit stance with regards to Māori, they maintain positions of agency within their profession, they focus on establishing relationships of care with their students and they also focus on learning relationships. One meaning for us as a research team is the necessity to develop a robust measure of effectiveness that encompasses facilitators and students understandings.

For the purposes of this report, although we primarily focused on the 48 teachers whom students had validated as being successful implementers of the entire ETP, we also focused on the positive experiences students had with the 25 teachers who according to the students were partially implementing the profile. Students revealed what it looked like, sounded like and felt like to be a Māori student in the classrooms of these successful implementers of the ETP.

As the purpose of these interviews was to report on students' experiences in the classrooms of effective teachers, we have not reported on any negative experiences the students had with teachers who were only partially implementing the profile. We know from the Phase 1 narratives and from a history plagued with stories of Māori underachievement and disconnection with education how the voices of Māori disaffection sound.

Teacher positioning about Māori students

As stated in the introduction to this section, it is difficult to fully understand from talking to students what a teacher's positioning and understandings may be in terms of whether they reject deficit theorising as a means of explaining Māori students' educational experiences, or whether they may be operating from a position of agency. However, when teachers operationalise these two theoretical understandings, understandings upon which the ETP is premised, these students were able to report on the related behaviours and discourses that teachers were exhibiting.

Importantly, a major difference between the students interviewed in Phase 1 with the students in Phase 3 is the positive experience of being Māori the latter group are having with these teachers. Being Māori was no longer problematic, as it had been for the Phase 1 students; rather, being Māori with these teachers was acceptable, or even normal. While this was not a topic that was raised directly with these students, the experiences they had with effective teachers indicated that teachers maintained positive discourses of them as students, leading to situations where these Māori students believed they were valued for who they were and held in positive regard.

And she doesn't expect us to be someone else she lets us be us. (School 8: Group 3, 2005)

She won't call us dumb, she'll say 'you guys can do it, I believe in you.' (School 3: Group 3, 2005)

She doesn't like that dumb Māori stuff cos that's what we say.

Yeah she doesn't believe in that.

She says "don't give me that..." (School 10: Group 3, 2004)

I used to wag a lot of classes and stuff like that, but I found that you come to school, and be your self but learn at the same time too, and like I have achieved heaps, like I got my first merit in maths and my first excellence in cooking and I achieved a merit in science but failed my exams but it's all right. And I have achieved heaps since I've been in this class. I came from third form in a really low class but from my exams at the end of the year moved up into this class, her class and then I went into this class so I've been through heaps but at the end of the day I'm glad I got put in this class. (School 6: Group 1, 2004)

Although the use of culturally appropriate resources and iconography was important, having their own cultural experiences as Māori validated by these teachers by being able to bring their own experiences to the learning context was more important. Teacher positioning was evident in the way students spoke of the importance of being able to bring their own cultural experiences as Māori into these classrooms.

And I think that she was interested in the culture as well.

Yeah, and its genuine interest not just an act. (School 10: Group 1, 2004)

She treats us all the same.

Just the way she talks.

She's not racist.

She's really positive towards Māori students.

But she treats us all the same. (School 3: Group 3, 2005)

Teacher positioning that acknowledged and affirmed a cultural identity that in most cases was different to their own, provided the platform for the development of mutual respect and caring relationships. The students were certain that teachers being responsive to them as Māori, and the way they were treated as Māori, were an essential precursor to the quality of in-class relationships with teachers and to their participation in classrooms.

Relationships

In line with the Phase 1 students, these students spoke of the absolute importance of caring relationships. They spoke of effective teachers who consistently demonstrated a manner of care based upon mutual respect, compassion, affirmation of ability, high expectations and the creation of learning environments where students felt secure. In short, these effective teachers demonstrated manaakitanga, mana motuhake and ngā whakapiringatanga, and these relationships had a positive impact upon the students we spoke to in that these students felt inspired and compelled to learn in the classrooms of these teachers. It is very clear in the original narratives and throughout these current interviews that Māori students wished to achieve in the education arena, and where good relationships existed between themselves and their teachers, these students were able to thrive.

We like teachers and get along with teachers when we learn a lot from them. Like our science teacher we are learning a lot. (School 7: Group 1, 2005)

Where teachers cared for students as culturally located beings (manaakitanga) and these relations formed the basis of interactions between teachers and students, then other relations such as discipline and attendance, that fit under teachers caring for the performance of their students (mana motuhake), were seen as evidence that teachers did indeed care and hold high expectations for them. Likewise teachers who created secure, well managed learning environments (ngā whakapiringatanga) were seen to be caring about their profession and thus caring about setting students up for success. Advice from these students would strongly suggest the three types of relationships described above provide the necessary foundation for the range of interactions described in the ETP. They were also pleased that their teachers used a range of strategies to implement these interactions. The message that is very clear from these students' experience is that teachers cannot ignore the positioning and relational elements of the ETP, and implement strategies and expect that respectful relationships will necessarily flow from that. Further, it is very difficult for teachers to form a caring relationship with Māori students without first addressing anti-deficit thinking and locating oneself within positions of agency. In line with As Rawiri Brell (2003 p.c) Phase 2 school "these students are now 'discerning consumers of education'. Anecdotal evidence from facilitators would suggest that Māori students can easily identify deficit theorising teachers even before some of them have opened their mouths.

The act of reciprocity, of tātou tātou, is a thread that runs throughout the demonstrations of care that students have spoken of in relation to manaakitanga, mana motuhake and ngā whakapiringatanga. Students repeatedly described the nature of their relationships with effective teachers in terms of the mutual and reciprocal benefits. Where students believed teachers were giving the very best of themselves, Māori students would reciprocate not only with regards to values such as trust and respect but also their best efforts with participation and learning.

The best for the best. (School 10: Group 1, 2005)

She knows how to treat us right and stuff, and then we do sort of the same thing and respect her back. (School 10: Group 2, 2005)

Yeah you've got to give respect to get respect. (School 9: Group 1, 2005)

While these current interviews are stories of success, they represent only a fraction of the experiences these students are having with the rest of their teachers. Throughout the interviews students indicated that the positive encounters they were describing were not typical of the encounters they were having throughout the school.

Like in [another] class none of us get along with the teacher and none of us seem to be passing our tests. (School 7: Group 1, 2005)

And if you get it wrong, she'll give you another chance to do it, not like 'Oh you failed already, so ... get out of my class!' (School 2: Group 1, 2005)

Again the act of reciprocity, of tātou tātou, is fundamental to these classrooms. Where students believed teachers were not giving the very best of themselves, students were likely to

reciprocate with similar attitudes which resulted in their failure to attend the classes of these teachers on any sort of regular basis and a lack of any real effort when they did. Which presents the challenge posed by students, how do we ensure that Māori students are able to experience effective teaching across the board and not just in isolated instances?

There is no one that teaches like her that's why. (School 10: Group 3, 2005)

Yeah true, that's the one, 'cos it's dumb just passing in one class and failing in all the others. (School 4: Group 2, 2005)

Outcomes

Students spoke of positive outcomes in the classrooms of effective teachers across a range of indicators. Interestingly students spoke of these indicators in relation to their learning. Enhanced relationships between teachers and students have led to classroom situations where students feel respected and included in relevant and meaningful ways.

'Cos I like him as a teacher.

He respects us.

Yeah you've got to give respect to get respect.

He listens to our ideas and plans and stuff.

Yeah, he listens to us and that. (School 9: Group 1, 2005)

Improved expectations from teachers has given students confidence in their ability to achieve, an awareness of their progress over time and instilled in students a work ethic that will lead to future improvements.

She's confident in us.

Yeah, 'cos we've come a long way since the beginning, 'cos we were like Level 4 at the beginning of the year, now we're Level 5.

Level 5 and 6. (School 4: Group 2, 2005)

Do the best that we can and she hopes that we can score high for next year, she doesn't want us to fail after all the stuff we've been doing this year. We've been working hard for all our exams, she wants us all to achieve. (School 3: Group 1, 2005)

Students spoke of their aspirations and goals as achievable and influenced by effective teachers.

I want to be a drama teacher like Mr P cause it looks like he has a lot of fun and he is doing what he loves. (School 3: Group 3, 2005)

Students spoke of changes in their attendance of specific subjects

You don't miss maths?

No, we don't want to.

I want to learn it. (School 10: Group 3, 2004)

Students spoke of their engagement with learning and the resultant changes in their in-class behaviour and enjoyment of the subject.

*You do want to learn in her class.
She does make it a learning kind of environment though.
Especially at exam time.
It's funny too.
Yeah, yeah we laugh heaps. (School 6: Group 1, 20004)*

*Last year, last year, we were naughty as
Cause we never listened to our teacher*

And do you know why, can you account for why it might be different this year?
*Because we're learning something.
It's because we're actually trying this year.
It's always you know ... my teacher. (School 8: Group 3, 2004)*

Finally students spoke of improvements in their achievement

*I was down in the N's. I was a Not Achieved, Not Achieved, Not Achieved, but now it's like ... I haven't got a Not Achieved in Maths, it's a Merit.
I've gotten two Excellences and a Merit since I've been in Mrs H's class.
It feels good. (School 4: Group 2, 2005)*

*No. We didn't achieve, well we did but just not as much.
We've improved heaps this year.
It's the teacher.
Not really.
I reckon it's the teacher. (School 10: Group 3, 2004)*

Conclusion

In Phase 1, Māori students talked about what would engage them in education, while also identifying how problematic it was to be Māori in mainstream secondary schools education. They considered teachers' rejection of deficit theorising about Māori as essential to the development of respectful and caring relationships between Māori students and teachers. They yearned for positive recognition and acceptance of their own culture, and gave specific examples of what this meant, such as the correct pronunciation of Māori names, their being able to wear taonga and the inclusion of their own culture through the use of their own experiences. These elements were largely absent from the classrooms of the Māori students with whom we talked (Bishop & Berryman, 2006).

The narratives of Phase 1 students further distinguished the voices of engaged and non-engaged students. The engaged students were aware that they had given something up in order to participate in mainstream education, and while they felt as strongly as the non-engaged students about being accepted as Māori and having their Māori identity seen in a positive light, they understood that they had engaged in an education system where being Māori was neither safe nor comfortable. The non-engaged students, while knowing that in future opportunities and choices would be provided for them through the pathway of education, just

could not suppress their anger and frustration at the way they were related to and interacted with by most of their teachers.

The Māori students in the original Phase 1 narratives were Year 9 and 10 Māori students from five different secondary schools, and they hypothesised about the types of teacher relationships and interactions that would encourage them to engage in learning. From this theorising (along with their whanau, principals and their teachers who were positioned within a relational discourse) we were able to construct a picture of what constituted effective teaching for Māori students, the Effective Teaching Profile.

In the Phase 2 interviews, Māori students reported positively on their experiences in the classrooms with teachers participating in *Te Kōtahitanga* (Bishop et al, 2005). While there were still underlying concerns regarding negative stereotyping and generalisations regarding the ability and behaviour of Māori students, these behaviours seemed to emanate from non-*Te Kōtahitanga* teachers. The students interviewed at this time commented on the benefits of good relationships with their teachers; that is their teachers made concerted efforts to pronounce their names correctly, related to their students personally and used humour and more personal interactions to motivate and inspire them. These students reported that being Māori in the classroom was about being treated well by teachers, challenged in terms of their learning and listened to as individuals.

The Phase 3 interviews, which are the subject of this chapter, are the experiences of Year 9 and 10 Māori students from a range of 12 schools working with a range of specific teachers who have received professional development in the ETP. These narratives strongly affirm the hypothesising of the Phase 1 students; that is, the Phase 3 interviews clearly affirm that teachers who use the entire range of relationships and interactions to be found in the ETP are effective teachers for Māori students. The Phase 3 students talked freely about how they had benefited from being with these teachers. In the conversations with the students interviewed, copious examples of the elements of the ETP are easily recognisable, in fact taking all of their interview transcriptions into account, apart from their discussions around less effective teachers who they spoke of as not adhering to the elements within the ETP, there was little else.

Clearly, from these conversations, the ETP does indeed have real strengths for raising the achievement of Māori students. The professional development that these teachers have received from their facilitators has changed these teachers' approach to teaching, making them exponents of the ETP and thus effective for Māori. Subsequently, totally new cohorts of Māori students are benefiting from the profile based on the suggestions of the Phase 1 students' narratives.

Students in Phase 3 have strongly affirmed the importance of teacher positioning themselves as being agentic, the development of mutually respectful, caring relationships, the importance of discursive classroom interactions, and were clear as to how this leads to increased Māori student participation and learning. What is also evident is that as Māori students begin to feel more secure in themselves and with their teachers, their identities are acknowledged and made secure as it is with these 320 Māori students in the classrooms of these effective implementers of the ETP. As a result they can get on with learning and be far less concerned about the cultural manifestations of their identity. When their identity is secure the conversations of these Māori students focus largely on their being engaged with learning and thus better able to be self-determining, now and in the future.

Chapter 9: Te Kōtahitanga 2004-2005 Student Achievement Results and Discussion

Introduction

This chapter contains analyses of changes in Māori student achievement over time as measured through use of two instruments: Assessment Tool for Teaching and Learning (asTTle) for numeracy and Essential Skills Assessment (ESA) for literacy.

Assessment Tool For Teaching And Learning (asTTle)

The University of Waikato Research and Professional Development Team chose to use asTTle (Brown & Hattie, 2003) to measure Māori student achievement in numeracy for the first time in 2005. AsTTle was not used in 2004 as it was still undergoing trialling and was not released for general use until early in 2005. Therefore, as soon as it was available we conducted a one-day induction meeting for facilitators in its use and asked that the schools use this tool for measuring achievement. AsTTle appealed to us as a kaupapa Māori inspired research team because it contained national norms that had been generated as part of the normal asTTle process rather than as a separate stand-alone exercise for no other purpose than to provide the intervention with a comparative standard. These norms can act as controls/comparisons against which to measure the achievement of Māori students in project classrooms.

However, like all innovations, there were teething problems with the introduction of asTTle in the schools, and despite our strong request, for a variety of reasons not all of the project schools used asTTle in 2005 and some schools did not conduct pre-tests and post-tests properly. Others had server and other IT problems, while even more found the time needed to produce and grade tests was way beyond the time they had to spare. As a result we were not able to collect sufficient literacy test results to supplement or even replace the ESA text. However, we were fortunate enough to be able to gather numeracy pre and post-test results from schools who were representative of the 12 schools and therefore provide the analysis below.

We found asTTle is a valuable tool for both formative and summative purposes. Formatively, asTTle enables teachers to create and analyse tests for literacy and numeracy. The resulting reports that are generated show what students know, what gaps they have in their learning, and what they need to learn next. The results also indicate how well students are learning in comparison with other students nationally. AsTTle has the ability to immediately analyse the performance of both individuals and groups, displaying the analysis graphically. Teachers can identify subsequent learning steps for individuals, groups, or classes by linking to an indexed online catalogue of classroom resources (What Next). AsTTle software also provides information on the strengths and weaknesses of individuals and groups, and can be used to identify whether progress is being made.

Summatively, asTTle allowed us to compare the asTTle numeracy results of Māori students who were taught by Maths teachers involved in Te Kōtahitanga with Māori students who were taught by Maths teachers not involved in Te Kōtahitanga. In that way, the Māori students who were taught by Maths teachers involved in Te Kōtahitanga constituted an

experimental group and the Māori students who were taught by Maths teachers not involved in Te Kōtahitanga constituted a control/comparison group.²⁹ Because of the unique nature of asTTle, further comparisons were able to be made between asTTle numeracy results for Māori students who were taught by Maths teachers involved in Te Kōtahitanga as the experimental group with asTTle national norms for Māori students as a control/comparison group. In this way, we were able to have two control/comparison groups for this study. We are using the term control/comparison because in the literature, researchers such as Borman (2003, 2005) uses the term “quasi-experimental, non-equivalent, control group design” (p. 142) for this kind of study. However, others such as Whitehurst (2003), use the term quasi-experimental “non-randomised, comparison group design” (p. 6).

This study is quasi-experimental, and the selection process was non-randomised and used non-equivalent groups because the selection of the schools and the teachers was out of our hands. For example, the Ministry of Education selected the 12 schools from within the MOE Schooling Improvement Initiative and the schools determined their own means of selecting teachers to participate in the project, primarily through asking for volunteers. In this way, the MOE selection process and the needs of the teachers to self-select, to be self-determining, outweighed the needs of the researchers to randomly select the schools and the teachers. As a result, we were not able to randomly select the schools or randomly assign the teachers as would be required for this study to be a randomised-experimental design but rather, we had to select groups through the process of “matching” the experimental groups with similar, yet non-equivalent groups. Hence this study could best be termed a *quasi-experimental, non-equivalent/non-randomised, control/comparison design*.

The research team evaluated the results of asTTle numeracy test for 2005 conducted with Year 9 and 10 Māori students in six project schools. Pre-tests were conducted at the beginning of the school year and post-tests were conducted at the end of the school year. The schools included for testing were representative of the range of schools involved in the project, including large urban schools, medium urban schools, and small rural schools, and schools from the three areas where the project is located: Northland, Auckland, and Waikato-Bay of Plenty. Therefore this indicates that the sample (403 Māori students) selected for inclusion was representative of the Māori students to be found in the 12 schools across the project (Creswell, 2005).

Data were analyzed using the Statistical Package for the Social Sciences (SPSS). A paired samples *t*-test analysis was conducted; pre-test and post-test scores were compared employing a pretest-post-test nonequivalent-groups design (Morgan, Gliner, & Harmon, 2006). Effect sizes were calculated using Cohen’s *d* (Cohen, 1988). Alpha was set at $p < .05$.

We relied on the work of Fashola and Slavin, (1998) to interpret effect sizes. Their project focused on “disadvantaged students” (p. 370) in the United States and in particular on the achievement gap between different ethnic groups, African-American and Latino students and their white counterparts. Because the focus of their work parallels the focus of this project on improving Māori student achievement, we chose to use their effect size criterion of .25 for identifying differences that are “educationally significant” (p. 375) or beyond expected progress.

²⁹ Such analysis was not possible for the ESA literacy scores inserted below because of the nature of the assessment it was not possible to suggest that learning was directly related to English teachers for example whereas numeracy is far more likely to be the domain of maths teachers.

Results

Table 9.1: asTTle Numeracy Pre-test and Post-test Mean Differences, Year 9 – 10 Māori Students in 2005.

	n	M	SD	<i>t</i>	<i>p</i>	<i>d</i>
Total						
Māori students of Maths teachers involved in Te Kōtahitanga				14.8	.000	.76
Pre-test	236	596.9	103.6			
Post-test	236	678.5	109.6			
Māori students of Maths Teachers not involved in Te Kōtahitanga				10.6	.000	.52
Pre-test	167	580.7	129.6			
Post-test	167	655.2	153.6			

Note: *n*= The number of participants in the sample; *M*=The mean is simply the average of all the items in a sample.; *SD*=The standard deviation is a measure of how spread out your data are.; *t*- The *t* statistic is a measure of how extreme a statistical estimate is; *p*= A *p*-value is a measure of how much evidence we have against the null hypotheses of zero difference; *d*= Commonly called effect size, it is the difference between the means, $M_1 - M_2$, divided by pooled standard deviation. The pooled standard deviation is found as the root mean square of the two standard deviations (Cohen 1988).

Data in Table 9.1 report the outcome of a paired samples *t*-test. Table 9.1 shows these mean differences revealed statistically significant differences between the pre-test and post-test scores for Māori students as follows: Overall Total for 6 Schools for Māori students of Maths teachers involved in Te Kōtahitanga: $t(235)14.8$, $p=.000$, $d=.76$; Overall Total for 6 Schools for Māori students of Maths teachers not involved in Te Kōtahitanga: $t(166)10.6$, $p=.000$, $d=.52$.

According to Cohen (1988) the effect sizes of these mean differences between the pre-test and the post-test comparing Māori students of Maths teachers involved in Te Kōtahitanga with Māori students of Maths teachers not involved in Te Kōtahitanga revealed: Larger than typical effect sizes for Māori students of Maths teachers involved in Te Kōtahitanga ($d=.76$) and typical effect sizes for Māori students of Maths not involved in Te Kōtahitanga ($d=.52$).

The research team then evaluated the results of the asTTle numeracy test for 2005 conducted with Year 9 and 10 Māori students in six project schools with AsTTle national norms for Māori students. The norms were based on a similar time interval to our study, with our interval being slightly shorter.

Table 9.2: asTTle Numeracy Effect Size Comparison Between Experimental and Control/Comparison Groups for Year 9 – 10 Māori Students in 2005.

	n	M	SD	<i>d</i>
Experimental Group				
Māori students of Maths teachers involved in Te Kōtahitanga				.76
Pre-test	236	596.9	103.6	
Post-test	236	678.5	109.6	
Control/Comparison Groups				
Māori students of Maths Teachers not involved in Te Kōtahitanga				.52
Pre-test	167	580.7	129.6	
Post-test	167	655.2	153.6	
National Norm for Māori students				.51
Pre-test	410	727	85	
Post-test	319	769	81	

Table 9.2 shows the effect size for the experimental group (Māori students of Maths teachers involved in Te Kōtahitanga) was larger than typical ($d=.76$). The effect size for the control/comparison groups were: (a) typical for Māori students of Maths teachers not involved in Te Kōtahitanga ($d=.52$) and (b) typical for Māori students nationally ($d=.51$) (Cohen, 1988).

Discussion

The results of the administration of the asTTle numeracy test to Year 9 and 10 Māori students of Maths teachers involved in Te Kōtahitanga and Maths teachers who were not involved in the project revealed that the effect sizes of mean differences between pre-test over post-test scores were greater than the threshold level set by Fashola and Slavin (1998) ($d=.25$). Overall these results revealed a larger than typical effect size for Māori students of Maths teachers involved in Te Kōtahitanga ($d=.76$) and a typical effect size for Māori students of Maths teachers not involved in Te Kōtahitanga ($d=.52$).

This evidence suggests that significant growth, perhaps twice that expected, occurred in the Māori students taught by Maths teachers participating in Te Kōtahitanga in numeracy. Further, it appears these students might shift about three-quarters of a standard deviation over the same interval that students would shift about half of a standard deviation. Since we are comparing two very similar³⁰ groups of Māori students, the evidence would suggest that Te Kōtahitanga contributed to this significant growth in numeracy skills for Year 9-10 Māori students of Maths teachers involved in the project at an effect size of .24 greater than the Māori students of Maths teachers not involved in the project. Further, when doing a

³⁰ These groups of Māori students are very similar because the criteria for inclusion of the students in their category were whether their teacher was in the project or not. Their inclusion in either group was not decided upon by student variables such as streaming, course selection and so on. Similarly, because we have data from six schools that are representative of the whole 12 schools, again we are reassured that these two groups are similar.

comparison with national norms for asTTle numeracy, we found students of Te Kōtahitanga Maths teachers did substantially better than Māori students nationally. What is interesting of course is that these results have come about due to changing classroom relationships and interactions *not* from any content or strategy professional development.

Essential Skills Assessment (ESA)

The research team evaluated the results of the Essential Skills Assessment (ESA) (Brown, 2003) conducted with Year 9 and 10 students in both 2004 and 2005 in project schools. The ESA Information Skills, Finding Information in Prose Text – Secondary was used. The test consisted of two sections: 1) skimming and scanning for information and 2) note taking and organising information. ESA was chosen for this project because it measures skills, identified by ESA designers, as being critical for many subjects. The test was administered early in school years 2004 and 2005 as a pre-test and late in school years 2004 and 2005 as a post-test. The stanine and raw score results were analyzed for strength of differences between the pre-test and the post-test by ethnicity using the criteria of effect sizes.

A representative sample was used because we determined the group selected for this study was representative of students across the 12 schools involved in the project (Creswell, 2005). The sample for 2004 was 810 Year 9-10 students from eight schools participating in the project. In 2005 the sample consisted of 2,094 Year 9-10 students from six project schools. The schools included for testing were representative of the range of schools involved in the project, including large urban schools, medium urban schools, and small rural schools; and schools from the three areas where the project is located: Northland, Auckland, and Waikato-Bay of Plenty.

Data were analyzed using the Statistical Package for the Social Sciences (SPSS). A paired samples *t*-test analysis was conducted because pre-test and post-test scores were compared employing a single group quasi-experimental design (Morgan, Leech, Gloeckner & Barrett, 2004). This design was chosen because constraints within the various schools precluded the establishment of control groups for either Māori or Non-Māori students. Alpha was set at $p \leq .05$. Again, we relied on the work of Fashola and Slavin, (1998) for interpreting effect sizes that were “educationally significant” ($p = .375$) or beyond expected progress ($d = .25$).

Stanines

Stanine results for students are expressed as normalized standard scores, ranging in value from 1-9. For more discrete analysis ESA stanine scores were grouped into three separate clusters. For this study stanines 1-3 were labelled as the lower third stanines, stanines 4-6 as the middle third stanines, and stanines 7-9 as the higher third stanines. This allowed us to conduct various analyses with particular focus on Māori students who achieved in the lower third stanine in the ESA pre-test. We wanted to know how this group of students performed on the ESA post-test relative to the pre-test.

This focus on the lower stanines of our investigation arose out of the Program for International Student Assessment (PISA) study conducted by the Organization for Economic Cooperation and Development (OECD), which showed that although New Zealand has a high quality education system, low equity exists because of the achievement gap between Māori and non-Māori students (OECD, 2000). We were particularly concerned with the PISA study

revealing that there is a long tail (between 5% and 25%) of students' results, mainly Māori, who participated in the study. For this reason we chose to analyze stanine results by dividing those results into thirds and focusing our attention on the lower third, which would approximate the long tail mentioned in the PISA study.

Results

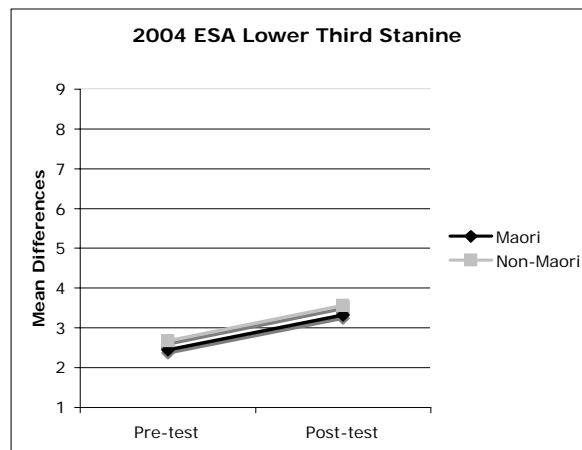
Table 9.3: 2004 Essential Skills Assessment Pre-test and Post-test Lower Third Stanine Mean Differences by Ethnicity for Year 9 – 10 Students.

	n	M	SD	<i>t</i>	<i>p</i>	<i>d</i>
Māori				7.44	.000	.80
Pre-test	108	2.45	0.78			
Post-test	108	3.32	1.32			
Non-Māori				9.00	.000	.92
Pre-test	130	2.67	0.59			
Post-test	130	3.56	1.25			

Data in Table 9.3 report the outcome of a paired samples *t* test. Table 9.3 shows these stanines by ethnicity revealed statistically significant differences between the pre-test and post-test scores for both Māori students, $t(107)7.44$, $p=.000$, $d=.80$, as well as for non-Māori students, $t(129)9.00$, $p.000$, $d=.92$. These effect sizes are larger than typical (Cohen, 1988) and were considered to be educationally significant or beyond expected progress.

Similar analyses of the middle third stanine did not reveal statistically significant results for Māori students. Further, the results of a paired samples *t* test for the middle third stanine revealed a significant difference between the pre-test and the post-test for non-Māori and a significant difference between the pre-test and the post-test for both Māori and non-Māori students for the higher third stanine. However, the effect sizes of these mean differences between the pre-test and the post-test were smaller than typical and, therefore, these results were not treated as being educationally significant.

Figure 9.1: 2004 Lower Third Stanine Line Graph



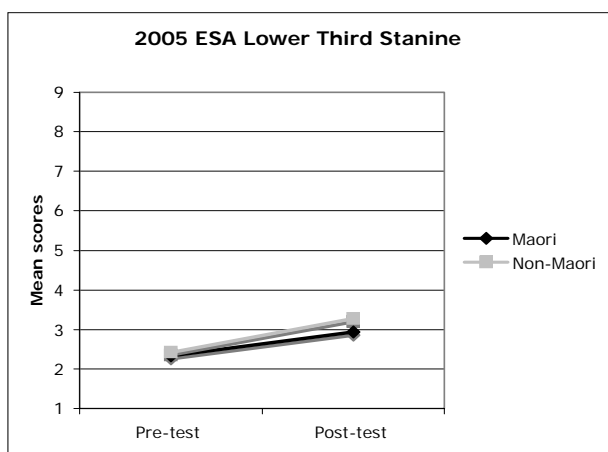
This figure graphs the ESA 2004 scores for pre-test and post-test lower third stanine mean differences. These data show that both groups of students, Māori and non-Māori, made similar progress.

Table 9.4: 2005 Essential Skills Assessment Pre-test and Post-test Lower Third Stanine Mean Differences by Ethnicity for Year 9 – 10 Students.

	n	M	SD	<i>t</i>	<i>p</i>	<i>d</i>
Māori				9.28	.000	.58
Pre-test	288	2.33	0.77			
Post-test	288	2.94	1.28			
Non-Māori				10.7	.000	.78
Pre-test	281	2.43	0.77			
Post-test	281	3.28	1.34			

Data in Table 9.4 report the outcome of a paired samples *t* test. Table 9.4 shows these stanines by ethnicity revealed statistically significant differences between the pre-test and post-test scores for both Māori students, $t(287)9.28$, $p=.000$, $d=.58$ as well as for non-Māori students, $t(280)10.7$, $p=.000$, $d=.78$. Similar analyses of the middle and upper third stanine scores did not reveal statistically significant results.

Figure 9.2: 2005 ESA Lower Third Stanine Line Graph



This figure graphs ESA 2005 scores for pre-test and post-test lower third stanine mean differences. These data show that both groups of students, Māori and non-Māori, made similar progress.

Discussion

The ESA lower third stanine results revealed that the effect sizes of mean differences between pre-test over post-test scores for Māori students in 2004 ($d=.80$) and in 2005 ($d=.58$) were greater than the level set by Fashola and Slavin (1998) ($d=.25$). Similarly the effect sizes of

mean differences between pre-test over post-test scores for non-Māori students in 2004 ($d=.92$) and in 2005 ($d=.78$) were above the threshold set by Fashola and Slavin (1998) ($d=.25$).

The following figures illustrate the statistically significant differences in the lower third stanine for Māori students.

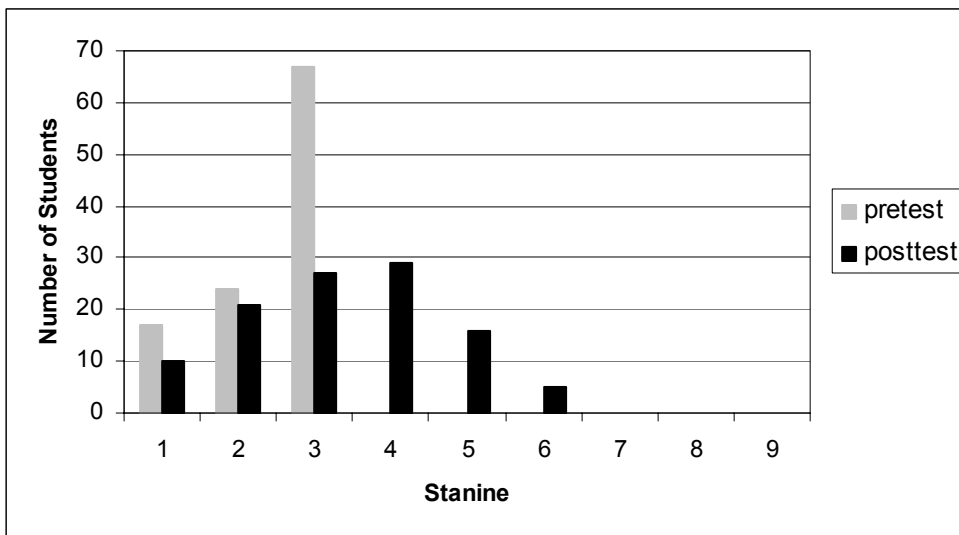


Figure 9.3: 2004 Essential Skills Assessment Pre-test and Post-test Lower Third Stanine Shifts for Year 9-10 Māori Students (n=108).

These results revealed that Māori students, who achieved stanines between 1 and 3 in the 2004 ESA pre-test, achieved stanines between 1 and 6 in the ESA post-test. 46.3% of Māori students, who achieved stanines between 1 and 3 in the ESA pre-test, achieved stanines between 4 and 6 in the ESA post-test, while 53.7% of Māori students who achieved stanines between 1 and 3 in the ESA pre-test also achieved stanines between 1 and 3 in the ESA post-test.

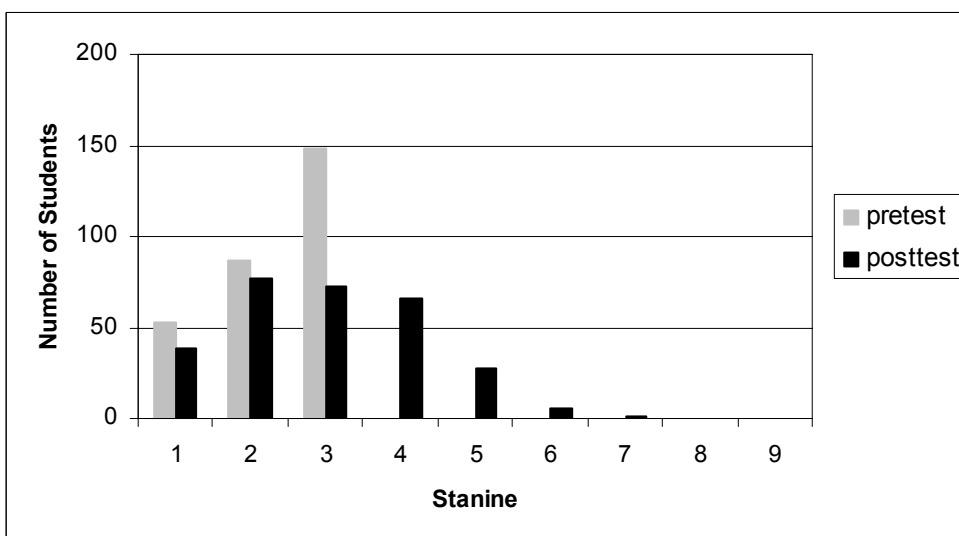


Figure 9.4: 2005 Essential Skills Assessment Pre-test and Post-test Lower Third Stanine Shifts for Year 9-10 Māori Students (n=288).

These results revealed that Māori students, who achieved stanines between 1 and 3 in the 2005 ESA pre-test, achieved stanines between 1 and 7 in the ESA post-test. 34.4% of Māori students who achieved stanines between 1 and 3 in the ESA pre-test, achieved stanines between 4 and 7 in the ESA post-test, while 65.6% of Māori students who achieved stanines between 1 and 3 in the ESA pre-test also achieved stanines between 1 and 3 in the ESA post-test.

Raw Score

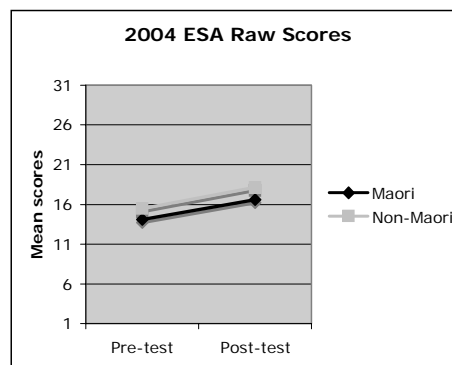
Results

Table 9.5: 2004 Essential Skills Assessment Pre-test and Post-test Mean Differences by Ethnicity for Year 9-10 Students.

	n	M	SD	<i>t</i>	<i>p</i>	<i>d</i>
Māori				10.2	.000	.42
Pre-test	319	14.1	5.94			
Post-test	319	16.6	5.75			
Non-Māori				12.9	.000	.46
Pre-test	488	15.5	5.67			
Post-test	488	18.1	5.55			
Total				16.5	.000	.44
Pre-test	810	15.0	5.82			
Post-test	810	17.5	5.69			

Data in Table 9.5 report the outcome of a paired samples *t* test. Table 9.5 shows that all students on average performed significantly better on the Essential Skills Assessment (ESA) at the end of the 2004 school year (post-test) than at the beginning of the 2004 school year (pre-test), $t(809) 16.5, p=.000, d=.44$. Further analysis of these raw scores by ethnicity revealed statistically significant differences between the pre-test and post-test scores for both Māori students, $t(318)10.2, p=.000, d=.42$, as well as for non-Māori students, $t(487)12.9, p=.000, d=.46$.

Figure 9.5: 2004 ESA Raw Scores

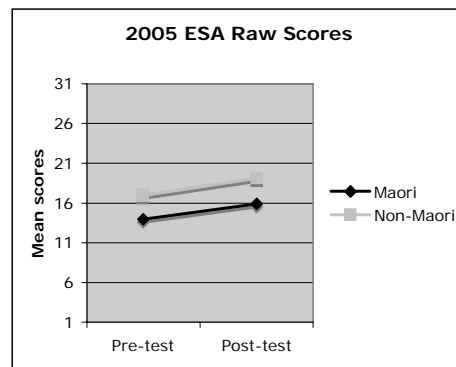


This figure graphs ESA 2004 raw scores for pre-test and post-test mean differences. These data show that both groups of students, Māori and non-Māori, made similar progress.

Table 9.6: 2005 Essential Skills Assessment Pre-test and Post-test Mean Differences by Ethnicity for Year 9 – 10 Students.

	n	M	SD	<i>t</i>	<i>p</i>	<i>d</i>
Māori				13.6	.000	.31
Pre-test	760	14.0	6.51			
Post-test	760	15.9	6.25			
Non-Māori				18.9	.000	.34
Pre-test	1334	17.0	6.48			
Post-test	1334	19.1	6.00			
Total				23.3	.000	.32
Pre-test	2094	15.9	6.64			
Post-test	2094	17.9	6.28			

Data in Table 9.6 report the outcome of a paired samples *t* test. Table 9.6 shows that all students on average performed significantly better on the Essential Skills Assessment (ESA) at the end of the 2005 school year (post-test) than at the beginning of the 2005 school year (pre-test), $t(2,093)23.3$, $p=.000$, $d=.32$. Further analysis of these raw scores by ethnicity revealed statistically significant differences between the pre-test and post-test scores for both Māori students, $t(759)13.6$, $p=.000$, $d=.31$, as well as for non-Māori students, $t(1,333)18.9$, $p=.000$, $d=.34$.

Figure 9.6: 2005 ESA Raw Scores

This figure graphs ESA 2004 raw scores for pre-test and post-test mean differences. These data show that both groups of students, Māori and non-Māori, made similar progress.

Discussion

Te Kōtahitanga focuses on improving Māori student achievement. The results of the administration of the Essential Skills Assessment (ESA) to Year 9 and 10 students of teachers involved in the project revealed that the effect sizes of mean differences between pre-test over post-test scores for Māori students in 2004 ($d=.42$) and 2005 ($d=.31$) were greater than the threshold level set by Fashola and Slavin, (1998) ($d=.25$) in their project with minority group students. These effect size results also indicate that the strength of the pre-test-post-test differences for Māori students was similar to the strength of the differences for students involved in the study overall, ($d=.44$ and 2005, ($d=.32$). At the same time, non-Māori students

achieved at significant levels, 2004 ($d=.46$) and 2005 ($d=.34$), above the threshold effect size level set by Fashola and Slavin, (1998) ($d=.25$).

The change in effect sizes for Māori students from 2004 ($d=.42$) to 2005 ($d=.32$) is reported in the literature as “implementation dip” (Fullan & Stiegelbauer, 1991) which is common in reform efforts such as Te Kōtahitanga. Borman (2005) substantiated this dip in his meta-analysis of Comprehensive School Reform (CSR) initiatives. Borman found the dip continued through the fifth year of the initiatives studied before substantial increase in effect sizes were noted. In fact, this nation wide project in the United States to bring reform to scale in high-poverty schools did not show effect sizes of .32 until the seventh year of implementation of CSR initiatives. This comparison is noteworthy because both Te Kōtahitanga and the CSR initiatives focus on raising the achievement of minoritized and marginalized students.

Since the strength of the effect sizes for Māori students is above the threshold set by Fashola and Slavin, (1998) for being “educationally significant” (p. 375) or beyond expected progress, one can conclude that the significant difference between the pre-test and post-test scores for these students is beyond natural growth in literacy that might be expected during the school years 2004 and 2005. While other variables may have influenced this change over time, the evidence suggests that Te Kōtahitanga contributed to this significant growth in literacy skills for Year 9-10 Māori students of teachers involved in the project. Simultaneously, non-Māori students’ achievement grew significantly and effect sizes were above the threshold for educational significance.

Conclusions

In 2005 Te Kōtahitanga schools began administering the asTTle test for measuring student numeracy achievement. Overall, the results for the six schools that obtained pre-test and post-test data revealed statistically significant improvement in Māori student numeracy scores for Māori students of both Maths teachers involved in Te Kōtahitanga and teachers not involved in the project. Further analysis revealed the numeracy effect size results for Maths teachers involved in Te Kōtahitanga were substantially higher than for Maths teachers not involved in the project. When compared to two control/comparison groups (consisting of Māori students of Maths teachers in project schools not involved in Te Kōtahitanga and the national asTTle numeracy norms for Māori students), the Māori students of Maths teachers involved in Te Kōtahitanga had substantially larger effect size differences between the pre-test and post-test asTTle numeracy results.

In 2005 Te Kōtahitanga entered into the second year of using the Essential Skills Assessment to measure student literacy achievement. For the second consecutive year results revealed there was a statistically significant improvement in student literacy achievement scores for both Māori and non-Māori students. Further analysis of the 2005 results revealed the students who would be classified as being in the lower third stanines for the pre-test had the most significant gains between the pre-test and post-test. These results confirmed the project goal of helping Māori students who were identified in the PISA study (OECD, 2000) as being in the long tail of lower academic achievers to improve their results.

Although the effect size results showed a dip from 2004 to 2005, these results are consistent with other school reform initiatives (Fullan & Stiegelbauer, 1991; Borman, 2005). For both

years the strength of these differences was above the threshold of what we would expect by natural maturation during the school year.

These findings revealed that in 2005 Māori students had statistically significant improvement in literacy and numeracy achievement scores. The improvement in the area of numeracy was greater for Māori students of Te Kōtahitanga Maths teachers than for Māori students of Maths teachers who were not involved in the project and as compared with Māori students nationally. In addition, these findings revealed that Māori students in the lower third stanine had the largest significant literacy gains over the year among Māori students in the three stanine groups. In addition the overall literacy data shows that Māori and non-Māori students made similar progress.

Chapter 10: Summary and Conclusions

Summary

This report has detailed and analysed the research and professional development programme that was implemented in 12 schools during the third phase of the Te Kōtahitanga research project in 2004 and 2005. While we appreciate that sustainable change in Māori student achievement will require whole school change, the unit of focus for this report has been those changes that have taken place in the classrooms of project teachers because this is where reform needs to begin. We intend investigating those wider schools and beyond-school factors that affect Māori student achievement in a further study. The theoretical framework of the project was detailed in Chapter One. The professional development intervention itself was detailed in Chapter Two. Chapter Three outlines the research methodology. In Chapters Four to Nine inclusive, we present the research results from the implementation of the programme in the 12 schools. Chapters Four to Seven attends to classroom relations and interactions; our analysis of what is happening in those new institutions developed to support classroom changes; a teacher participation survey; and interviews with some effective teachers. Chapters Eight and Nine presents results of our research about students' experiences in the classrooms of effective implementers of the Effective Teaching Profile (ETP), and student achievement data. Chapter Ten draws it all together in summary form and draws a number of conclusions.

We began this research by asking what happens when the Effective Teaching Profile (ETP) is implemented in mainstream secondary classrooms. Because of the complex nature of this exercise, we used a triangulation mixed methods approach (Creswell, 2005) to gather and analyse qualitative and quantitative data from a range of instruments and measures. As a result we have multiple indicators (Kim and Sunderman, 2005) that form the basis of our investigation.

From the *student interviews* we learned that, when Māori students have good relationships with their teachers, they are able to thrive at school. Good relationships are based on teachers embracing all aspects of the ETP, including caring for them as culturally-located individuals as Māori, caring for their performance and using a wide range of classroom interactions, strategies and outcome indicators to inform their practice. These developing relationships and interactions were captured by the use of the *observation tool*. The *teachers' interviews* indicated that effective Te Kōtahitanga teachers have undergone a philosophical shift in the way they think about teaching and learning. Anti-deficit thinking, agentic positioning, and the six elements of the ETP are the essential threads in this new approach to teaching, here termed a Culturally Responsive Pedagogy of Relations. It is an approach that rests in the first instance upon a commitment by teachers to build caring and learning relationships and interactions with Māori students; in the second, for teachers to strongly believe Māori students can improve their achievement; and thirdly, their students are able to take responsibility for their learning and performance.

According to the analysis of the *Teacher Participation Survey*, Te Kōtahitanga teachers reported that their understanding of and appreciation for the kaupapa of the project, that is, to improve Māori student achievement, and the support they receive within their schools is directly related to improving Māori students' outcomes. Analysis of data from *feedback sessions and co-construction meetings* revealed teachers are experiencing challenges along

with affirmations of their emerging positionings and practices as they participate in the new institutions developed to support the implementation of the ETP in their classrooms. In addition, within these new institutions, they are being encouraged to further engage in discourses that: (a) have a focus on raising Māori students' achievement, (b) reject or respond to deficit theorizing and (c) are agentic. Perhaps most importantly, given the concern over this issue expressed by our government, ministry officials, educators in general, Māori parents and the students themselves, we are seeing *improvements in numeracy for Māori students* with teachers who have repositioned themselves discursively, and *literacy gains* for all Māori students. The greatest gains, however, were for those in the lowest stanine groups.

On the basis that Te Kōtahitanga is focused on raising the achievement of Māori students through changing teacher practice, we have adopted Elmore's (2002) model for demonstrating improvement by measuring increases in teacher practice and student performance over time. This model demonstrates improvement by measuring the quality of teacher practice and student performance on the vertical axis and time on the horizontal axis. Improvement then is shown by movement in a consistent north-easterly direction (see Figure 10.1).

Data for Figure 10.1 are taken from the chapters in this report concerning: the Observation Tool, including teacher-student interactions; teacher ETP implementation rating; teacher-student relationships; group interactions; cognitive level of the lessons; Māori student engagement and Māori student work completion; Assessment Tool for Teaching and Learning (asTTle) for numeracy; and Essential Skills Assessment (ESA) for literacy. The results for the Observation Tool and ESA were recalculated as percentages for this illustration so there was a common unit of measurement, and are shown on the left, asTTle scores are shown on the right. The positive trends indicated by these eight sets of quantitative results in relationship to each other, supported by the results of all the qualitative data analysed, clearly indicates that there is a relationship between Māori student performance and how well Te Kōtahitanga teachers implement the elements of the ETP in the project teachers' classrooms.

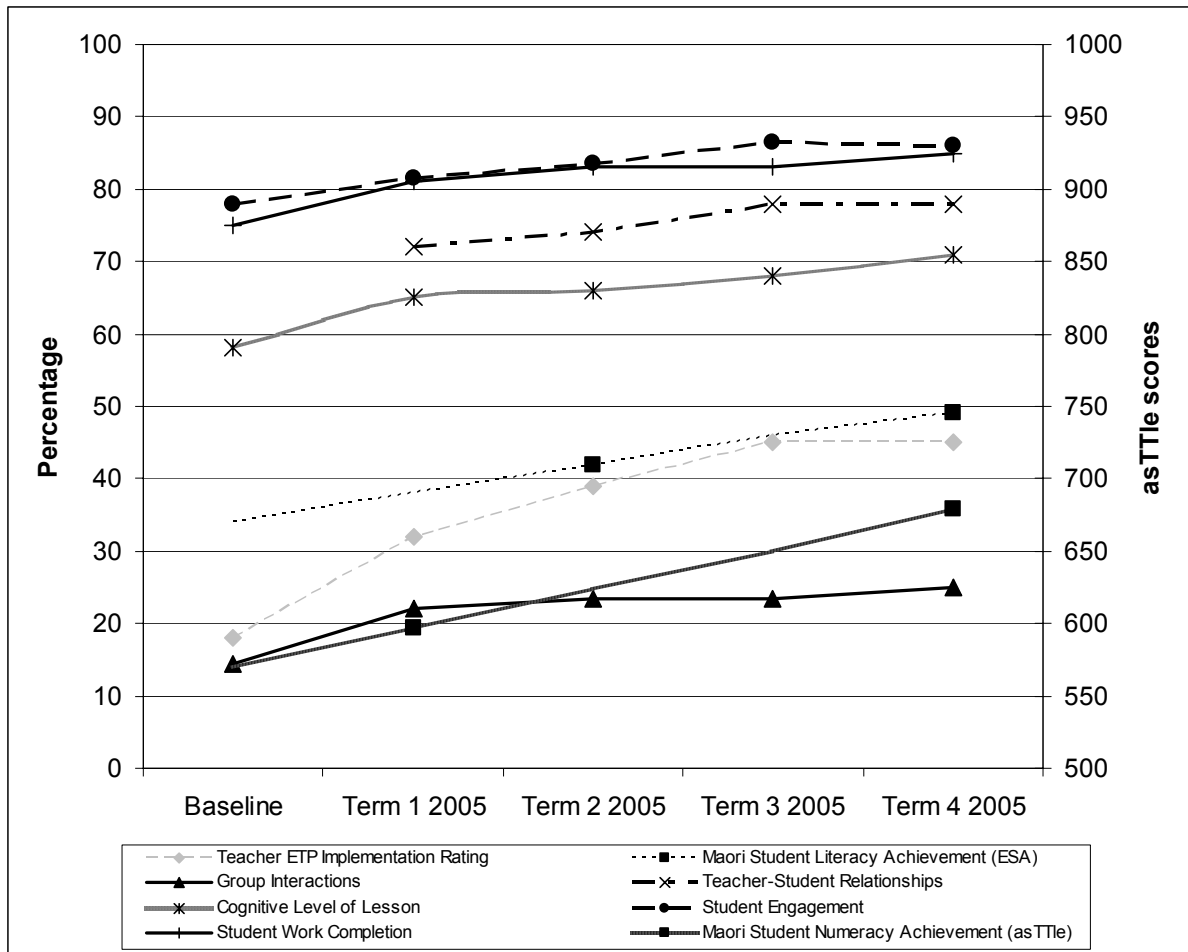


Figure 10.1: Improvement in Teacher Practice and Student Performance during Phase 3 of Te Kōtahitanga

Figure 10.1 demonstrates through multiple indicators (Guskey & Sparks, 1996) that while Te Kōtahitanga teachers have improved in their use of the ETP in their classrooms, their Māori students have improved in numeracy and literacy achievement. While other variables may help account for positive gains in Māori students' achievement, this model demonstrates, based on the totality of the evidence presented in this report, that Te Kōtahitanga teachers, across multiple schools, have built their knowledge, skills, and capacities in their classrooms through the implementation of the ETP and simultaneously their Māori students have experienced continuous improvement in numeracy and literacy performance during Phase 3 of the project.

Conclusions

1. The Effective Teaching Profile

The overall aim of this phase of the project has been to investigate how to improve the educational achievement of Māori students in mainstream secondary school classrooms. From the theoretical position of kaupapa Māori research, and an examination of appropriate Māori cultural metaphors, we suggested that this will be accomplished when educators create learning contexts within their classrooms; where power is shared between self-determining

individuals within non-dominating relations of interdependence; where culture counts; where learning is interactive, dialogic and spirals; where participants are connected to one another through the establishment of a common vision for what constitutes excellence in educational outcomes. We termed this pedagogy a Culturally Responsive Pedagogy of Relations.

To examine what this pedagogy might look like in practice, in 2001, we developed an Effective Teaching Profile (ETP), the design guided and shaped by experiences of Māori students, their whānau, principals and teachers. Fundamental to the ETP is teachers' understanding the need to explicitly reject deficit theorising as a means of explaining Māori students'³¹ educational achievement levels, and their taking an agentic position in their theorising about their practice. That is, practitioners expressing their professional commitment and responsibility to bringing about change in Māori students' educational achievement by accepting professional responsibility for the learning of their students. These two central understandings are then manifested in these teachers' classrooms where the teachers demonstrate on a daily basis that: they care for the students as culturally located individuals; they have high expectations of the learning for students; they are able to manage their classrooms so as to promote learning; they are able to engage in a range of discursive learning interactions with students or facilitate students to engage with others in these ways; they know a range of strategies that can facilitate learning interactions; they promote, monitor and reflect upon learning outcomes that in turn lead to improvements in Māori student achievement and that they share this knowledge with the students.

In many ways, the most important section of this report is the chapter that examines the experiences of Māori students in the classrooms of the effective implementers of the ETP, teachers who are positioned within a Culturally Responsive Pedagogy of Relations, and who, by extension, actively create culturally responsive contexts for learning in their classrooms. In 2001 we were told by 70 Māori students from a range of school settings, that this is what was needed in mainstream schools (Bishop & Berryman, 2006). What these Māori students told us in 2001 resonated not only in the conversations with their whānau, their principals and teachers, but also in the literature, in the research of others (Smith, 1997; Hawk & Hill, 2000), and in our own research into effective teaching in Māori medium settings (Bishop et al. 2001b).

In other words, we had built up a very strong picture of what constituted an effective context for improving Māori students' educational achievement. Now in the words of 325 Māori students from 12 diverse schools in 2004 and 2005, we see that this picture was very accurate. Indications from the assessments of student learning also supports this hypothesis that the 2001 cohort of Māori students provided us with: that there is an association between Māori student achievement and the effective implementation of the Effective Teaching Profile.

In many ways, talking with the Māori students in 2001 was harrowing because they were constantly having relational problems. In contrast, it has been a delightful experience to talk with Māori students in 2004 and 2005, because we are now hearing the other side of the story, just how good it can be when relations of care and learning are developed in the classroom, how much better it is to be Māori in these classrooms, and how more secure the identity of Māori students are in these classrooms.

³¹ This is also relevant for other minoritised students' see Shields, Bishop & Mazawi (2005).

In support of these Māori students' experiences, the multiple quantitative measures used in association with the qualitative, indicates the centrality of the ETP in this project. These measures also indicate how careful and systematic implementation of this approach is to teaching by the teachers, facilitation team members, regional coordinators and other members of the research and professional development team, is paying dividends for their efforts in terms of improving Māori students' participation in schooling, their engagement with learning, work completion and academic achievement in selected indicators.

2. **Anti-deficit thinking**

Anti-deficit theorizing and agentic positioning by teachers is fundamental to this project, and we can see evidence of such thinking in the voices of the teachers we interviewed and from the Teacher Participation Survey completed by 236 teachers. These teachers believed that they have a high level of understanding about the negative effects of deficit thinking about Māori students and are applying that knowledge in their teaching practice. They also believed they have a high level of understanding of the importance of relating to Māori students from an agentic position and in ensuring that their teaching practices reflect an agentic attitude towards these target students. However, it is well established that self-reporting by teachers is generally less reliable than more objective measures because of compliance with preferred answers and enthusiasm. For example, the analysis of taped segments of both the feedback sessions and the co-construction meetings revealed that, while the teachers might report these high levels of understanding, their practice is different. This is not to say that the survey results are wrong, it is simply verification of the importance of a multiple-method approach when evaluating the effectiveness of this type of project.

Therefore, we have included two other measures of anti-deficit thinking in this report: the aforementioned analysis of feedback and co-construction sessions and the analysis of student interviews. The analysis of the taped feedback sessions and co-construction meetings showed that, while there are some exemplary implementers of the ETP, there is a tendency in both the feedback sessions and in the co-construction meetings for teachers to focus on the teaching interactions, strategies and planning of the ETP and less so on continually challenging deficit thinking and promoting Māori student achievement. Improvements in the use of the instrument for analysing feedback and co-construction meetings and for the provision of formative feedback have been made to address this issue.

The analysis of student interviews have provided us with a lens to teachers' thinking and understandings. As Bruner (1996) and Elbaz (1983; 1988) explain, teaching occurs, progress decided and practices are modified on the basis of such thinking; that is, deficit thinking limits student progress, agentic thinking promotes student learning. Māori students see this in the actions of their teachers, how they relate to and interact with them in their classroom, often more clearly than teachers do.

It is very clear from this evidence that teachers taking an agentic position on the one hand gives them the power to reject deficit thinking and its associated pathologising practices. On the other hand it further allows them to use the power of their own agency to see, in association with this discursive positioning, wonderful changes in Māori students' behaviour, participation, engagement and achievement in their classroom.

As we identified in 2001, the majority of teachers we spoke to at that time were positioned in discourses that limited their agency and efficacy, therefore the project needed to promote

discursive repositioning as its first priority. This approach is supported by Mazarno et al. (2005), who have identified that most educational innovations do not address the “existing framework of perceptions and beliefs, or paradigm, as part of the change process – an ontological approach.” (p. 162), but rather assume “that innovation is assimilated into existing beliefs and perceptions” (p. 162). They go on to suggest that reforms that are more likely to succeed are those that are fundamentally ontological in nature, providing participants with an “experience of their paradigms as constructed realities, and an experience of consciousness other than the ‘I’ embedded in their paradigms” (p. 162).

3. The importance of relationships

Just as the Māori students, their whānau, principals and some of their teachers had stated in 2001 (Bishop & Berryman, 2006), this current group of Māori students spoke at length about the importance of whakawhānaungatanga and whānaungatanga; that is, the process of establishing relationships and the quality of the relationships that are established. Indeed, they focused very heavily on these qualities in their interviews. Similarly, the teachers who positioned themselves within the relational discourse in 2001, and again those teachers interviewed in 2005, emphasised the importance of relationships at all levels of the project; within the classroom, between facilitators and themselves and also between themselves and their management, parents and community members.

Sidorkin (2002) suggests that these people have something very valuable to offer to mainstream education because to his understanding, relations ontologically precede all else in education, meaning that practically, they need to be attended to first. It is clear from what the students told us in 2001 and again in 2004 and 2005, that the quality of the relationships that are established in classrooms affects their attendance, learning and achievement. The evidence in this report would certainly indicate that they are correct.

These experiences and findings are supported by a number of other researchers. Hattie (2003), using reading test results prepared as norms for the asTTle formative assessment programme, identified that achievement differences (“the gap”) between Māori and Pākehā remained constant regardless of whether the students attended a high or low decile school. Hattie (2003) concluded from this information that it is not socio-economic differences that have the greatest impact upon Māori student achievement. Instead, he suggests that “the evidence is pointing more to the relationships between teachers and Māori students as the major issue - it is a matter of cultural relationships not socio-economic resources” – as these differences occur at ALL levels of socio-economic status” (p. 7).

Similarly, Alton-Lee (2003), citing the 2000 PISA study, showed that New Zealand literacy achievement differs more markedly within schools than between schools, which is not what we would expect if the socio-economic argument were to hold. Her analysis indicates that the quality of classroom relations and interactions within schools has more to do with the creation of educational disparities than the decile ranking of the schools.

This finding means that, while we cannot ignore the impact of structural impediments, such as socially constructed impoverishment, we cannot allow this analysis to disempower us as teachers from action. Hattie (2003) and Alton-Lee (2003) are clear that it is teachers who have the potential and ability to change the educational outcomes of Māori students. So too are Phillips, McNaughton and MacDonald (2001), who, in a study that indicated how Māori and Pasifika new entrant students’ reading scores could be improved by addressing teachers

expectations of their learning, found that “low rates of progress in literacy are neither inevitable nor unchangeable in low decile schools. Educators working in these environments can help bring children up to speed – to expected levels of achievement.” (p. 10)

Or as Ryan, (1976) suggested thirty years ago:

We are dealing, it would seem, not so much with culturally deprived children as with culturally deprived schools. And the task to be accomplished is not to revise, and amend, and repair deficient children, but to alter and transform the atmosphere and operations of the schools to which we commit these children. Only by changing the nature of the educational experience can we change the product. To continue to define the difficulty as inherent in the raw material, the children – is plainly to blame the victim and to acquiesce in the continuation of educational inequality (pp. 61-2).

Therefore, in Ryan’s terms, the professional development cycle of Te Kōtahitanga, the observations and feedback sessions, the co-construction meetings and the shadow-coaching are all designed to change the nature of the educational experience. In each of these settings, as can be seen in the analysis of the taped feedback and co-construction sessions, there is more going on than what could be termed just “good teaching,” for good teaching doesn’t necessarily address the “social conditions, contexts, and consequences of one’s teaching, as well as about one’s skill, efficiency, or kindness in performing it.” (Hargreaves, 1995, p. 16). Hence the emphasis that both groups of students (2001 and 2004/2005) have placed on the importance of their teachers demonstrating on a daily basis that: they care for their Māori students in their class as Māori people; they have high expectations of Māori students’ learning; and they are well-prepared and curriculum competent. These three elements of caring demonstrated by teachers create learning relationships between them and Māori students, which leads to a much better educational experience for all.

4. Teacher-student interactions

A number of changes have been observed taking place in teacher-student interactions.

Quantitative changes

The data presented in Chapters Four to Seven reveals a number of changes that can eventuate when teachers are assisted to undertake a change from traditional, transmission type classrooms to more interactive, discursive classrooms. One of the first changes to be evident is quantitative, that is the increase in the number and range of teacher-student interactions as the shift from a traditional classroom takes place. These changes identify how teachers move from a concentration on instruction (for product learning) monitoring and behavioural feedback, to a wider range of interactions. These interactions include some instruction (a mixture of process and transmission), the monitoring of processes and uptake, and the recognition of appropriate student behaviour. In addition, the teachers increase their acknowledgement of students’ prior learning and respond to student-initiated interactions by giving academic feedback and feed-forward, and also co-construct the content and process of learning with students as co-learners.

Further, as teachers move towards a more discursive classroom, they spend less time interacting with the whole class and more time with individuals and/or groups. Strategies to enable this to happen range from informal group activities to structured co-operative learning,

(Brown & Thomson, 2000). However, these are by no means the only strategies available to teachers and further professional development by in-school facilitators is often conducted with the project teachers on a needs-be basis to introduce and/or reinforce or build upon teachers understandings of specific strategies. These sessions are site specific and responsive to the aspirations of individual or groups of teachers who identify the need for more specific input about specific strategies. One school has even gone to the extent of producing a series of pamphlets for their teachers and shared them with the other schools in the project another has developed wall charts of procedures for cooperative learning that are shared among staff to ensure consistency across many classrooms.

Whatever the case, as Bandura (1997) suggests, once teachers position themselves in an agentic space, they will seek alternative strategies to make their new positioning manifest in their classrooms. In Te Kōtahitanga, we seek to support these aspirations but in reality leave the development of new strategies to the in-school teams, subject specialists and the teachers themselves. A further development that is happening in schools, and something that will be further studied and reported on in the Phase 4 report, is the integration of other professional development approaches such as literacy and numeracy within the infrastructure provided by Te Kōtahitanga.

Qualitative Changes

Qualitative changes also take place with this shift from traditional to discursive classrooms and when the nature of classroom relations and interactions changes. For example, instruction often changes from being transmission of product/content focused to become more process orientated. Instruction in a discursive classroom might consist of how to conduct a co-operative learning activity or it might be a focused mini-lecture to provide some specific student-identified need. Monitoring also changes from testing for compliance, content reception or understanding of instructions to monitoring of learning processes, which again can be sub-divided into monitoring of facilitated learning experiences or the monitoring that occurs during co-construction sessions. In addition, in the traditional classroom feedback is provided on behaviour as much as it is provided on academic initiatives, and both forms of feedback are limited. In addition, when the classes are at their most traditional, teachers will often provide behavioural feedback “good boy, good girl” to an enquiry or an answer from a student that should receive an academic response. As the classes become more discursive, academic feedback increases markedly and behavioural feedback diminishes.

Further, as teachers change their classroom interactions from traditional transmission to include more interactive discursive modes, the quality of interaction changes the way they relate to students due to their being more available to interact on small-group or one-to-one level rather than in a whole class-teacher mode.

A further finding from talking with teachers is that many reported that Te Kōtahitanga legitimated their teaching in ways that they had learnt about in-service education but had never been able to use because of perceived restrictions. Others spoke about Te Kōtahitanga allowing them to teach in ways they had always wanted to teach, a liberating experience all round.

5. The dominant pattern of teacher-student interactions

The similarity between the baseline classroom interaction patterns of the first and second cohort from the 12 schools and the fact that these patterns were observed in both Phases 1 and

2 of Te Kōtahitanga (Bishop, et al. 2003, 2005) would tend to confirm our suggestion that the dominant pattern of teacher-student interactions in secondary schools is traditional, where the teacher is an active transmitter of pre-determined knowledge, the students are the receivers. One implication of this finding is that without intervention, this pattern is likely to remain dominant with its consequent impact upon the achievement of Māori students because this is precisely the pattern that Māori students identified in the original narratives as causing problems for their learning. Frustration among the students with this approach often resulted in resistance, which manifests itself in poor behaviour with consequent behavioural intervention strategies being employed by teachers. This in turn leads to more disruption and destroys the potential for learning relationships to develop. These types of classroom create few opportunities for teachers to support students' learning by their providing positive feedback and feed-forward based on informal and formal formative assessment activities. The main aim remains one of "getting through the syllabus" and controlling students' resistant behaviour, rather than engaging in positive learning relationships with them. Such interaction patterns also maintain control over what constitutes appropriate and "official" knowledges and ways of learning in the classroom in the hands of the teacher, in this way denying Māori students opportunities to bring their own prior cultural knowledges to the classroom "conversation". This pattern also supports and maintains the dominant deficit discourse. Any problems that Māori students have with learning, or any resistance they offer (such as poor behaviour or absenteeism), is seen as a manifestation of their poor attitudes and/or low parental aspirations rather than a manifestation of inappropriate learning relationships.

6. Addressing Student Achievement

This project seeks to improve the educational achievement (in its widest sense) of Māori students. This notion often becomes conflated with addressing the achievement "gap" with consequent expectations that increasing Māori student achievement should be reducing the "gap". However, Ladson-Billings (2006) insists that it is not the achievement gap that we should be addressing, but rather the education debt.

Using the notion of the national debt as a metaphor, Ladson-Billing (2006) suggests that it is the accumulation of achievement gaps that needs to be addressed; that is, just as the accumulation of annual fiscal deficits produces an economic debt, so the accumulation of achievement gaps over time has produced an education debt, a debt that the education system owes to Māori children who have been short-changed by the education system for generations.

There are two implications of this analysis. The first is that we should not get too excited by the early signs of achievement gains being made by Māori students because this could well be the "Hawthorne effect," where the focus of attention is sufficient in itself to bring about gains in achievement. Further, even if the gains we have seen in this report are entirely due to the project's intervention, the problem remains of how to sustain these gains in the face of what Coburn (2003) identifies as "competing priorities, changing demands, and teacher and administrator turnover" (p. 6). In other words, the education debt requires that we, as educators, persist with monitoring achievement gains in these schools in order to address the long term education debt. We should not be seeing the reform as "over" or implemented with the first sign of success.

The second implication is that we should not be measuring Māori students against progress made by non-Māori students especially those in the same class, but rather we should be

measuring Māori student progress against their peer group as we did in the asTTle results. This is in line with Durie's (1995) warning that to measure Māori progress against non-Māori is to perpetuate non-Māori being seen as the norm, the standard against which all others are to be measured, ignoring the advantage that non-Māori students have had over Māori during their entire education.

The education debt can be addressed from a variety of discursive positions. It can be seen as the cumulative fault of the child and their homes, the solution being that children and their families need to change; however we know that this is virtually impossible for classroom teachers to accomplish if indeed it is even to be seen as a viable proposition. Or it can be seen as a systemic issue that can be addressed by changing structures and systems from the top down. However, often structural and systemic changes do not benefit Māori students. For example, as Hattie (2003) identifies, while we have focused our attention on improving schools, numerous studies have shown that "schools barely make a difference to achievement" (p.9).

Alternatively, the education debt can be seen from the discursive position of relationships where self-determination becomes not separatism, but rather a process of establishing relationships predicated upon non-dominating relationships of interdependence. From this discursive position, the Effective Teaching Profile has been offered to the project schools as a *koha* which means that it is up to the schools, as truly self-determining partners in relationship with the research and professional development team, to pick up the *koha*. Of course, with picking up a *koha* comes responsibility and commitment, for within the Māori sense of this metaphor, there are obligations upon the person who picks up a *koha*. To do so means that the schools accept that they will work towards the goal of improving classroom relationships and interactions and develop institutional infrastructure in their schools in ways that will begin to address the education debt on a long-term basis. This ongoing commitment means that schools and educators will refrain from seeing achievement in its limited sense, or measuring short term gains against those historically privileged.

7. Towards Sustainability and Scale

As the project grows and develops in each school, systemic and institutional developments are necessary to support the changes taking place in the classroom. One area that needs to be developed is that of accurately measuring student attendance data, stand-downs, suspensions, early leaving exemptions, retention rates and achievement data, for two purposes. First, to allow teachers the opportunity to collaboratively reflect upon this data to inform their ongoing practice and second, to use the same data for summative purposes so as to identify if there is a relationship between the implementation of Te Kōtahitanga and positive changes in student participation and achievement. In order that these objectives are met in the sequence of formative preceding summative purposes, it is important that the project schools are able to undertake the task of data gathering and processing themselves in real time. One of the aims of the project in Phase 4 will be to continue to develop the use of Student Management Systems (SMS) so that the schools are able to use the data for formative purposes in co-construction and other collaborative settings, and that these data can then be aggregated for summative purposes.

A second major systemic development in the project has been an investigation of what constitutes sustainability of the gains made in these 12 schools and for taking the reform initiative to scale. Coburn's (2003) model proved to be useful starting heuristic for

considering how to take a project to scale in a large number of classrooms, and to sustain the gains made in these classrooms. Coburn (2003) indicates four main components: pedagogy, sustainability, spread, and ownership. However, in light of the developments in Phase 3, this model has been developed further by adding a focus on Māori students' educational achievement, the vital role of leadership, the need to develop further evaluation and monitoring instruments as well as the need to raise the capacity and capability of staff in the schools to undertake this evaluation and monitoring.

The following model (Figure 10.2) was developed in a parallel study funded by Ngā Pae o te Māramatanga and the first part of the results were initially published as a monograph (Bishop & O'Sullivan, 2005).



Figure 10.2: A reform initiative must have the above elements:

This model can be applied to what constitutes sustainability and scale at a classroom, school and system-wide level. (see Table 10.1)

The theoretical model in Bishop & O'Sullivan (2005) uses GPILSEO as a mnemonic device to aid in referencing. In order to ensure that the reform initiative will be sustainable, the following elements should be present in the reform initiative *from the very outset*. These elements need to include: a means of establishing a school-wide GOAL and vision for improving student achievement; a means of developing a new PEDAGOGY to depth so that it becomes habitual; a means of developing new INSTITUTIONS and structures to support the in-class initiatives; a means of developing LEADERSHIP that is responsive, transformative, pro-active and distributed; a means of SPREADING the reform to include all teachers, parents, community members and external agencies; a means of EVALUATING the progress of the reform in the school by developing appropriate tools and measures of progress; and a means of creating opportunities for the school to take OWNERSHIP of the reform in such a way that the original objectives of the reform are protected and sustained.

The application of the model below in Table 10.1 focuses on classroom, school and system-wide settings. For the purposes of this report it identifies that for a reform initiative to bring about sustainable change in classrooms, there must be, from the very outset: a focus on improving Māori students participation, engagement and achievement in the classroom; a means of implementing a new Culturally Responsive Pedagogy of Relations to depth; a means of developing new institutions in the classroom, such as those developed through using cooperative learning approaches; a means of developing distributed leadership within the classroom; a means whereby the new classroom relationships and interactions will include all students; a means of monitoring and evaluating the progress of all students so as to inform practices; and above all, a means whereby the teachers and their students know about and take ownership of the reform, its aims, objectives and outcomes.

This model also details the types of changes and initiatives that need to be implemented at the whole school and at education system-wide levels in order for reforms such as Te Kōtahitanga to be sustainable. The implementation and evaluation of this model will be the focus of the next phase of research in the Te Kōtahitanga project. Meanwhile, this phase of the project focused on those conditions necessary to being about changes in classroom practice.

In terms of this model then, this report produces evidence to show that all of these elements are developing in the classrooms in the project schools, some faster than others, but nevertheless, developing. In this report, we have focused on the experiences of those teachers who have been able to implement the ETP to an effective level, for as Hattie (2003) suggests, it is these teachers who indicate the way that others need to travel. In support of this approach we have reported the positive experiences of the large group of Māori students from the 12 schools who are being educated in the classrooms of these exemplary teachers. Overall, along with the evidence from the teachers' survey, observation tool and the feedback and co-construction analysis, we can identify that each of the elements of the model are present in the effective implementers' classrooms. That is: they focus on improving Māori student achievement; are using the new Culturally Responsive Pedagogy of Relations to implement the Effective Teaching Profile, (including developing understandings of anti-deficit theorising and agentic positioning); are changing the institutional structures in their classrooms; are distributing leadership through the development of power-sharing relationships; are spreading the reform to include all students in the benefits of participation in the conversation of learning; are formally and informally monitoring and evaluating Māori students' (and others') progress so as to inform their changing practices; and above all, are taking ownership of the aims and objectives of the project.

Table 10.1: Sustainability

	Sustainability/going to scale	Classroom	School	System
G	Goal Focus to be on raising Māori student achievement and reducing disparities.	Focus on improving Māori school achievement in classroom.	Focus to be on improving all Māori student achievement across the school.	National policy focus on raising achievement of Māori students and reducing disparities.
P	The need to implement a new pedagogy to depth	Focus is on implementing a Culturally Responsive Pedagogy of Relations to depth i.e. to become habitual	A new pedagogy of relations needs to be developed across all classrooms and should inform relations and interactions at all levels in school and community relations.	Pre-service Education needs to be aligned with In-service Professional Development so that each supports the other in implementing new Pedagogy of Relations.
I	The need for new institutions in the school	Focus is on developing new ways of relating and interacting in classrooms in ways that are organised and instituted.	Schools need to make time and space for observation, feedback, co-construction and shadow coaching cycle, and restructure and timetable to support this reform.	Funding for facilitators needs to be built into staffing allocation and schooling organisations to provide ongoing, interactive reform process.
L	The need for Leadership to be responsive, pro-active and distributed	Teachers and students as leaders and initiators of learning.	The need for leadership to be responsive to the needs of the reform, pro-active in setting targets and goals and distributed to allow power sharing.	National support and professional development for leaders to promote distributed leadership models.
S	Spread : the need to include others in the reform	The need for an inclusive classroom where all students are engaged in learning.	The need for all staff to join the reform for parents and community to be included into the reform.	The need for collaboration between policy funders, researchers and practitioners.
E	Evaluation : the need to develop an on-going means of evaluating movement towards the goal	Teachers and students are able to use formal and informal formative assessments to improve their practice and learning.	In school facilitators and researchers are able to use appropriate instruments to monitor the implementation of the reform.	National level support for the evaluation and monitoring that is ongoing and interactive. Support for integrated Research and Professional Development.
O	Ownership The need for all involved to own the reform	Ownership is seen when teacher and student learning is central to classroom relations and interactions and teacher learning is based on analyses of patterns of student learning.	The whole school include BOT to take ownership of the reform. Ownership is seen when teacher learning is central to the school and systems, structures and institutions are developed to support teacher learning.	National ownership of the problem and provision of sufficient funding and resources to see solutions in a defined period of time.

References

- Alton-Lee, A. (2003). *Quality Teaching for Diverse Students in Schooling: Best Evidence Synthesis*. Wellington: Ministry of Education.
- Applebee, A. (1996). *Curriculum, as Conversation*. Chicago & London: University of Chicago Press.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Beane, J. (1997). *Curriculum Integration. Designing the core of democratic education*. New York: Teachers College Press.
- Bishop, R. (1994). Initiating empowering research. *New Zealand Journal of Educational Studies*, 29, (1), 1-14.
- Bishop, R. (1996). *Collaborative Research Stories: Whakawhānaungatanga*. Palmerston North: Dunmore Press.
- Bishop, R. (1997). Interviewing as collaborative storying. *Education Research and Perspectives*, 24, (1), 28-47.
- Bishop, R. (2005). Freeing ourselves from neocolonial domination in research: A Kaupapa Māori approach to creating knowledge. In N. Denzin & Y. Lincoln (Eds.), *The Sage handbook of qualitative research* (3d ed.), (pp. 109-138). Thousand Oaks, CA: Sage.
- Bishop, R., & Berryman, M. (2006). *Culture Speaks: Cultural relationships and classroom learning*. Wellington: Huia Press.
- Bishop, R., & Glynn, T. (1999). *Culture counts: Changing power relations in education*. Palmerston North: Dunmore Press.
- Bishop, R., Berryman, M., & Richardson, C. (2001a). *Teachers' Perceptions and Use of Aro Matawai Urunga-a-Kura: Suggestions for Improvement*. Wellington: Ministry of Education. NZ
- Bishop, R., Berryman, M., & Richardson, C. (2001b). *Te Toi Huarewa*. Report to the Ministry of Education. Wellington, NZ.
- Bishop, R., Berryman, M., Tiakiwai, S., & Richardson, C. (2003). *Te Kōtahitanga: The experiences of Year 9 and 10 Māori Students in Mainstream Classrooms*. Report to the Ministry of Education. Wellington, NZ
- Bishop, R., Powell, A., & Teddy, L. (2003). *Te Kōtahitanga, Phase III Whakawhānaungatanga: Improving the educational achievement of Māori students in mainstream education. Milestone report 1*. Report to the Ministry of Education. Wellington, NZ.

- Bishop, R., Berryman, M., Powell, A., & Teddy, L. (2005). *Te Kōtahitanga: Improving the educational achievement of Māori students in mainstream education Phase 2: Towards a whole school approach*. Unpublished report to the Ministry of Education. Wellington, NZ.
- Bishop, R., & O'Sullivan, D. (2005). *Taking a reform project to scale: Considering the conditions that promote sustainability and spread of reform. A monograph*. Unpublished report to Ngā Pae o te Māramatanga: The National Institute of Research Excellence for Māori Development and Advancement. Auckland: University of Auckland Press.
- Borman, G. D. (2005). National effort to bring reform to scale in high-poverty schools: Outcomes and implications. In L Parker (Ed.), *Review of research in education*, 29 (pp. 1-28). Washington D.C: American Educational Research Association.
- Brown, G. T. (2003). Searching informational texts: Text and task characteristics that affect performance [Electronic Version]. *Reading Online*, 7. Retrieved Available: http://www.readingonline.org/articles/art_index.asp?HREF=brown/index.html.
- Brown, G. T., & Hattie, J. A. (2003). *A national teacher-managed, curriculum-based assessment system: Assessment tools for teaching and learning (asTTle)*.
- Brown, D., & Thomson, C. (2000). *Cooperative Learning in New Zealand Schools*. Palmerston North. Dunmore Press.
- Bruner, J. (1996). *The Culture of Education*. Cambridge, Massachusetts: Harvard University Press.
- Burr, V. (1995). *An Introduction to Social Constructionism*. London: Routledge.
- Coburn, C. E. (2003). Rethinking Scale: Moving Beyond Numbers to Deep and Lasting Change. *Educational Researcher*, 32, (6).
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Earlbaum Associates.
- Cook-Sather, A. (2002). Authorizing students' perspectives: Towards trust, dialogue, and change in education. *Education Researcher*, 31, (4), 3-14.
- Covey, D. (2004). Becoming a literacy leader. *Leadership*, 33, (4), 34-35.
- Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (2d ed.). Upper Saddle River, NJ: Pearson Education.
- Cummins, J. (1995). Power and pedagogy in the education of culturally diverse students. In J. Fredericksen & A. F. Ada (Eds.), *Reclaiming our voices: Bilingual education, critical pedagogy, and praxis* (pp. 139-162). Ontario, CA: California Association for Bilingual Education.

- Danaher, G., Schirato, T., & Webb, J. (2000). *Understanding Foucault*. Sydney: Allen and Unwin.
- Durie, M. (1995). Tino Rangatiratanga: Self Determination. *He Pukenga Korero*, 1, (1), 44-53.
- Durie, M. (1998). *Te Mana, Te Kawanatonga: The politics of Māori self-determination*. Auckland: Oxford University Press.
- Durie, M. (2001). *A Framework for Considering Māori Educational Advancement*. Opening Address, Hui Taumata Matauranga November 2001.
- Elbaz, F. (1983). *Teacher thinking: A study of practical knowledge*. New York: Nichols Publishing.
- Elbaz, F. (1988). Critical reflection on teaching: Insights from Freire. *Journal of education for teaching*, 14, (2), 171-81.
- Elmore, R. F. (2002). Hard questions about practice(school organizational and instructional practices). *Educational Leadership*, 59 (8), 22-25.
- Fashola, O.S., & Slavin, R. E. (1998). Schoolwide reform models: What works? *Kappan*, 78 (5), 370-379.
- Fisher, C., Berliner, D., Filby, N., Marliave, R., Cahen, L., & Dishaw, M. (1981). Teaching behaviours, academic learning time, and student achievement: An overview. *The Journal of Classroom Interactions*, 17 (1), 2-15.
- Foucault, M. (1972). *The archaeology of knowledge*. New York: Pantheon
- Freire, P. (1972). *Pedagogy of the oppressed*. New York: Continuum
- Fullan, M.G., & Stiegelbauer, S. (1991). *The new meaning of educational change*. New York: Teachers College Press.
- Fullan, M. (2005). Resiliency and Sustainability. *School Administrator*. February. 62 (2), 16-18.
- Gage, N., & Berliner, D. (1992). *Educational psychology*. Boston: Houghton Mifflin.
- Gay, G. (2000). *Culturally responsive teaching. Theory, research and practice*. Columbia University, New York, London: Teachers College Press.
- Glynn, T. & Glynn, V. (1986). 'Shared reading by Cambodian mothers and children learning English as a second language'. *The Exceptional Child*, 33 (3), 159-172.
- Glynn, T., Berryman, M., Atvars, K., & Harawira, W. (1997). *Hei Āwhina Māua : A home and school behavioural programme*. A final report to the Research and International Section of the New Zealand Ministry of Education, September 1997. Wellington: Ministry of Education.

- Glynn, T., Berryman, M., & Glynn, V. (2000). *Reading and writing gains for Māori students in Mainstream schools: Effective partnerships in the Rotorua Home and school literacy project*. A report for The Rotorua Energy Charitable Trust and the Ministry of Education, Wellington, New Zealand.
- Grumet, M.R. (1995). The curriculum: What are the basics and are we teaching them? In J.L. Kincheloe & S.R. Steinberg (eds.), *Thirteen questions*, 2nd ed., pp. 15-21. New York: Peter Lang.
- Guskey, T. R. (1986). Staff development and the process of teacher change. *Educational Researcher*, 15, 5-12
- Guskey, T. R., & Sparks, D. (1996). Exploring the relationship between staff development and improvements in student learning. *Journal of Staff Development*, 17, (4), 34-38.
- Guskey, T. R. (2002, March). Does it make a difference? Evaluating professional development. *Educational Leadership*, 59(6), 45-51.
- Hall, G.E. & Hord, S.M. (2006). *Implementing change: Patterns, principles, and potholes*. Boston: Pearson Education.
- Hargreaves, D. (1995). Self-managing schools and development planning - chaos or control? *School Organization*, 6, (1), 2-46.
- Hattie, J. (2003). *New Zealand education snapshot*. Paper presented at the Knowledge Wave 2003: The leadership forum, Auckland.
- Hawk, K., & Hill, J. (2000). *Towards making achieving cool: Achievement in Multi-cultural High Schools*. A report to the Ministry of Education by Educational Research and development Centre, Massey University, Albany.
- Heshusius, L. (1994) Freeing ourselves from objectivity: Managing subjectivity or turning toward a participatory mode of consciousness? *Educational Researcher* 23 (3) 15-22.
- Heshusius, L. (1996). 'Modes of consciousness and the self in learning disabilities research'. Considering past and present. In K. Reid, W.P. Hresko and H.L. Swanson (eds). *Cognitive Approaches to Learning Disabilities*. Austin: PRO_ED, 1996. 617-651.
- Hingston, K. (2005). *The quality of the professional development for the professional developers*. Unpublished masters dissertation, the University of Waikato, Hamilton, NZ.
- Hohepa, M., McNaughton, S., & Jenkins, K. (1996). Māori pedagogies and the roles of the individual. *New Zealand Journal of Educational Studies*. 31 (1), 29-40.
- Hunn, J.K. (1960). *Report on the Department of Māori Affairs*. Wellington: Government Print.

- Kalantzis, M., & Cope, B. (1999). Multicultural education: Transforming the mainstream. In May, S. (Ed). *Critical Multiculturalism: Rethinking Multicultural and Antiracist Education*. London: Falmer Press.
- Kim, J. S., & Sunderman, G. L. (2005). Measuring academic proficiency under the No Child Left Behind Act: Implications for educational equity. *Educational Researcher*, 34 (8), 3-13.
- Kincheloe, J., & Steinberg, S. (1997). *Changing multiculturalism*. Buckingham, Philadelphia: Open University Press.
- Ladson-Billings, G. (2006). *From the Achievement Gap to the Education Debt: Understanding Achievement in U.S. Schools*. Presidential address to the American Educational Research Association (AERA) conference. San Francisco, USA.
- Mazarno, R. J., Zaffron, S., Zraik, L., Robbins, S.L., & Yoon, L. (2005). A new paradigm for educational change. *Landmark Education*, 106, (2), 162-173.
- Merriam, S. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass Publishers.
- Metge, J. (1990). *Te Kohao o Te Ngira: Culture and Learning*. Wellington: learning media, Ministry of Education.
- Ministry of Education. (2002). *Monitoring the achievement of Māori students. In New Zealand Schools Nga Kura o Aotearoa 2001*. A report of the Minister of Education on the compulsory schools sector in NZ 2001 (also known as the Schools Sector report 2001). Wellington: Ministry of Education.
- Morgan, G. A., Gliner, J. A., & Harmon, R. J. (2006). *Understanding and evaluating research in applied and clinical settings*. London: Lawrence Erlbaum Associates.
- Morgan, G. A., Leech, N. L., Gloeckner, G. W., & Barrett, K. C. (2004). *SPSS for basic statistics: Use and interpretation* (2d ed.) Mahwah, NJ: Lawrence Earlbaum Associates.
- Nieto, S. (2000). *Affirming diversity: the sociopolitical context of multicultural education* (3rd ed.). New York: Longman.
- Organization for Economic Co-Operation and Development (OECD) (2000). *School factors related to school quality and equity: Results from PISA 2000*. Paris, France.
- Patton, M. Q. (1997). *Utilization-Focused Evaluation: The New Century Text*. Thousand Oaks, CA.: Sage,
- Phillips, G., McNaughton, S., & MacDonald, S. (2001). *Picking up the pace*. A report to the Ministry of Education on the professional development associated with the early Childhood Primary Links via Literacy (ECPL) project. Auckland: The Child Literacy Foundation and Woolf Fisher Research Centre.

- Philpott, P. (1993). Seating patterns in small language classes: an example of action research. *British Journal of Educational research*, 19 (2), 191-210.
- Pihama, L., Cram, F., & Walker, S. (2002). *Creating methodological space: A literature review of Kaupapa Māori research*. *Can J Native Educ.* 2002:26:30-43.
- Quest Rapuara. (1992). *Cultural identity, Whakamana tangata: A resource for educators*. 3rd. ed. Publication info. Wellington, N.Z.
- Ryan, W. (1976) *Blaming the victim*. New York: Vantage Books.
- Shields, C., Bishop, R., & Mazawi. A. E. (2005). *Pathologizing Practices: The Impact of Deficit Thinking on Education*. New York: Peter Lang.
- Sidorkin, A. M. (2002). *Learning relations*. New York: Peter Lang.
- Sleeter, C. (2005). *Un-standardizing curriculum: Multicultural teaching in the standards-based classroom*. New York: Teachers College Press.
- Smith, G. H. (1992). *Tāne-nui-a-rangi's legacy...propping up the sky: Kaupapa Māori as resistance and intervention*. A paper presented at the New Zealand Association for Research in Education/ Australia Association for Research in Education joint.
- Smith, G.H. (1997). *Kaupapa Māori as transformative praxis*. Unpublished PhD Thesis: University of Auckland.
- Smith, G.H. (2002). *Kaupapa Māori theory: transformative praxis and new formations of colonisation*. Paper presented at Cultural Sites, Cultural Theory, Cultural Policy: The Second International Conference on Cultural Policy Research. Wellington: Te Papa National Museum, 23–26 January.
- Smith, L. T. (1999). *Decolonising methodologies: Research and indigenous people*. London/Dunedin. Zed Books/ University of Otago Press.
- Thomas, J. D., & Glynn, E. L. (1976). Mangere Guidance Unit; Evaluation of behavioural programmes. Report to the Director General. Wellington: Department of Education.
- Timperley, H. S., Phillips, G., & Wiseman. J. (2003). *Shifting the Focus: Achievement Information for Professional Learning: A Summary of the Sustainability of Professional Development in Literacy - Parts 1 and 2*. A report to the Ministry of Education. Wellington, New Zealand.
- Villegas, A. M. & Lucas, T. (2002). *Educating culturally responsive teachers: A coherent approach*. Albany: State University of New York Press.
- Wagstaff, L., & Fusarelli, L. (1995). Establishing, collaborative governance and leadership. In P. Reyes., J. Scribner, & A. Scribner. (Eds). (1999). *Lessons from high-performing Hispanic schools: Creating learning communities*. New York: Teachers College Press.

-
- Whitehurst, G. J., (2003). *The Institute of Education Sciences: New Wine, New Bottles*. A paper presented at the American Education Research Association, 2003 Annual Meeting Presidential Invited Session.
- Widdowson, D., Dixon, R., & Moore, D. (1996). The effects of teacher modelling of silent reading on students' engagement during Sustained Silent Reading. *Educational Psychology*, 16, 171-180.
- Young, M. (2004). *Social Values of the Daly Region: A Preliminary Assessment*. Darwin. Draft report to the CRG, School for Social and Policy Research, Charles Darwin University.
- Young, R. (1991). *Critical theory and classroom talk*. Clevedon; Multilingual Matters.
- Ysseldyke, J., & Christenson, S, (1998). *TIES-II, the instructional environment system II: A system to identify a student's instructional needs*. Sopris West: Longmont.

APPENDIX A

Te Kōtahitanga In-Class Observation Sheet

2005 Te Kōtahitanga In-class Observation Sheet – Phase III

Name of Observer: _____

Date: _____ Class and Level: _____

Period in day: _____

School: _____ Banding of Class: _____

Teacher: _____

Ethnicity of teacher Māori _____ Non Māori _____ Years of teaching 0-5 ___ 5-10 ___ 10-15 ___ 15+ ___

Observe for 10 seconds then record for 5 seconds	Target	1	2	3	4	5	6	7	8	9	10	% Eng	Work Completed 1 - 5
	Student 1												
	Teacher												
	Student 2												
	Teacher												
	Student 3												
	Teacher												
	Student 4												
	Teacher												
	Student 5												
	Teacher												

Code	Whole	Indiv	Group	Total
Co				
FFA +				
FFA -				
FBA +				
FBA -				
P				
PM -				
FFB +				
FFB -				
FBB +				
FBB -				
M				
I				
O				
Total				50

Cognitive Level	Student Positioning *			Teacher positioning *		
1 2 3 4 5						
Not Challenging Medium Challenging						
Work Completed						
1 2 3 4 5						
Not Challenging Medium Challenging						

* NB: Top = Front of class * NB: Top = Front of class

Observation of Relationships.

Relationships:	What evidence is there of the teacher:	Range:	Evidence:
Caring for the student	a) caring for the student as (culturally located) individuals	$\frac{1}{\text{Low}} \quad \frac{2}{\text{Medium}} \quad \frac{3}{\text{High}} \quad 4 \quad 5$	
Caring for the performance of the student	b) having high expectations for the learning performance of the students	$\frac{1}{\text{Low}} \quad \frac{2}{\text{Medium}} \quad \frac{3}{\text{High}} \quad 4 \quad 5$	
Behaviour expectations	c) having high expectations fro the behaviour performance of the students	$\frac{1}{\text{Low}} \quad \frac{2}{\text{Medium}} \quad \frac{3}{\text{High}} \quad 4 \quad 5$	
Management of the classroom	d) proving a well-managed learning environment	$\frac{1}{\text{Low}} \quad \frac{2}{\text{Medium}} \quad \frac{3}{\text{High}} \quad 4 \quad 5$	
Culture (C)	e) providing a culturally appropriate learning context for Māori students	$\frac{1}{\text{Low}} \quad \frac{2}{\text{Medium}} \quad \frac{3}{\text{High}} \quad 4 \quad 5$	
Culture (c)	f) providing a context where Māori students can bring their own cultural experiences to their learning	$\frac{1}{\text{Low}} \quad \frac{2}{\text{Medium}} \quad \frac{3}{\text{High}} \quad 4 \quad 5$	
Feedback to teacher	Feedback – general points as observations		

Teacher reflection on feedback	Teacher reflection on lesson and feedback received from Observer
Future directions	Notes/ideas from co-construction meetings / suggestions for improvements

APPENDIX B

Taped Feedback/Co-Construction Sessions: Analysis Form

School:

Date:

Facilitation Team Member:

Teacher:

Convention: Score each tape for ten minutes only, the ten minutes to begin at least five minutes into the tape for feedback and ten minutes for co-construction. Score by ticking \surd each chunk or separate meaningful idea. To the left hand side of the table, score teacher contributions with a tick \surd and a capital T e.g. \surd T.

Facilitation Team Member or Teacher				Facilitation Team Member	Teacher		
Inaudible	Other	Opener	Feedback	Specific feedback/Conversation that links to Learning for the:			
				Teacher	Student	Teacher	Student

Taped Feedback/Co-Construction Sessions: Analysis Tool**Tape****School****Feedback /Co-construction****Term****Year**

Characteristics of effective learning communities	Amount of Evidence				
	Tally	1 = None	2 = Little	3 = More	4 = Lots
1. Te Kōtahitanga ETP principles are challenging or affirming teachers' current assumptions and practices					
2. Discourses have a focus on raising Māori students achievement					
3. Discourses reject or respond to deficit theorising					
4. Discourses are agentic					
5. Collaboration and shared expertise are contributing to a critical examination of recent in-class practice					
6. Discourses are reflective linking classroom experience and evidence to more effective in-class practice					
7. Clear focus on student learning with recent evidence being used to inform next teaching steps					
8. Expectations, skills and knowledge are developing and practices are changing or affirmed					
9. Values and expectations about learning and achievement are shared					
10. Discourses show that teaching is collaborative and de-privatised					
TOTALS					

Record some excellent examples of verbatim quotes (identify characteristic by numbers).

APPENDIX C

Te Kōtahitanga Teacher Participation Survey

26 October 2005

Te Kotahitanga : Culture Counts



From Māori, For Māori, For All

Thank you for completing this survey. The following information will be used for improvement, evaluation, and research purposes only. Your responses will be kept confidential and you will be tracked by a unique identification number. Your feedback and information are very important to the ongoing development of Te Kōtahitanga. Please reflect on your experiences in Te Kōtahitanga and answer each of the following questions within the range of 1=strongly disagree to 5=strongly agree by circling the appropriate answer. We would appreciate your comments in the boxes provided, as your comments will help us develop the project.



Participant Information**(Please fill in the blank or check the appropriate box for each question.)**

1. Unique identification number _____
2. What is your gender?
 - Male
 - Female
3. What is your ethnicity?
 - Māori
 - Non-Māori
4. What year level(s) do you teach?
 - Year 9
 - Year 10
 - Both
 - Other _____
5. Are your classes streamed?
 - Yes
 - No
6. What school do you teach at? _____
7. How long have you participated in Te Kōtahitanga? _____
8. How many years have you taught? _____
9. Where did you receive your teacher training? _____
10. What type of pre-service education did you receive?
 - Bachelor's degree
 - Postgraduate degree
 - Teaching degree
 - Teacher training certificate
 - Secondary teaching diploma
 - Industry and trade _____
 - Certificate(s) _____
 - Other _____
10. Do you have experience teaching in primary (junior) school?
 - Yes. If so, how many years? _____
 - No

(Please circle the appropriate answer in each of the following questions.)

1. **Te Kōtahitanga participants' reactions to professional development activities.** My reactions to the professional development experiences are as follows.

A. Initial three-day hui

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. The leaders/facilitators at the initial three-day hui I attended were knowledgeable and helpful.	1	2	3	4	5
2. The time I spent at the initial three-day hui was well spent	1	2	3	4	5
3. The information and materials provided at the initial three-day hui were useful.	1	2	3	4	5
4. The initial three-day hui was well planned and meaningful.	1	2	3	4	5

How useful was the initial hui?

Comments:

B. Te Kōtahitanga professional development activities: *Observations*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. The leaders/facilitators of the observations were knowledgeable and helpful.	1	2	3	4	5
2. The time spent in the observations was well spent.	1	2	3	4	5
3. The information and materials provided at the observations were useful.	1	2	3	4	5
4. The observations were well planned and meaningful.	1	2	3	4	5

Comments:

C. Te Kōtahitanga professional development activities: *Feedback (Following Observation)*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. The leaders/facilitators giving feedback were knowledgeable and helpful.	1	2	3	4	5
2. The time spent in the feedback was well spent.	1	2	3	4	5
3. The information and materials provided at the feedback were useful.	1	2	3	4	5
4. The feedback was well planned and meaningful.	1	2	3	4	5

Comments:

D. Te Kōtahitanga professional development activities: *Co-Construction Meetings*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. The leaders/facilitators of co-construction meetings were knowledgeable and helpful.	1	2	3	4	5
2. The time spent in co-construction meetings was well spent.	1	2	3	4	5
3. The information and materials provided at co-construction meetings were useful.	1	2	3	4	5
4. The co-construction meetings were well planned and meaningful.	1	2	3	4	5

Comments:

E. Te Kōtahitanga professional development activities: *Shadow Coaching*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. The leaders/facilitators at shadow coaching were knowledgeable and helpful.	1	2	3	4	5
2. The time spent in shadow coaching was well spent.	1	2	3	4	5
3. The information and materials provided at shadow coaching were useful.	1	2	3	4	5
4. Shadow coaching was well planned and meaningful.	1	2	3	4	5

Comments:

2. Te Kōtahitanga participants' learning.

My reflections on the knowledge and skills I have gained are as follows.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A. Deficit thinking about Māori students has a negative effect on their achievement.	1	2	3	4	5
B. I need to relate to Māori students from an agentic position.	1	2	3	4	5
C. I need to create a supportive environment of care in my classroom(s) where Māori students are free to be themselves.	1	2	3	4	5
D. I need to have high expectations for the performance of Māori students and let them know about their progress and how they can improve.	1	2	3	4	5
E. In order to be an effective teacher I need the management skills required to create a secure, meaningful, and well-managed learning environment in my classroom(s).	1	2	3	4	5
F. In order to be an effective teacher I need in-depth curriculum knowledge.	1	2	3	4	5
G. In order to be an effective teacher I need an overall approach to planning, including units and lessons, and to use student outcomes to inform my practice.	1	2	3	4	5
H. In order to be an effective teacher I need to engage in effective teaching interactions, including feedback, feed-forward, and co-construction, with Māori students so they are encouraged and able to bring their own prior experiences to my classroom(s).	1	2	3	4	5
I. I need to use a range of strategies that promote an effective teaching and learning environment where learning conversations can occur.	1	2	3	4	5
J. I need to focus and reflect on the goal of raising Māori achievement.	1	2	3	4	5

Comments:

3. School support and change.

My reflections on how my school supports Te Kōtahitanga are as follows.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A. The changes promoted by Te Kōtahitanga are in alignment with my school's mission or strategic direction.	1	2	3	4	5
B. My school provides sufficient resources for implementing Te Kōtahitanga, including time for sharing and reflection.	1	2	3	4	5
C. My school has a school-wide culture to honor and share successes achieved through Te Kōtahitanga.	1	2	3	4	5
D. My school has been effective in advocating and facilitating the implementation of Te Kōtahitanga.	1	2	3	4	5
E. My school addresses issues and problems related to implementing Te Kōtahitanga quickly and efficiently.	1	2	3	4	5
F. My school supports teachers working together collaboratively in a structured manner.	1	2	3	4	5
G. My school supports the whole staff being involved in Te Kōtahitanga.	1	2	3	4	5

The primary goals of my school are:

My school is participating in Te Kōtahitanga because:

4. Te Kōtahitanga participants' use of new knowledge and skills.

My reflections on how the new knowledge gained and skills acquired have made a difference in my professional practice are as follows.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A. I am aware of the negative effects of deficit theorizing about Māori students and my teaching practices reflect this knowledge.	1	2	3	4	5
B. My teaching practices reflect a more agentic attitude towards Māori students.	1	2	3	4	5
C. My teaching practices enable Māori students to be who they are in my classes and to feel supported in a caring environment.	1	2	3	4	5
D. I hold high expectations for the performance of Māori students and frequently communicate these expectations in my classes by letting my students know about their progress and how they can improve.	1	2	3	4	5
E. My classroom is a well-managed purposeful learning environment.	1	2	3	4	5
F I have extensive curriculum knowledge and use it in my classrooms.	1	2	3	4	5
G. I have an overall approach to planning, including units and lessons, and use student outcomes to inform my practice.	1	2	3	4	5
H. My lessons are planned to encourage interactions, including feedback, feed-forward, and co-construction, where Māori students can bring their experiences and help shape their own learning.	1	2	3	4	5
I. My interactions with students create learning conversations and communicate respect for their knowledge and an atmosphere of learning from each other.	1	2	3	4	5
J. I focus and reflect on the goal of raising Māori achievement.	1	2	3	4	5

Comments:

5. Learning outcomes for students of Te Kōtahitanga teachers.

My reflections on the effects on students in my classes are as follows.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A. My participation in Te Kōtahitanga has positively affected the achievement of Māori students in my classroom(s).	1	2	3	4	5
B. My participation in Te Kōtahitanga has positively influenced the physical and emotional well-being of Māori students in my classroom(s).	1	2	3	4	5
C. My participation in Te Kōtahitanga has increased the confidence of Māori students in my classroom(s) as learners.	1	2	3	4	5
D. My participation in Te Kōtahitanga has improved the attendance of Māori students in my class(es).	1	2	3	4	5
E. My participation in Te Kōtahitanga has increased the engagement of Māori students in my classes with learning.	1	2	3	4	5
F. My participation in Te Kōtahitanga has positively impacted on Māori students in my classroom(s).	1	2	3	4	5

Please provide specific examples of how changes in your teaching practice have improved Māori student achievement:

APPENDIX D

Te Kōtahitanga Phase 3 Teacher Interviews

These interviews provide teachers with an opportunity to reflect on their involvement in Te Kōtahitanga with reference to theoretical positioning, classroom practice and the impact on the learning of Māori students in their classrooms.

These interviews take place at a time when schools have been involved in Te Kōtahitanga for a period of two years, although individual teachers may have only been involved for one year.

The teachers invited to participate in these interviews have been identified by facilitators as successful implementers of the Effective Teaching Profile and this position has been verified through the process of student interviews.

The purpose of these interviews is to build case studies around the Effective Teaching Profile.

1. Tell me about your experiences with Te Kōtahitanga?
 - Expectations
 - Positive features
 - Difficulties or problems
 - Deficit theorising
 - Agentic positioning
2. What has been the impact of Te Kōtahitanga on relationships in your classroom?
 - Caring for the student
 - Caring for performance
 - Classroom management
3. What has been the impact of Te Kōtahitanga on Māori student learning?
 - Interactions
 - Strategies
 - Outcomes to inform practice
 - Outcomes to inform student learning
4. In what ways has Te Kōtahitanga enabled you to work with others? How useful has this been?
 - Students
 - Colleagues
 - Facilitators
 - Senior Management
 - Parents/Whānau/Community
5. If you were to offer advice to other teachers what would you say?
6. Can you make any suggestions about how the professional development support you are receiving could be improved?

APPENDIX E

Te Kōtahitanga Phase 3 Student Interviews

Introduction

- Are you aware that some of your teachers have been taking part in a programme that looks to improve Māori education in secondary schools?
- We want to talk to you about your experiences with some of these teachers, in particular the sorts of things that happen in the classroom- the way your teacher teaches, how your achievement is going, your attendance, whether you plan to stay at school until year 13 and anything else you'd like to talk about.
- The interviews will be recorded for the purposes of the research team, however you will not be identified and nothing you say during this interview will be used against you in any way. Your discussions during this interview will be used by the research team, not by your school.
- Consent issues and withdrawal.

1. Experiences

Describe your experiences in this class, this year.

*What is it like with this teacher in this class?
What sort of teacher are they?*

- strategies: group work, paired work, activities, rewards, games

*What sort of activities do you do in class? Can you describe them?
How often would you do these types of activities?
What is your teacher doing and saying while you are doing these activities?
What do you do when you're not doing group work?
Do you enjoy this type of work? Why? Do you think it helps your learning?*

- interactions: feedback, feedforward, help, prior knowledge

*Do you feel comfortable asking for help in this class?
Does your teacher get round to everybody?
Are there times when you're asked what you already know about a subject?
What sort of instructions are you given about what to do next?*

- choices:

What choices do you get in the classroom? Time spent on activities, the types of activities you do?

*Do you feel you have a say in your own learning?
Are you responsible for your own learning?*

- participation

*Do you feel comfortable about participating and contributing in class?
Does everyone participate most of the time, why/why not?*

Does your teacher ask you for feedback about whether you liked a lesson or what could be done differently?

- teacher expectations

*Do you find the work you're doing challenging?
Do you know what your teacher expects of you in this classroom?
Do you know what your teacher expects of you in each lesson?
Do you think your teacher cares about your learning? How do you know?
Does your teacher find out how you are doing in other subjects as well?*

If you had to rank all your teachers and put the best teacher at number one, who would be your best teacher?

2. Achievement

How are you doing in this class this year in terms of achievement?

*Do you know how you're doing? How do you know?
Can you compare how you did last year in this subject? Why the change?
When do you find out how you are doing? Tests, reports, assignments or can you just ask?
Are you given a choice in how you are assessed?
What is the subject you are doing the best in?*

3. Attendance

Do you attend this class regularly?

*Would you avoid this class/why?
Are there other classes you would choose to miss?*

4. Goals

What goals do you have?

Will you be staying at school after this year?

Will you be staying until year 13?

What goals do you have for your own achievement?

Have you thought about what you want to do when you finish school?

Are your teachers aware of your goals? Do they encourage you?

5. Other ideas

Is there anything else you'd like to share?

APPENDIX F

Evidence About Effectiveness Of Te Kōtahitanga From Education Review Office (ERO) Reports

The focus of Te Kōtahitanga is on improving Māori student outcomes, and the Education Review Office (ERO) has collected information for reports to government on improving Māori student achievement during 2004-2006. Also Christine Sleeter (2005) internationally acclaimed scholar in the field of multicultural education, identified ERO reports as a “significant piece of evidence.”

Thus, the University of Waikato Research and Professional Development Team decided to review ERO reports for project schools during 2004-2006 because these reports constitute evidence of the effectiveness of Te Kōtahitanga from an outside evaluator. Reports were found for four schools. Those schools are named here because ERO reports are in the public domain. Completed reports were found on the ERO Website for 4 of the 12 schools

School A (2004)

The Education Review Office (ERO) Evaluation

The quality of student achievement information reported to the board has improved. In the past year teachers have participated in school-wide professional development initiatives that are having a positive impact on student achievement. These programmes, Te Kete Akoranga and Te Kōtahitanga, are designed to increase student engagement in learning, improve literacy skills and address the underachievement of Māori students. Teachers report noticeable improvements in the quality of teaching and learning.

Findings - Goals and targets for improving the achievement of Māori students Background

The 2003 report recommended that the board do more to enhance educational opportunities for Māori students. The report suggested that the curriculum did not adequately reflect the backgrounds and interests of Māori students and noted that the board had no specific goals for improving outcomes for Māori students. Data comparing Māori and non-Māori student achievement, discipline, attendance, retention and pastoral care had not been collated or analysed.

Areas of progress

The new board expresses a commitment to improving Māori student achievement and has included a goal in its strategic plan to this effect. The board includes several elected Māori representatives who are well positioned to guide the board’s decisions and further consultation with the Māori community.

A significant number of teachers are implementing the Te Kōtahitanga programme in their classrooms. This initiative is based on research designed to support and enhance the achievement of Māori students through the development of supportive relationships and

improved teaching methodology. Teachers involved in this programme receive good feedback from the external research team and have reported improved learning outcomes for students. The school is taking steps to better reflect the culture and values of Māori students who comprise two thirds of the school roll. There has been an increase reported in the numbers of students taking te reo Māori at the senior level. Students appreciate the ways in which many teachers are acknowledging te reo me ōna tikanga Māori in classrooms and the improved signage around the school.

Areas for further improvement

Co-ordination of initiatives: Senior managers should co-ordinate and report on initiatives relating to school goals for improving outcomes for Māori students. This management responsibility should include reporting comparative information between Māori and non-Māori in a range of benchmarked indicators including academic achievement, sport, discipline and retention levels.

Quality management and self review - Areas of progress

The professional development undertaken by teachers in the past year is strengthening the school-wide learning culture. The priority teachers have placed on improved teaching and learning through enhanced relationships with students is benefiting student learning outcomes.

Suspension reductions initiatives

Background

The 2003 ERO report identified concerns about student stand-downs and suspensions. Although the school was part of the Suspension Reduction Initiative, the data indicated that numbers of suspended students had not significantly declined. The report recommended that the board continue to explore alternatives to facilitate students' participation in education.

Areas of progress

The board has made every effort to reduce student suspensions. In 2003, 17 students were suspended; of these, 7 were excluded. To date in 2004, four students have been suspended and none have been excluded. Trustees have worked closely with senior managers and parents to ensure that students returning to school following a suspension are appropriately supported.

A number of effective pastoral care systems are in place to monitor student behaviour. The most significant shift in behaviour management has occurred as a result of new teaching and learning initiatives implemented by the staff. The focus on engaging students in learning rather than managing their behaviour has been a positive feature of staff development.

To the Parents and Community

The quality of student achievement information reported to the board has improved. In the past year teachers have participated in school-wide professional development initiatives that are having a positive impact on student achievement. These programmes, Te Kete Akoranga and Te Kōtahitanga, are designed to increase student engagement in learning, improve literacy skills and address the underachievement of Māori students. Teachers report noticeable improvements in the quality of teaching and learning.

Teachers, support staff and senior managers are strengthening the learning culture of the school. They are working collegially to create a more student-centred learning environment. Students with identified learning needs are catered for effectively. Baseline achievement data in literacy and numeracy has been collated and analysed. Achievement data from the reading extension programme indicates significant improvements in skill levels for targeted students over a two-year period.

Improvements have appropriately focused on student achievement. However, further improvements are needed in some areas of school management.

School B (2004)

The Education Review Office (ERO) Evaluation

School B is a large, multi-cultural, West Auckland secondary school. The school is student-centred with a board, principal and staff who are committed to raising student achievement. The tone of the school is positive. Staff are forward looking and willing to try innovative strategies to further improve teaching and learning.

The principal has been effective in setting the tone of the school. His strategic vision for the school enables him to lead the staff in implementing teaching best practice based on national and international educational research. Ongoing improvements to school organisation and practice are aimed at raising teacher capability and lifting student achievement levels.

The focus of this review is the effectiveness of systems to promote high quality teaching and learning. The report evaluates how the school is improving Māori and Pacific student achievement.

School Specific Priorities - The effectiveness of systems to promote high quality teaching and learning

Background

The board of trustees and staff selected this focus area because they regard high quality teaching and learning as fundamentally important to improving student achievement. The staff has been involved in professional development and discussions on how to increase student engagement in learning. The aim of the board and staff to improve achievement is reflected in the school motto: "Achievement for All".

As part of the school drive to improve the quality of teaching and learning, the board and staff have participated in a research-based pilot project, Te Kōtahitanga, aimed at improving the achievement of Māori students. The project is based on improving relationships between teachers and students. A significant number of teachers have opted to be part of the programme which is strongly supported by a carefully planned professional development programme on the use of teaching strategies to engage Māori students.

Over the three years the project has been in operation, research has been undertaken on teaching strategies to improve the achievement of targeted Māori students in full Māori core classes in Years 9 and 10, four Māori home groups, and targeted Māori students in mainstream classes. These students are taught by 'target' teachers who have undertaken the required professional development.

To inform review findings on the quality of teaching, the review team considered systems to introduce and support Te Kōtahitanga, systems for curriculum planning and assessment, provisions for senior students, review and evaluation, and performance management.

Areas of good performance

Te Kōtahitanga:

- The mana and success of Te Kōtahitanga in working to raise the achievement of Māori students is due to the strong commitment and support of the board, the principal, project teachers, whānau and the community working in collaboration with staff from the University of Waikato. The project is informed by research based on New Zealand educational theory and practice. It is a relevant and strategic model of classroom management designed to address Māori under-achievement.
- Target teachers report positively on the professionalism and helpfulness of advice they receive from lead teachers and facilitators carrying out observations of their classroom practice. Evidence collected through intensive on-site teacher observations and analysed by staff from Waikato University has identified a significant shift in teachers' pedagogical approaches towards interactive strategies that engage students positively in learning.
- Baseline and ongoing achievement data is being collected on the achievement of Māori students. Seventy-one percent of the Y10 Māori target class in 2003 showed an improvement in their reading ages from Y9 to Y10 and achieved well above rates for non-target Y10 Māori students. The school has data on the achievement of targeted and non-targeted students in the National Certificate of Educational Achievement (NCEA) in 2003. However, the number of targeted Māori students involved in NCEA is too small to be statistically reliable or to enable the senior management team to identify trends.
- Further positive impacts of Te Kōtahitanga are reported as an increase in the numbers of students learning te reo Māori; observable increases in student engagement in learning; increased retention of targeted Māori students from Year 9 in 2001 to 2003 and increased enrolment of target Māori students in academic courses in Year 10. Data from the project for 2001 and 2002 show that suspension and stand down rates for targeted Year 9 and 10 Māori students are significantly lower than for those of non-targeted Māori and non-Māori students. The school has yet to analyse data for 2003 to confirm the continuation of this trend.

Areas for improvement

Quality of teaching: The senior management team should ensure that the high quality pedagogical practices that guide the implementation of Te Kōtahitanga are implemented for all students. A number of staff should use more strategies for interactive teaching to ensure they engage students more effectively in the learning process. The pedagogical principles of Te Kōtahitanga should be documented as expectations of best practice for all staff.

Areas of Specific Government Interest - Improving Māori student achievement

Twenty-three percent of students at School B are Māori. The school has used asTTLe achievement information to collate and analyse data on the achievement of Year 9 Māori students in reading and numeracy. Data show that Māori students achieve at a level very close

to that of all other students. The achievement of Māori students in NCEA is below that of non-Māori students. However, the school's NCEA results show an improvement in Māori student achievement from 2002 to 2003. The principal is working with staff to further improve the achievement of Māori students in the senior school.

The principal recognises that Ministry of Education data show that the percentage of Māori students leaving school with qualifications is well below that of non-Māori students. Māori students are made aware of opportunities to win scholarships to further their education.

The school has data on the attendance rates of Māori students from the beginning of 2004. The school has not analysed attendance rates for Māori since the 2000 ERO report. School data show that the suspension rate for Māori students is the highest in the school by ethnic breakdown. The senior management team should regularly analyse available data on suspensions and stand downs of Māori students, monitor trends and implement strategies to further reduce the suspension and stand down of these students.

School initiatives for Māori students include the Te Kōtahitanga project which is designed to improve the achievement of Māori students through improved teaching strategies to meet their learning needs. The impact of the project is evaluated earlier in this report.

Since the last triennial board of trustee elections the board has coopted Māori representatives who have helped arrange consultation hui. Māori parents actively support school events that specifically celebrate Māori arts and culture and student success. Staff responsible for Te Kōtahitanga have held hui with the Māori community to provide information about the programme. Links have been made with local iwi and marae. The board recognises the need to continue this process to strengthen consultation about the wishes of Māori parents for their children's education.

Recommendations

ERO and the board recommend that the board of trustees and senior staff improve the school's systems for collating, analysing, interpreting and using data on student achievement and pastoral care to further improve planning and monitoring of students' learning and behaviour needs.

To the Parents and Community of School B

The focus of this review is the effectiveness of systems to promote high quality teaching and learning. The report evaluates how the school is improving Māori and Pacific student achievement, the extent to which the school is implementing the Code of Practice for the Pastoral Care of International Students, and the quality of guidance and support provided for beginning teachers. The report finds that the school provides a positive environment for student learning and makes a number of suggestions and recommendations for further improvement.

School C (2006)

The Education Review Office (ERO) Evaluation

Since the last review in November 2002 there has been modernisation of the technology, physical education, visual arts and library facilities. There have also been significant changes in staff, particularly at head of department level and in the senior management team. In addition there has been substantial development in all of the areas identified in the last report

as requiring improvement. These areas include staff professional development to improve the quality of teaching and the achievement of Māori students, the collation and use of achievement data, assessment in Years 9 and 10 and reporting to parents on student progress.

This report focuses on student engagement with learning. The Education Review Office consulted with the board of trustees to select this focus area. The report also includes evaluation of the collation and use of assessment information, improving Māori student achievement, students who are under achieving, careers education and guidance, adult and community education and implementation of the code of practice for international students. The report identifies good practice and next steps within each section.

The school has a clear focus on improving student learning and achievement. Effective leadership by the board and principal provide a strong common sense of purpose about achieving the school's stated objective of 'maintaining an unrelenting focus on achievement'.

Over the past three years staff have been involved in extensive, school-based, professional development aimed at improving student engagement with learning. This development has involved strengthening classroom management practices and relationships between students and teachers as well as raising the achievement of Māori students. This professional development is encouraging the development of a culture of professional reflection about teaching practice and ongoing improvement. Greater consistency in the implementation of teaching strategies such as formative assessment and strengthening aspects of teacher appraisal should further improve the quality of teaching practice.

Positive and respectful relationships between and among teachers and students are evident throughout the school. The school has an inclusive approach to student management that aims to support students in their learning. Teachers know students well and demonstrate a willingness to provide the extra assistance necessary to promote success in curricular as well as extra curricular activities.

School Specific Priorities - Student Engagement with Learning

Background

The mission statement of School C is, 'challenging students to achieve'. In order to improve student achievement the school aims to develop a high level of student engagement in learning. This report evaluates progress in the development of student engagement with learning.

Student progress and achievement

The most recent available school-wide achievement information for School C is the NCEA and Ministry of Education benchmark data for 2004. This information indicates that overall levels of student achievement, including that of Māori students, are comparable to that of students in other schools on a national basis but above those of students in other schools of the same decile.

Areas of good performance

Strategic direction: The school has a clear focus on improving student learning and achievement. The board of trustees, principal and senior managers provide effective leadership for the direction of the school. School-wide documentation such as the strategic

plan, annual plan and other guiding documents are of high quality and are underpinned by current research in education.

Effective leadership and clearly documented guidelines are providing a strong common sense of purpose about achieving the school's stated objective of maintaining an, 'unrelenting focus on achievement'.

Te Kōtahitanga: Participation by a majority of staff in the Te Kōtahitanga programme provides evidence of the school's commitment to enhancing student engagement in learning. This programme provides a framework for sustained and focused professional development which aims to improve Māori student achievement, enhance relationships between students and teachers and develop more effective classroom management strategies. Programme facilitators are providing enthusiastic and committed leadership with strong support from the principal. Involvement in the Te Kōtahitanga programme is encouraging professional dialogue among teachers and is assisting in promoting high levels of engagement with learning for many students.

Professional development opportunities: School-wide professional development is focused on improving teaching and learning. In addition to involvement in the Te Kōtahitanga programme, teachers have participated in a range of other training opportunities involving information and communications technologies (ICT), formative assessment, classroom management strategies and subject-based professional development. There is an increasing shared awareness and understanding of good practice in teaching and learning.

Relationships: Classroom learning climates are characterised by mutually respectful relationships. Teachers are skilled in using positive strategies in managing their relationships and interactions with students and are responsive to their needs and interests. Students appreciate the efforts of teachers who are willing to work hard in their interests and work alongside them. Positive relationships are contributing to a settled learning environment where students are able to engage with learning.

Junior certificate: The school has introduced a well-designed structure for monitoring progress of students at Year 9 and 10. Achievement expectations and criteria linked to national curriculum levels have been established in all curriculum areas. Increasingly these expectations are being shared with students. This approach means that students can be more involved in, and take more responsibility for, their learning.

Community partnership: The school has developed a strong and constructive partnership with its parents and the community. There is planned and regular communication with parents including Māori parents. Parents find the school accessible and welcoming and enjoy a range of opportunities to be involved in school activities and events. A positive relationship between home, school and community promotes student engagement in learning.

Areas for improvement

Teaching strategies: While the school has made a commitment to assist teachers in the development of strategies to better engage students in learning, teachers are at different stages of development in their practice. There is a continuing need for consistency in the school-wide implementation of teaching strategies that are aimed at improving student engagement. Models of good practice in planning, curriculum delivery and the use of formative approaches

to teaching and learning, which are evident in the school, should be shared more widely to consolidate these practices. Strengthening the use of strategies to engage students should further encourage them to be active participants in their learning.

Areas of National Interest - The Achievement of Māori Students

During the review, ERO evaluated the extent to which the school has knowledge of and strategies for promoting the achievement of Māori students.

Areas of good performance

Raising Māori student achievement: The principal and board of trustees demonstrate a strong commitment to improving outcomes for Māori students. This commitment is clearly reflected in the strategic and annual plans that include goals and targets for raising Māori student achievement. During the past two years there has been substantial resourcing for school-wide professional development focused on strengthening teacher knowledge and understanding of teaching strategies to better engage Māori students with learning.

Community consultation: Regular consultation hui between the board, management, staff and the Māori community are contributing to a united approach to raising student achievement. Trustees and management make every effort to ensure Māori parents are kept well informed about the school's endeavors for improving outcomes for Māori students. This approach is resulting in a mutually respectful relationship between the school and the Māori community, where Māori parents are able to actively contribute to raising the achievement of Māori students.

School initiatives: The school has set in place specific initiatives for strengthening Māori student achievement. The major professional development programme *Te Kōtahitanga*, is strengthening teacher relationships with many Māori students resulting in increased levels of student engagement with learning. The Te Aka Matua programme continues to provide students with purposeful experiences in te reo and tikanga Māori in a supportive whānau environment underpinned by values such as whānaungatanga, manaaki and tuakana/teina. The large number of students involved in the Te Aka Matua initiative is a strong indication of the pride these students have in te reo and Māori culture. Many students involved in this programme also go on to become school leaders. Māori students are responding positively to school initiatives that affirm their culture and identity as being an integral part of the school.

Relationships: Supportive learning relationships between Māori students and their teachers are evident within and outside the classroom. Students enjoy friendly, supportive relationships with teachers and peers. Many Māori students report that teachers have high expectations for them as learners, encouraging and challenging them to achieve particularly at senior level. A key indicator is the increasing number of Māori students participating in senior programmes resulting in improved retention rates, which are now comparable to those of all students.

More Māori are staying to Year 13, and the percentage leaving with qualifications has risen. The positive attitude of many Māori students to school is increasing their levels of participation and engagement with learning.

Providing for Students who are Underachieving – Findings

The school has a good knowledge of the progress and achievement of its students overall. The school has reliably identified those students who are not achieving as well as they should. The

school has a good knowledge of the impact of these programmes on the progress and achievement of the students involved.

School D (2005)

The Education Review Office (ERO) Evaluation

This report focuses on an evaluation of initiatives to improve student achievement. The board of trustees agreed to this focus area in consultation with the Education Review Office. The report also includes evaluation of the achievement of Māori students.

Improving the achievement of all students is the central priority at School D. A number of school-wide initiatives have been introduced to achieve this objective. These initiatives include a school-wide, cross-curricular focus on literacy and involvement by a large proportion of the teaching staff, in the Te Kōtahitanga programme which is aimed at raising the achievement of Māori students through promoting positive relationships and improved classroom teaching practice.

There is effective teaching across the school, with numerous examples of high quality practice. Teachers demonstrate knowledge of, and enthusiasm for, their subject areas and have high expectations for student achievement. Relationships and interactions between students and teachers are positive and supportive. There are generally high levels of student engagement in learning, with evidence of positive behaviour management which is contributing to settled classroom learning environments. Classroom teaching practice in Years 9 and 10 could be further strengthened by a focus on formative assessment practice to ensure that students are receiving regular feedback about their progress and their next learning steps.

The principal is a capable, thoughtful and reflective educational leader. He is providing clear direction for staff, students, parents and the board. He has taken a key role in the development of the school-wide initiatives to raise student achievement, and in strengthening perceptions of the school in the wider community. He is ably supported within the school by a committed team of senior and middle managers.

School Specific Priorities - School-wide initiatives to raise student achievement

Background

School D has identified improving the achievement of all students as its central priority. A number of school-wide initiatives have been introduced to achieve this objective. There has been a strong emphasis on careful analysis of assessment data to review programmes of learning and to develop the curriculum to meet the needs of students. It was agreed that ERO would evaluate the effectiveness of the school's strategies for improving achievement for all students.

Areas of good performance

Te Kōtahitanga: Participation in the Te Kōtahitanga programme provides evidence of the school's commitment to improving the achievement of Māori students. A large proportion of the staff is undertaking focused and sustained professional development through the framework of the Te Kōtahitanga programme. The main emphases of this professional development are to encourage a positive approach to improving the achievement of Māori students, to strengthen relationships between teachers and students and assist teachers to develop more effective classroom management strategies. The programme facilitators are

providing enthusiastic and committed leadership and monitoring of progress, with strong support from the principal. Involvement by teachers in the Te Kōtahitanga programme is contributing to professional dialogue and reflection about best practice in teaching and learning which should assist in enhancing the achievement of all students.

Relationships: Supportive and mutually respectful relationships between students and teachers and among students are evident across the school. Settled and constructive learning environments prevail in classrooms, with high levels of student engagement in learning, and effective behaviour management. Students appreciate the support and encouragement they receive from teachers. Positive relationships contribute to a climate, which encourages successful learning and achievement.

Teacher appraisal: Teacher appraisal procedures are strongly linked to the objective of improving student achievement. Teachers are required to have appraisal goals, which reflect school wide achievement initiatives. This approach is helping to ensure that there is a common sense of direction in the implementation of strategies to improve student achievement with a strong focus on teaching and learning.

Areas for improvement

Ongoing monitoring of the effectiveness of school wide initiatives: While there is a process for reviewing achievement initiatives on an annual basis consideration now needs to be given to establishing measurable targets and short term tracking procedures. This ongoing monitoring would provide more immediate feedback for staff, students and parents on progress in meeting the goals and targets of school-wide initiatives.

Formative assessment practice in Years 9 and 10: The use of classroom formative assessment practice across curriculum areas in Year 9 and 10 is variable. Good practice is evident in a number of classrooms where learning intentions are shared and success criteria developed. These practices should be modelled for other teachers so that students are encouraged to take greater responsibility for their own learning.

Areas of National Interest - The achievement of Māori students

During the review ERO evaluated the extent to which the school has knowledge of, and strategies for promoting, the achievement of Māori students.

Background

Twenty-four percent of students at School D identify as Māori. A number of school-wide initiatives have been introduced to raise student achievement at all levels of the school. Some areas of good performance related to the school's focus area, also apply to this section of the report.

Areas of good performance

Te Kōtahitanga programme: A significant proportion of the teaching staff is undertaking regular professional development through the Te Kōtahitanga programme. The main emphases of this professional development is to raise the achievement levels of Māori students through countering deficit theorising, promoting positive relationships between students and teachers and improving classroom teaching practice. Milestone reports indicate that this initiative is beginning to have a positive impact on teaching practice across the school.

Student engagement in learning: A high level of engagement in learning and on task behaviour among Māori students are evident across the school. The expectations and routines set for learning and behaviour by teachers are clearly understood by Māori students. Māori students enjoy being at school and are motivated to achieve success in academic, performing arts, sports and other cultural activities.

Achievement of Māori students: The school is collating and analysing achievement information specific to Māori students. NCEA results at levels 1, 2, and 3 indicate that the achievement of Māori students who enter NCEA is comparable with those of other students, and with national norms.

Communication and consultation: The school is responsive to the needs of its Māori students and the aspirations whānau have for their children. Self-review processes ensure that parents are regularly consulted and are provided with opportunities for active participation in the education of their children. Effective communication and consultation are contributing to a sound partnership between the school and its Māori community.

Area for improvement

Access to qualifications: There is a need to give consideration to issues surrounding the retention of Māori students and the number of Māori students who fail to complete or attend their NCEA assessments. Retention rates for Māori students into Years 10, 12 and 13 are lower than those for other students. This means that a disproportionate number of Māori students are leaving school prior to entering national qualifications.

Recommendations

ERO recommends that school management investigate ways of strengthening:

- the ongoing monitoring of the effectiveness of school-wide initiatives; and
- formative assessment practice in Years 9 and 10.

To the Parents and Community of School D

This report focuses on an evaluation of initiatives to improve student achievement. The board of trustees agreed to this focus area in consultation with the Education Review Office. The report also includes evaluation of the achievement of Māori students.

Improving the achievement of all students is the central priority at School D. A number of school-wide initiatives have been introduced to achieve this objective. These initiatives include a school-wide, cross-curricular focus on literacy and involvement by a large proportion of the teaching staff, in the Te Kōtahitanga programme which is aimed at raising the achievement of Māori students through promoting positive relationships and improved classroom teaching practice. There is also ongoing professional development in information and communications technology (ICT). Participation in these programmes and the focus on improving student achievement is contributing to self-reflection and professional dialogue among teachers about learning and teaching practice.

There is effective teaching across the school, with numerous examples of high quality practice. Teachers demonstrate knowledge of, and enthusiasm for, their subject areas and have high expectations for student achievement. Relationships and interactions between students and teachers are positive and supportive. There are generally high levels of student engagement in learning, with evidence of positive behaviour management which is contributing to settled classroom learning environments. Classroom teaching practice in Years

9 and 10 could be further strengthened by a focus on formative assessment practice to ensure that students are receiving regular feedback about their progress and their next learning steps.

The principal is a capable, thoughtful and reflective educational leader. He is providing clear direction for staff, students, parents and the board. He has taken a key role in the development of the school-wide initiatives to raise student achievement, and in strengthening perceptions of the school in the wider community. He is ably supported within the school by a committed team of senior and middle managers.

Results

Improving Māori student achievement is an area of specific government interest. Therefore, ERO has collected information in that regard from schools that were evaluated. Four Te Kōtahitanga schools were evaluated by ERO during 2004-2006.

Analysis of these reports revealed how ERO views Te Kōtahitanga as a “school-wide professional development initiative.” In these reports ERO noted that Te Kōtahitanga is “informed by research based on New Zealand educational theory and practice” and is designed to:

- raise the achievement levels of Māori students through countering deficit theorizing, promoting positive relationships between students and teachers and improving classroom teaching practice;
- provide a framework for sustained and focused professional development which aims to improve Māori student achievement, enhance relationships between students and teachers and develop more effective classroom management strategies; and
- encourage the development of a culture of professional reflection about teaching practice and ongoing improvement.

Based on our analysis of these ERO reports, we found ERO acknowledged milestone reports indicate that Te Kōtahitanga is beginning to have a positive impact on teaching practice across schools. Other evidence of progress as a result of involvement in Te Kōtahitanga noted by ERO included:

- commitment by boards of trustees and principals to improving Māori student achievement, including a goal in strategic plans;
- regular consultation hui between boards of trustees, management, staff and the Māori community that contribute to a united approach toward raising Māori student achievement;
- implementation of Te Kōtahitanga by a significant number of teachers;
- significant shifts in teachers’ pedagogical approaches;
- significant shifts in behaviour management by focusing on engaging students in learning;
- improved teaching and learning through enhanced relationships with students that benefit student learning outcomes;
- encouragement of professional dialogue among teachers and reflection about best practice in teaching and learning;
- strengthened school-wide learning culture;
- improved collation and analysis of achievement information specific to Māori students;

- improved attitude of Māori students resulting in increased levels of participation and engagement with learning; and
- increased percentage of Māori students staying in school to Year 13 and leaving with qualifications.

Conclusion

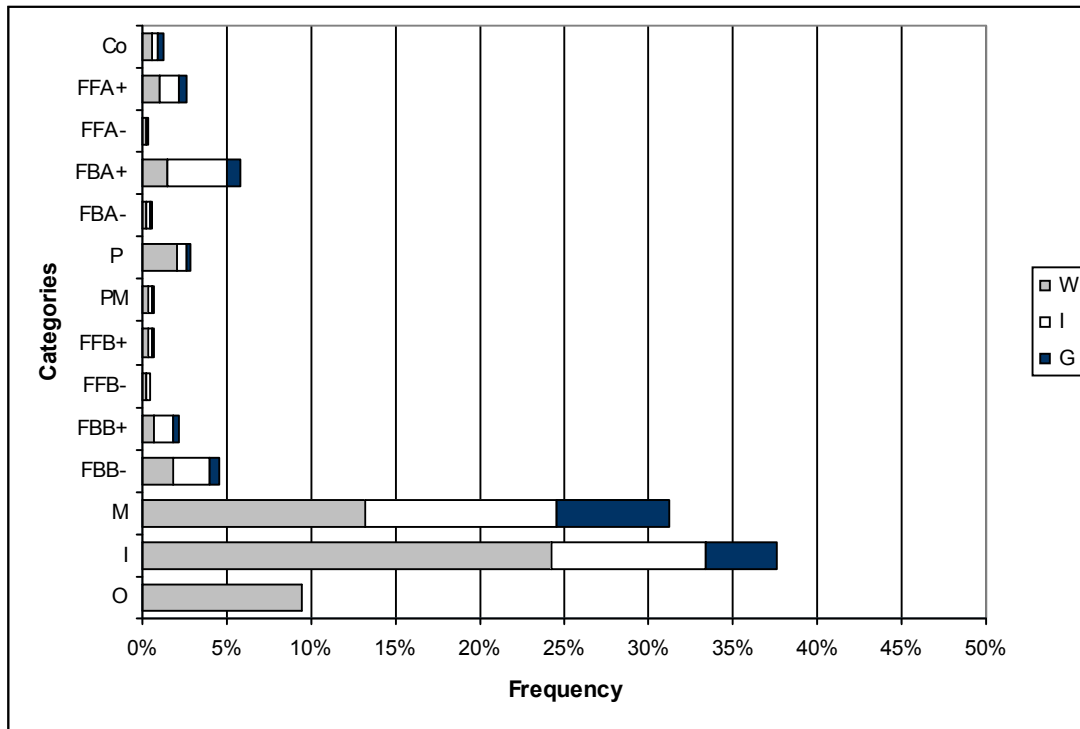
Improving Māori student achievement is a policy of current national interest. Te Kōtahitanga is focused on improving Māori student achievement. The Education Review Office (ERO) evaluates New Zealand schools on a regular basis and has focused in its reports on school-wide initiatives to improve Māori student achievement. As a result, in the four project schools ERO has evaluated since the project began in 2002, Te Kōtahitanga was a major element.

ERO recognizes Te Kōtahitanga as a research-based professional development program aimed at addressing the problem of underachievement of Māori students by countering deficit thinking about these students, promoting positive relationships between students and teachers, and improving classroom teaching practice. ERO has found project schools made progress toward this goal as a result of their involvement in Te Kōtahitanga. Boards of trustees and principals in project schools have committed themselves through strategic goals to raising Māori student achievement and entered into partnerships with management, staff, and the local Māori community to create a united approach to achieving this goal. As a result project schools have experienced improved learning outcomes for Māori students because of strengthened relationships between teachers and these students resulting in increased student engagement with learning.

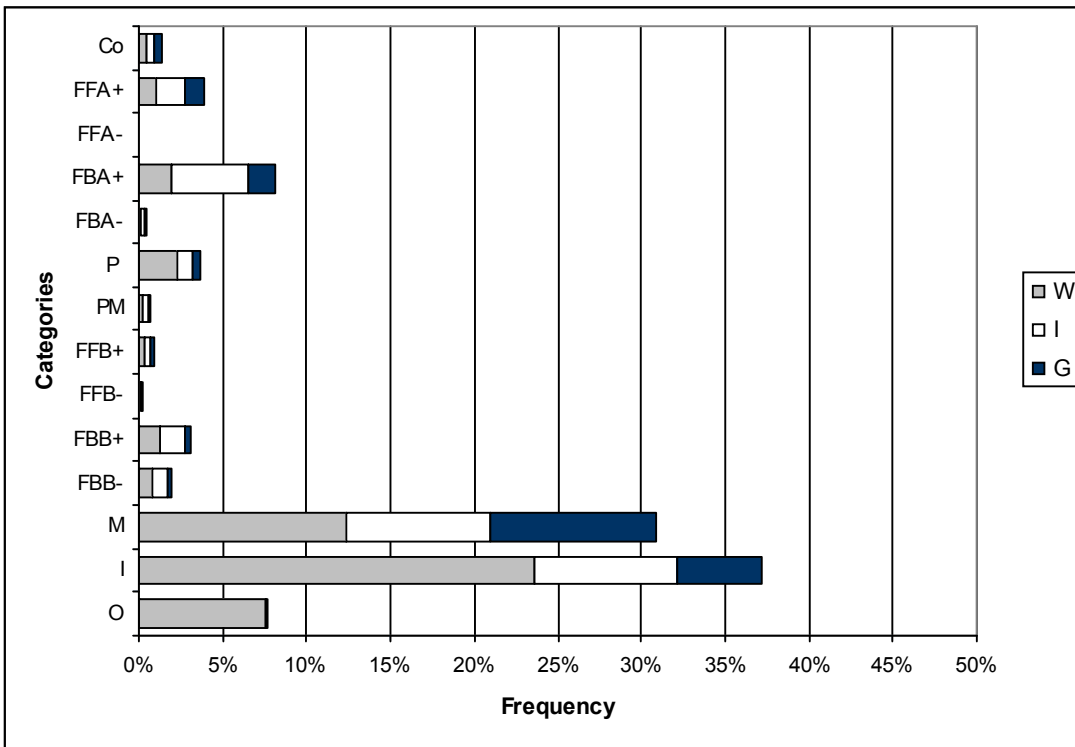
APPENDIX G

In the interest of space and ease of understanding, the full report included selected data to illustrate results from the in-school observation tool. For those people interested in looking at all the tables here is the full set of data results.

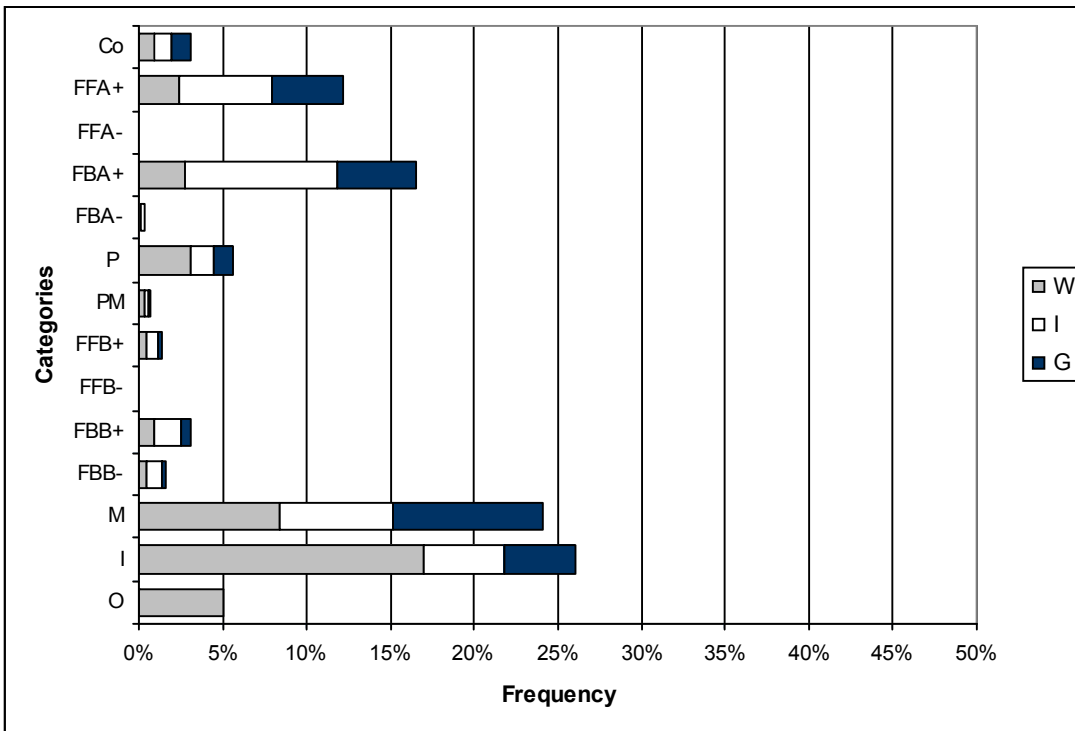
Cohort One observations 2003-2005



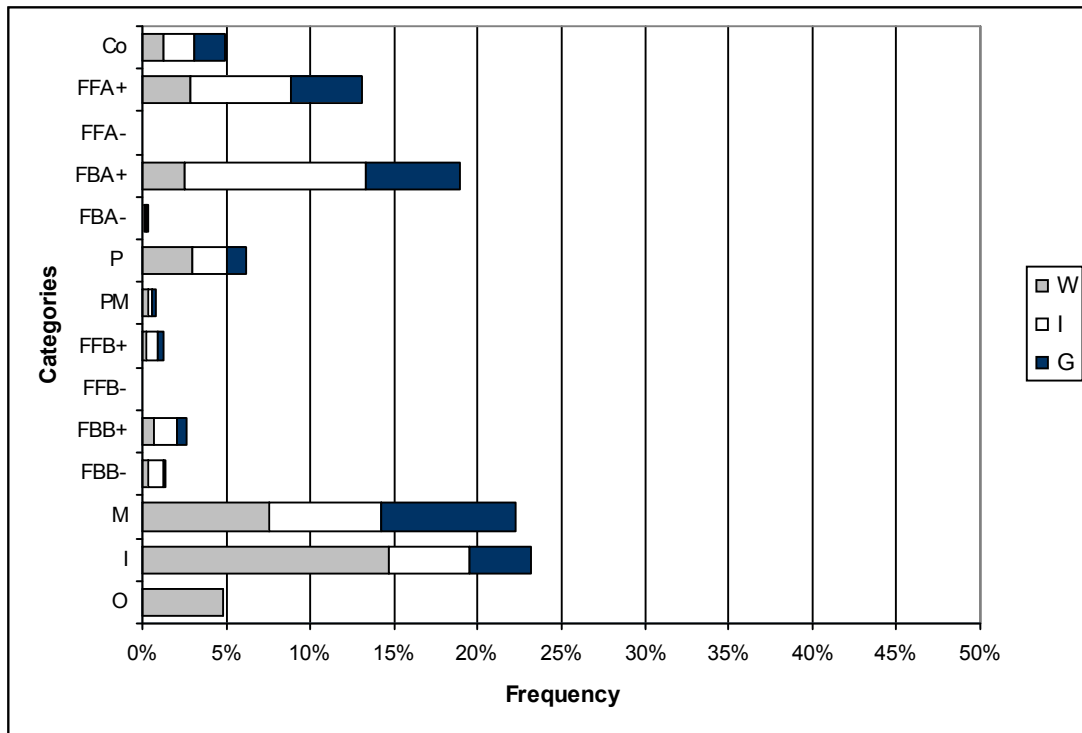
Cohort One: Baseline Observation, Term 4 of 2003 (n=330)



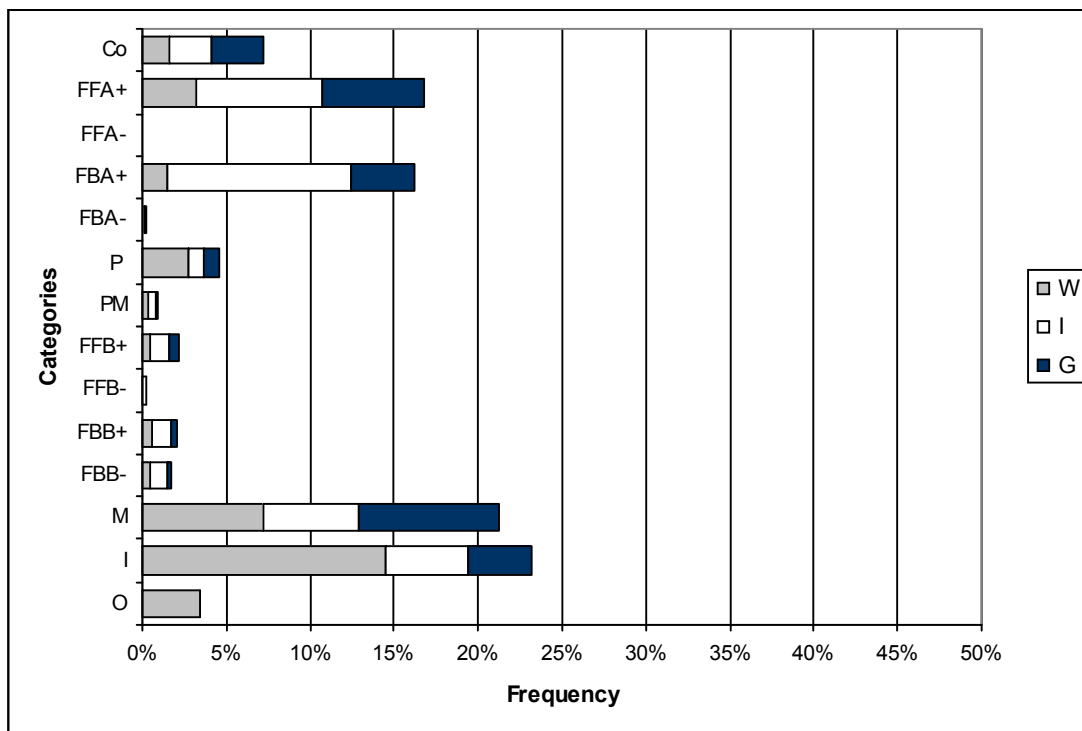
Cohort One: Observation 2, Term 1 of 2004 (n=325)



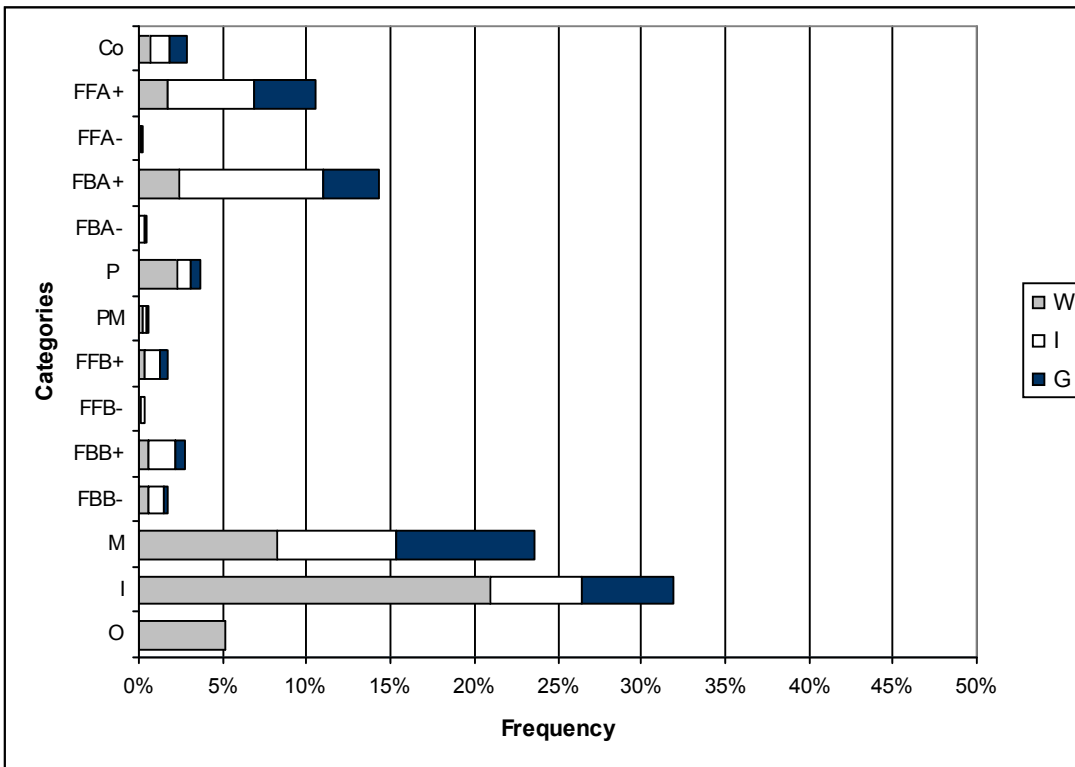
Cohort One: Observation 3, Term 2 of 2004 (n=304)



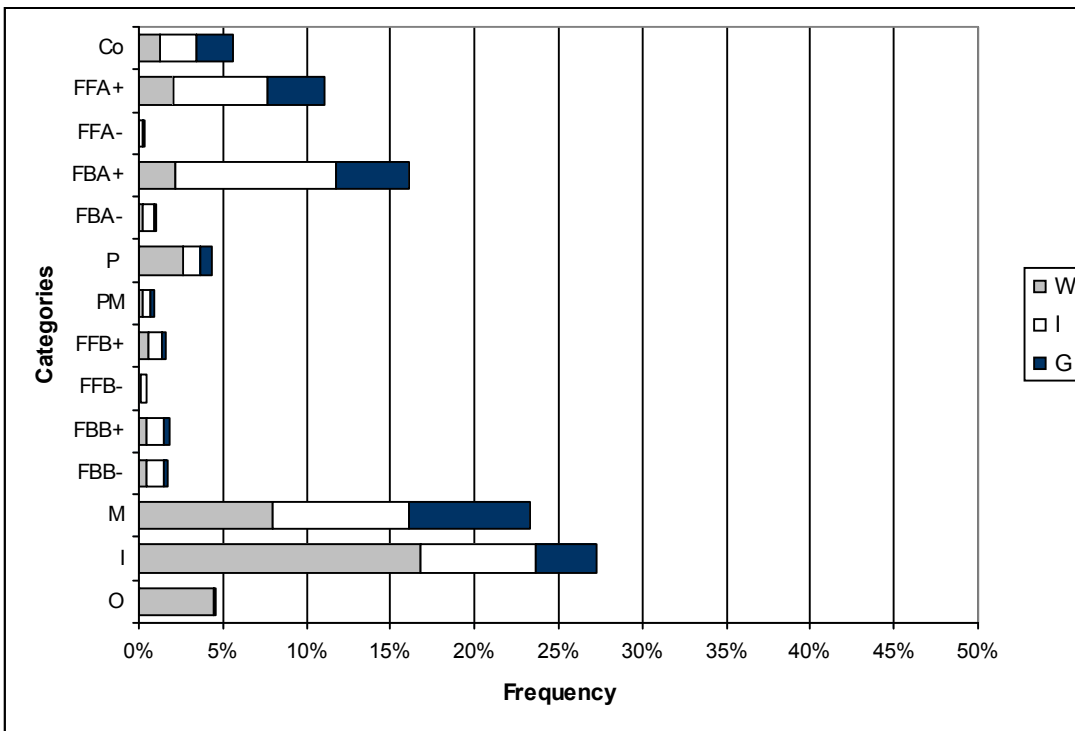
Cohort One: Observation 4, Term 3 of 2004 (n=261)



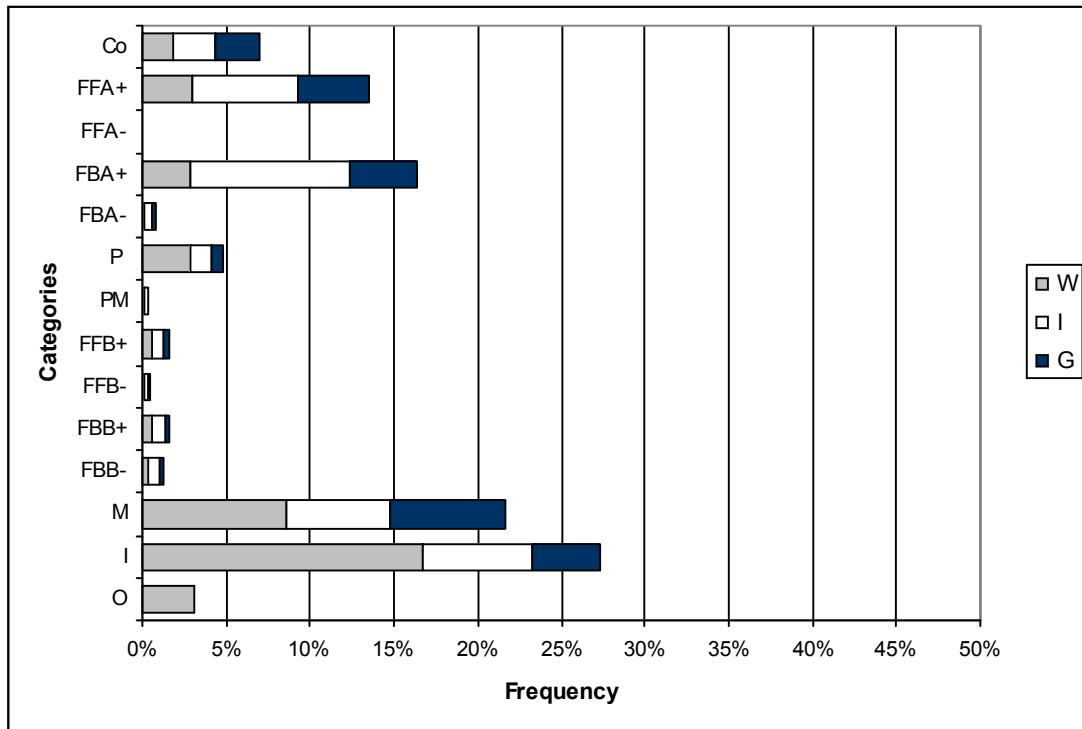
Cohort One: Observation 5, Term 4 of 2004 (n=112)



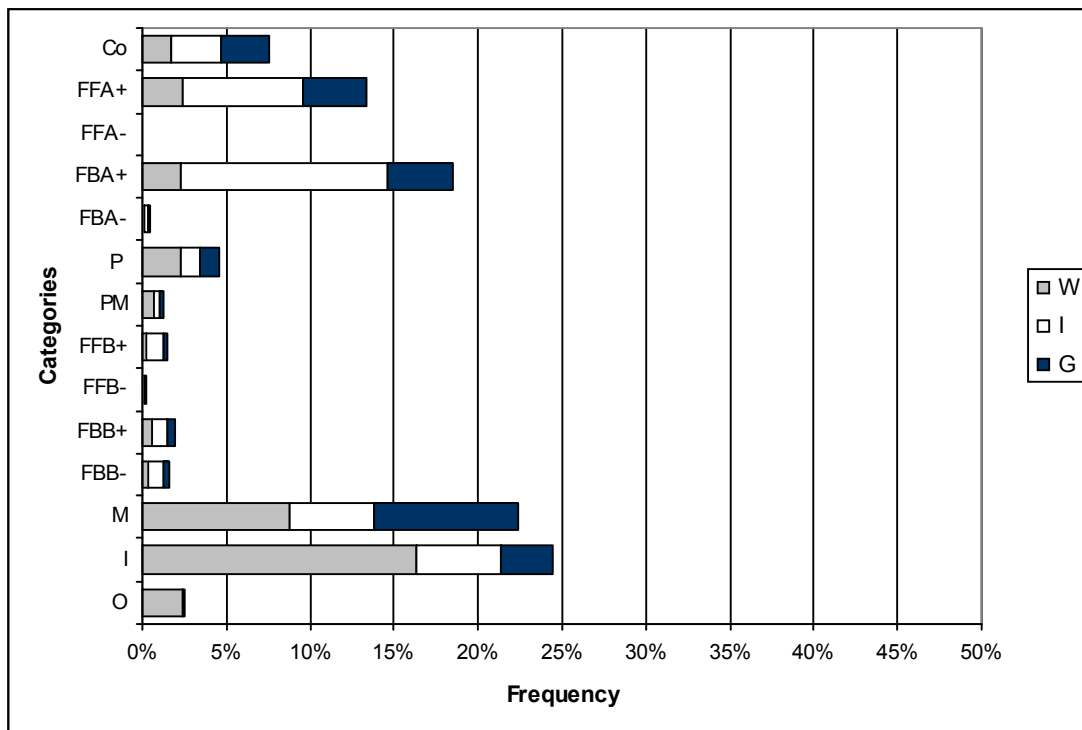
Cohort One: Observation 6, Term 1 of 2005 (n=209)



Cohort One: Observation 7, Term 2 of 2005 (n=186)

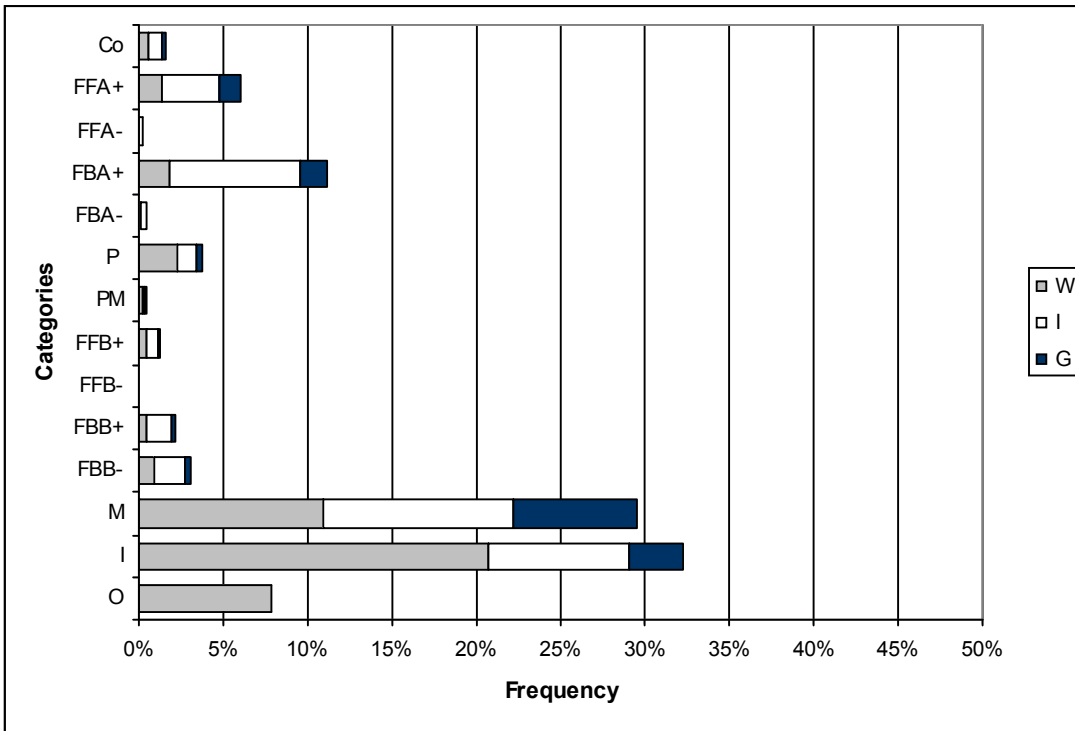


Cohort One: Observation 8, Term 3 of 2005 (n=180)

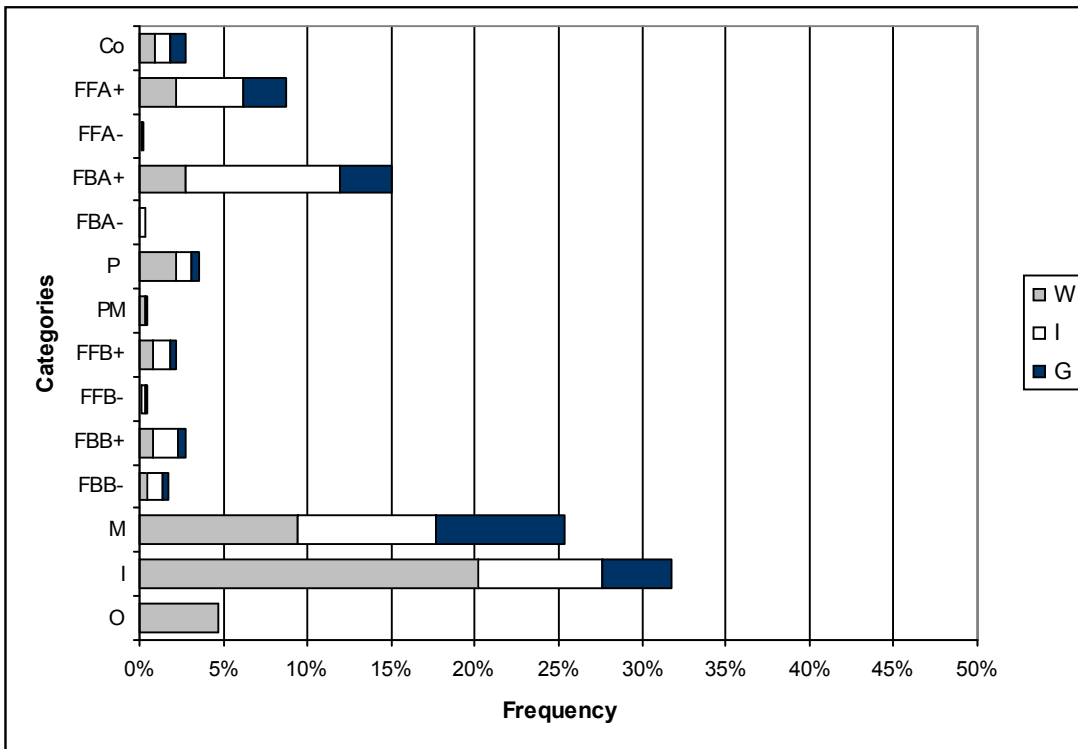


Cohort One: Observation 9, Term 4 of 2005 (n=135)

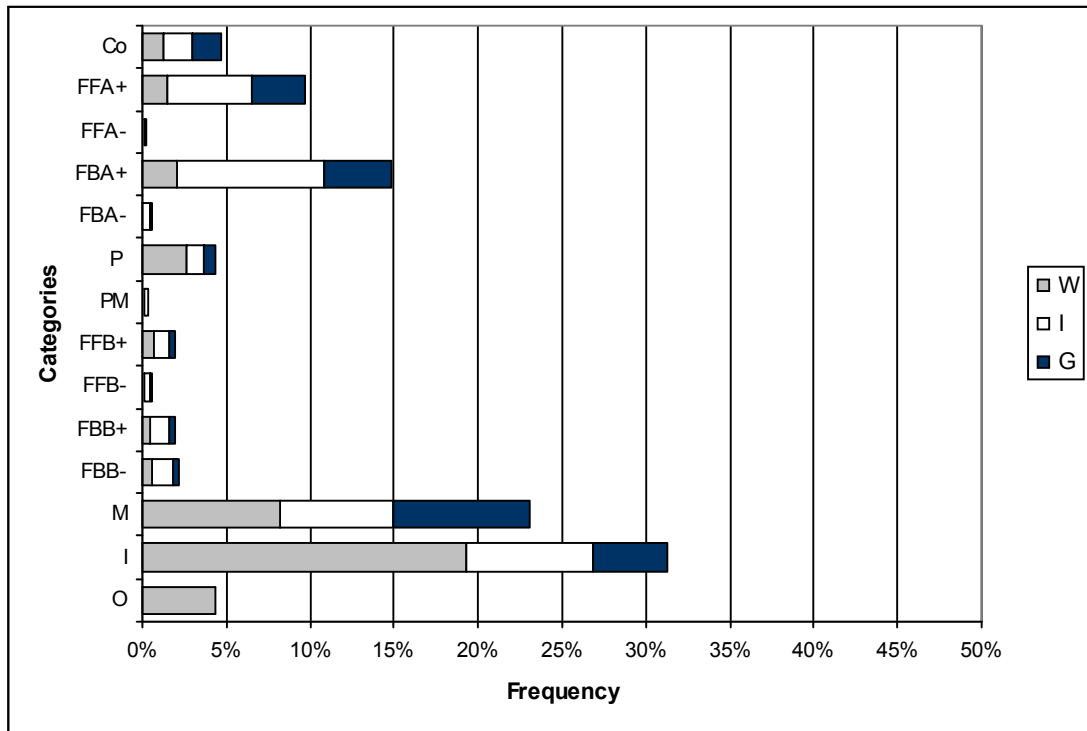
Cohort 2 Observations 2004-2005



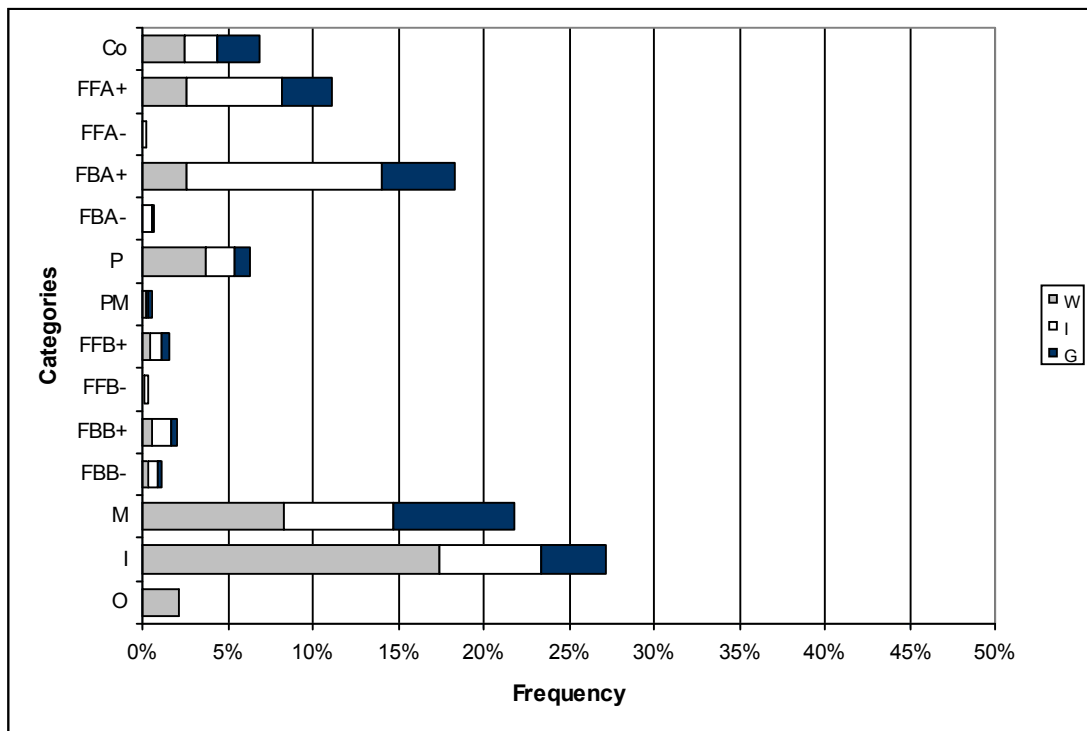
Cohort Two: Baseline observation Term 4 of 2004 (n=168)



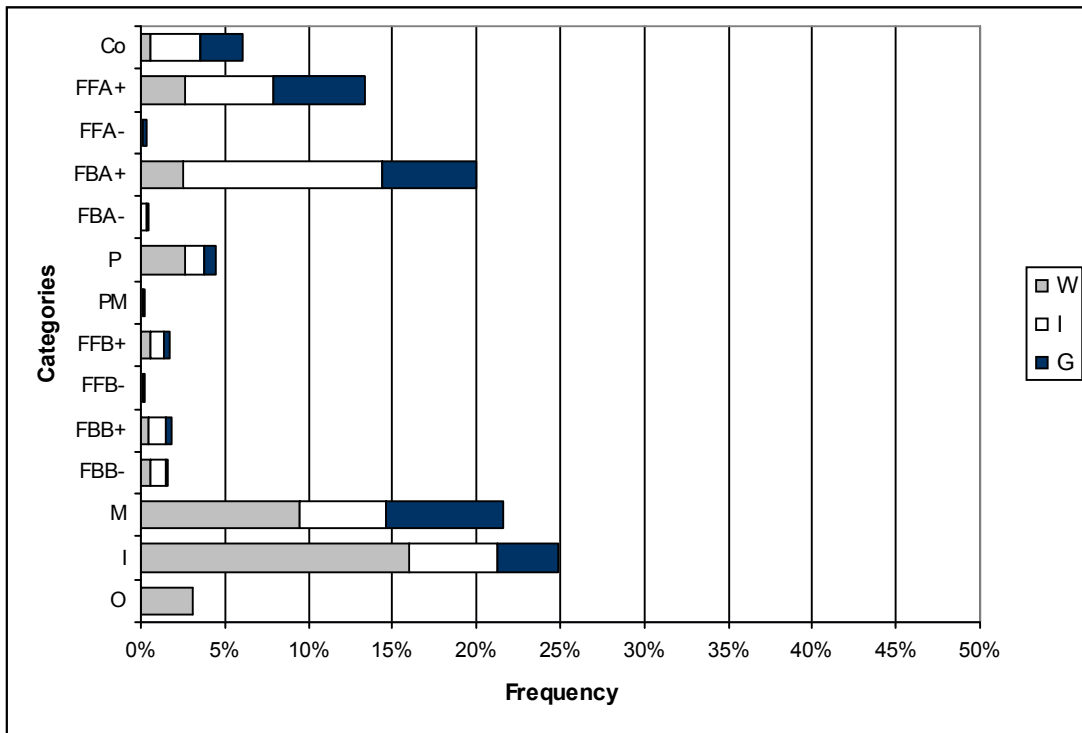
Cohort Two: Observation 2 Term 1 of 2005 (n=235)



Cohort Two: Observation 3 Term 2 of 2005 (n=211)



Cohort Two: Observation 4 Term 3 of 2005 (n=208)



Cohort Two: Observation 5 Term 4 of 2005 (n=117)