



Enhancing capacity to analyse students' writing

Libby Limbrick

2008



Teaching & Learning Research Initiative

P O Box 3237

Wellington

New Zealand

www.tlri.org.nz

© Crown, 2008

Acknowledgements

This project is the outcome of two and a half years of partnership between schools in the Manurewa Enhancement Initiative and a research team from the School of Languages, Literacies and Communication in the Faculty of Education, University of Auckland. As in all partnerships, successful outcomes are the result of close collaboration, mutual trust, and shared interest. The research team is most appreciative of the commitment and support of the boards of trustees, principals, and teachers of the schools involved. To our teacher-researchers, and the literacy leaders in these schools, we express our gratitude for allowing us to grow as practitioner-researchers alongside you.

The research team would also like to thank others who have supported the success of the project, especially Dale Leyland, whose administrative assistance was invaluable at all stages of the project. We are also grateful to our advisory group, Ministry of Education personnel associated with the Manurewa Enhancement Initiative: Gaye Russell, Elena Faamoetimoteo, and Carol Stoney. We would particularly like to thank Gaye Russell for being a constant source of advice and guidance throughout the project.

We also thank our colleagues in the School of Languages, Literacies and Communication for their interest in the project; and the Faculty of Education at the University of Auckland, especially Dr Mary Hill, Associate Dean of Research, for support and encouragement. The research team is also grateful to Uniservices Ltd for their management of the project. Finally our gratitude goes to the Teaching & Learning Research Initiative (TLRI) for funding the project over the two years.

Project team

University researchers (University of Auckland)

Dr Libby Limbrick

Pauline Buchanan

Marineke Goodwin

Helen Schwarcz

Literacy leaders and teacher-researchers

Clayton Park Primary School

Carol Styles

Joanne McKinnell

Marilyn Pritchard

Elizabeth Ross-Collier

Everglade Primary School

Joanne Thompson

Pravitha Singh

Paula Kingi

Manurewa East Primary School

Rae Baxter

Herman Tomsen

Vanya Huntley

Manurewa Intermediate School

Joanna Hardwidge

Mereana Timoteo

Roscommon Primary School

Sisi Key

Barbara Naidoo

Lisa Barnard

Lisa Carter

Jacinta Loto

Christine Patea

Rowandale Primary School

Sandra-Lee Campbell

Kay Morris

Suzanne Tom

Raumati Wynyard

Project advisory group

Gaye Russell, Literacy Strand Co-ordinator, Manurewa Enhancement Initiative

Elena Faamoetimoteo, Schooling Improvement Co-ordinator, Ministry of Education

Carol Stoney, Literacy Development Officer, Ministry of Education

Table of Contents

| | |
|---|-----------|
| Acknowledgements | i |
| 1. Introduction | 1 |
| 1.1 Aims | 1 |
| 2. Methodology | 5 |
| 2.1 Developing the partnerships | 5 |
| 2.2 Assessment of student achievement in writing | 6 |
| 2.3 Development of a teacher-researcher focus | 6 |
| 2.4 Developing understandings about writing and the assessment of writing | 7 |
| 2.5 Professional discussion | 8 |
| 2.6 The second year of the project, 2007 | 8 |
| 2.7 Enhancing the partnerships to ensure sustainability | 9 |
| 2.7.1 <i>Extending the research partnership: Writing mentors</i> | 9 |
| 2.7.2 <i>Professional discussions</i> | 10 |
| 2.8 Data collection | 11 |
| 3. Findings | 13 |
| 3.1 Student achievement | 13 |
| 3.1.1 <i>Overall writing achievement (asTTle Writing)</i> | 14 |
| 3.1.2 <i>Student achievement in selected schools</i> | 17 |
| 3.1.3 <i>Summary</i> | 20 |
| 3.2 Enhancing capacity to analyse students' writing using the English Writing Exemplars | 20 |
| 3.3 Teacher knowledge about the writing process and pedagogy for writing | 23 |
| 3.3.1 <i>The nature of writing</i> | 23 |
| 3.3.2 <i>The assessment of writing</i> | 24 |
| 3.3.3 <i>The writing process</i> | 24 |
| 3.3.4 <i>Pedagogical approaches for the teaching of writing: You can teach it!</i> | 26 |
| 3.3.5 <i>Awareness of research and role of professional discussion to support the teaching of writing</i> | 27 |
| 3.4 Case studies of three participating schools | 28 |
| 3.4.1 <i>Case study: School A</i> | 28 |
| 3.4.2 <i>Case study: School B</i> | 30 |
| 3.4.3 <i>Case study: School C</i> | 32 |

| | | |
|-----------|--|-----------|
| 3.5 | Sustaining the project beyond 2006 | 34 |
| 3.5.1 | <i>Establishing collaborative peer coaching within schools</i> | 34 |
| 3.5.2 | <i>Processes for sustaining achievement: The teachers' view</i> | 35 |
| 3.5.3 | <i>Sustaining the achievements into 2008 and beyond</i> | 36 |
| 4. | Limitations | 39 |
| 4.1 | Time | 39 |
| 4.2 | Availability of time in schools: Locality of schools and professional demands | 40 |
| 4.3 | Student achievement data | 40 |
| 4.3.1 | <i>Data collection</i> | 40 |
| 4.3.2 | <i>Analysis and interpretation of data</i> | 41 |
| 4.4 | Evidence of teacher knowledge about writing and writing pedagogy | 42 |
| 4.5 | Implementation of the mentoring process | 42 |
| 4.6 | Other issues | 43 |
| 5. | TLRI values | 45 |
| 5.1 | Strategic values: Nga hua rautaki | 45 |
| 5.1.1 | <i>Addressing diversity and reducing inequalities</i> | 45 |
| 5.1.2 | <i>Understanding the processes of teaching and learning</i> | 46 |
| 5.1.3 | <i>Exploring future possibilities</i> | 47 |
| 5.2 | Practice value: Nga hua ritenga | 47 |
| 5.2.1 | <i>Partnerships between practitioners and researchers (Principle Six)</i> | 47 |
| 5.2.2 | <i>The central role of the teacher in learning</i> | 48 |
| 5.3 | Research value: Nga hua rangahau | 49 |
| 5.3.1 | <i>Developing research capacity: The role of the TLRI in developing teachers' and university staff capacity as researchers</i> | 49 |
| 5.3.2 | <i>Dissemination of the project outcomes</i> | 50 |
| | References | 51 |

Tables

| | | |
|---------|--|----|
| Table 1 | 2006 and 2007 asTTle mean scores, curriculum overall levels, and levels for surface and deeper features of writing (consolidated sample) | 15 |
| Table 2 | Mean scores for all students in Years 4, 5, 6, 7, and 8, and total sample, 2006 | 16 |
| Table 3 | Mean scores for all students in Years 4, 5, 6, 7, and 8, and total sample, 2007 | 16 |

Appendices

| | | |
|-------------|---|----|
| Appendix A: | Partnership agreement between the project co-ordinator/researchers and teachers | 57 |
| Appendix B: | Planning documents | 61 |
| | Template for recording TLRI project | 61 |
| | Example of planning communication | 62 |
| Appendix C: | Documents used during the project | 63 |
| | Peer observations of writing | 63 |
| | Interschool meeting, November 2006 | 64 |
| | TLRI Interschool meeting, August 2007 | 66 |
| | TLRI final forum proforma, November 2007 | 67 |
| Appendix D: | asTTle Writing scores 2006–2007: Console reports | 69 |
| | 2006 Raw scores for median 75th and 25th percentiles and ranges (NZ norms for means, available only for the end of the year for asTTle V4, in brackets) | 71 |
| Appendix E: | asTTle Writing | 73 |
| | 2006 AsTTle WRITING SCORES FOR MARCH AND OCTOBER AND GAINS Mean AsTTle Writing (means and curricula levels) | 73 |
| | 2007AsTTle WRITING SCORES FOR MARCH AND OCTOBER AND GAINS Mean AsTTle Writing (means and curricula levels) | 74 |
| | AsTTle WRITING SCORES FOR MARCH AND OCTOBER AND GAINS MEDIAN, 75th PERCENTILE, 25th PERCENTILE AND RANGE | 76 |
| | English Writing Exemplars 2006 | 78 |

1. Introduction

1.1 Aims

The research, practice, and partnership goals of the Teaching & Learning Research Initiative (TLRI) provided the framework for this project. The aims were aligned to all the principles of TLRI¹ and in particular to Principle One: a strategic principle that aims to reduce inequalities and address diversity, understand the processes of teaching and learning, and, to some extent, explore future possibilities. It also has strong links with the practice goals of Principles Five and Six. These demand that projects should contribute to practice and lead to significant improvements and outcomes for learners. As stated below, this was the guiding principle for this project. Principle Six also states that projects should be undertaken as a partnership between researchers and practitioners. This tenet was also at the heart of this project and a guiding principle from its moment of inception.

The ultimate aim of this project was to raise students' writing achievement in a group of schools situated in South Auckland. Schools in the South Auckland area, which have a high proportion of Māori and Pasifika students, have reported low achievement, especially in literacy, for over 20 years (Ramsay, Sneddon, Grenfell, & Ford, 1981, cited in McNaughton, MacDonald, Amituanai-Toloa, Lai, & Farry, 2006). These schools were part of a Schooling Improvement Initiative, the Manurewa Enhancement Initiative (MEI), which is a cluster of 32 schools in Manurewa with 15,508 students, of which 37 percent are identified as Māori and a further 29 percent are identified as Pasifika. This cluster has the highest concentration of Māori students in the country. Māori and Pasifika students were not specifically identified in the schools participating in the project. Nonetheless, it is argued that outcomes might be relevant to raising achievement for Māori and Pasifika students because of the demographic of the schools.

In line with the strategic goals of the TLRI, the project's focus on reducing the disparity in student achievement arose partly because the National Educational Monitoring Project consistently reports Māori and Pasifika students' underachievement in writing. While there is some evidence that the disparity in writing achievement between Māori and Pasifika students and other students has reduced nationally in recent years (Crooks, Flockton, & White, 2007), low achievement levels in student writing samples in these MEI schools had been confirmed during a small investigation in 2005 (Limbrick, Buchanan, Goodwin, & Schwarcz, 2005). This study indicated that most of the

¹ The principles were revised and restated in 2008, after the implementation and reporting of this project. See <http://www.tlri.org.nz/about.html>

writing samples analysed from Year 1 to Year 8 students were at Levels 1 and 2. Even in the upper years, very few students were achieving at Level 3 or above, whereas *English in the New Zealand Curriculum* (Ministry of Education, 1994) suggests that the majority of students at Years 6 to 8 should be at Level 3 and above. Furthermore, it was evident that teachers' confidence in their ability to teach writing, and their knowledge of the writing process, was low. An earlier (2004) survey by MEI of 12 schools (of a potential 19) on approaches used to monitor students' writing achievement suggested that schools were assessing writing variably. The 2004 survey showed that a range of tools was used to assess writing and despite the fact that all schools in New Zealand had been supplied with English Exemplars of writing in 2005, only five schools reported using them. Additionally, it was apparent in this study, as has been reported by Timperley (2007), that few teachers were using assessment of writing either to inform their teaching or as a measure of their own effectiveness in teaching.

Thus another aim of the present study was to raise teachers' awareness of, and knowledge about, writing assessment and the potential of using a close analysis of students' writing assessments to inform their teaching and to target student needs. A number of recent studies have argued that when teaching is based on evidence and targeted to student needs, students' achievement can be raised (Buly & Valencia, 2002; Lai, McNaughton, MacDonald, & Farry, 2004; McNaughton et al., 2006; McNaughton, Phillips, & MacDonald, 2004; Symes & Timperley, 2003; Timperley & Parr, 2004). The students in most of the above studies, like the students in the MEI schools, were predominantly Māori and Pasifika who reportedly exhibited low achievement patterns. It was theorised that a key factor in raising achievement was teacher knowledge. These studies suggest that if the achievement of students traditionally viewed as "at risk" is to shift positively, then teachers need to be knowledgeable about their students, the purpose and practice of assessment, and the content knowledge of the subject, and then know how to use this information explicitly and purposefully in their teaching. They need to become "practitioner-researchers" as advocated by Robinson and Lai (2006).

A third broad aim of the project was to enhance teachers' knowledge about theories and practices for teaching writing. Until relatively recently there has been a paucity of research on the teaching of writing in New Zealand. Moreover, in contrast to the strong emphasis on professional development for the teaching of reading, professional development for writing has had minimal emphasis (Aikman, 1999). Many teachers lack confidence in teaching writing and knowledge about the process of writing. Indeed, research in New Zealand and internationally has suggested that teachers can unintentionally make writing difficult for some students, especially those from diverse backgrounds (Glasswell, Parr, & McNaughton, 2003a, b; Labbo, Hoffman, & Roser, 1995). The reported low achievement of Māori and Pasifika students, nationally and in these schools, may be a result, partly, of the wide range of teachers' understandings of writing and the writing process.

The second and third aims of this project contribute to the practice goals of the TLRI, specifically Principle Five which states that the TLRI recognises the central role of the teacher. Teacher knowledge is a central component of effective practice and critical if students' achievement is to

be optimised (McNaughton et al., 2006; Ministry of Education, 2003, 2006; Pressley, Allington, Wharton-McDonald, Block, & Morrow, 2001; Wray, Medwell, Fox, & Poulson, 2000).

An additional overall aim of the project was for the university researchers, through working in partnership with teachers in these schools, to encourage them to bring a researcher's lens to their practice. Research has also shown that teachers' engagement in researching their own practice is pivotal to the sustainability of school improvement and to fulfilling goals related to students' achievement (Robinson, 2003; Robinson & Lai, 2006). As Robinson and Lai state:

While it would be unrealistic to expect teachers to pursue substantial research in the course of their full time work, we believe there are good reasons why a research role should become a more important part of teachers' professional lives. Perhaps the most compelling reason lies in the nature of good teaching. Good teaching is reflective, based on high quality information and constantly improving. (p. 5)

Finally, this study was influenced by research which indicates that there are a number of benefits of teacher-researcher partnerships. Such relationships between academic researchers and practitioners have been shown to have positive effects on student achievement (Oliver, 2005). These include benefits to teachers' knowledge, encouragement of collaborative practice (Flack & Osler, cited in Oliver, 2005), and the development of self-efficacy and professional self-esteem (Berger et al., cited in Oliver, 2005). These elements have been identified as contributing to sustainability of professional development (Timperley, 2003). In addition, the university researchers, who are teacher educators, recognised the benefits for their pre- and in-service practice in working collaboratively with teachers to gain greater insights into the teaching of writing. The context also provided the opportunity for the university researchers, who as teacher educators had not previously had the extensive opportunities to engage in research, to build their capacity as researchers.

Thus the three aims stated at the outset of the project were to:

- raise student achievement in writing and reduce reported disparity in writing achievement for Māori and Pasifika students through strengthening teachers' understanding and use of assessment data in writing to modify instructional programmes
- enhance teachers' capacity to analyse students' writing, using the English Exemplars (2003), and to strengthen teacher practice in using evidence to inform teaching
- enhance teachers' knowledge about the principles and practices of effective pedagogy for writing through engaging in robust professional discussion in quality learning circles.

Four objectives stemmed from these initial aims. These were to:

- investigate and strengthen teachers' understanding of the writing process in schools that have high proportions of Māori and Pasifika students
- enable teachers to use writing achievement data to inform the teaching of writing processes
- investigate the role of professional discussion about students' writing to enhance teachers' knowledge about writing processes and writing pedagogy

- investigate teachers' perception of their own confidence and competence in teaching writing as a result of participation in quality learning circles focused on writing.

As the first year progressed, teachers' practice began to show signs of moving towards a pedagogy that was not only informed by what their students had achieved, and needed to achieve, but also reflected a greater understanding of the process of writing and writing instruction. However, it was clear that if these gains were to be sustained and to impact on student achievement throughout the school, more teachers needed to embrace a "researcher's approach" to the teaching of writing. Consequently, applications were made to TLRI to extend the project. The enthusiasm, and increased knowledge and confidence, of the participating teachers could be a resource to enhance the teaching of writing, and student achievement, more widely throughout the school to ensure sustainability.

Funding for the second year of the project resulted in the addition of a fourth aim, to:

- develop collegial and collaborative peer coaching networks in the participating schools to strengthen teacher practice and to sustain the professional growth of teachers, in order to raise student achievement throughout each school.

Research literature has demonstrated the power of professional discussion and peer coaching to develop and consolidate teacher knowledge (Annan, Lai, & Robinson, 2003; Robertson, 2005; Timperley, 2003). It was hypothesised that if the teacher-researchers from 2006 took a leadership role in embedding a research perspective to the teaching of writing further through their school, this would not only consolidate their own professional growth but would also lead to sustainability of the process with their school. Thus arose the specific objective of developing mentor systems in each of the schools.

Therefore, the following overarching research questions were at the heart of the project:

- Can teachers working as researchers of their own practice, in partnership with university researchers, develop greater capacity and confidence in teaching writing?
- Will students' low achievement in writing be raised when teachers are using evidence from students' writing to inform their practice?
- Can teachers develop collegial coaching relationships within their schools to consolidate and sustain professional development for the teaching of writing?
- Can a partnership between classroom teachers and university researchers strengthen the research capacity of both partners and further their knowledge about the teaching of writing?

2. Methodology

2.1 Developing the partnerships

In 2005, prior to getting funding from the TLRI, eight schools in the MEI had identified an interest in participating in a collaborative research project. Partnership agreements were drawn up and signed between the boards of trustees of the schools and the Faculty of Education, University of Auckland (see Appendix A). Once funding was confirmed, planning meetings were held with the literacy leaders and a Ministry of Education advisory group and later with the teachers, who were to be the teacher-researchers, to finalise the collaborative process. Planning meetings were held early in 2006, and progress meetings took place at various times during the year with the literacy leaders and an advisory group from the Ministry of Education. At this initial stage the project was conceptualised as being for one academic year. The decision to apply for funding for a second year to extend the project was made half way through 2006.

In the first year of the project, 25 teachers in eight schools, together with the literacy leaders in the schools, took part in the study. In each school, one teacher at Years 2, 4, 6, and 8 participated (two schools had classes at each level and one school was an intermediate school with Years 7/8 classes). A number of the classes were composite classes; for example, Years 2/3, 4/5, or 5/6. The schools are not named but are identified as schools A to H.

Four university researchers, who had had variable research experience, participated. In order to develop strong relationships, specific partnerships were developed between the teacher-researchers in the schools and the university researchers. The university researchers worked in pairs with the teacher-researchers. Each pair of university researchers worked in four schools consistently throughout the two years. However, for all planning meetings with the literacy leaders and advisory group and interschool meetings, all participants worked together.

During 2006, the development of the proposal to apply for funding to extend the project into a sustainability phase was undertaken collaboratively by the literacy leaders, the teacher-researchers, and the university researchers. A request was put to the boards of trustees of the participating schools to extend their partnership agreement for a further year. All schools agreed initially, although two schools (G and H) subsequently had to withdraw due to internal issues that had arisen in the schools, or staffing changes.

The research had three components designed to answer the project questions in Year 1.

2.2 Assessment of student achievement in writing

Standardised assessment of student achievement in writing was necessary in order to establish whether the project had resulted in gains in writing achievement that aimed to reverse the reported low achievement. Pre-post assessment of student achievement in writing was determined (in March and September/October) using asTTle Writing for students in Years 4, 6, and 8, and the English Writing Exemplars (Ministry of Education, 2003) for students in Year 2. This is because asTTle does not assess below Level 2 of *English in the New Zealand Curriculum* (Ministry of Education, 1994). In 2006, approximately 750 writing samples were gathered by the teacher-researchers and 25 percent of these were analysed by the university researchers, and a sample moderated. In 2007, writing samples were gathered from a wider range of classes as additional teacher-researchers were included (see comment below). These were analysed by a research assistant trained in asTTle assessment analysis. A sample of the asTTle data was moderated by the university researchers. Obtaining a control group for these schools was considered in order to provide greater experimental rigour. However, it was deemed inappropriate to include a school in the MEI area that was not participating in the project as a control school on ethical and practical grounds. Without substantial data gathering in the additional school it would not be possible to determine what, if any, professional development had been undertaken during the year. It was intended that, to enable a comparison of progress prior to the project, asTTle data would be compared with data collected in the schools during 2004. As will be noted later, this was not possible.

The English Writing Exemplars were not used to measure gains across the project, with the exception as noted above for the students in Years 1 to 3. They were, however, the basis of classroom assessment of students' writing for three reasons. The first is that they had been introduced to all schools in the MEI area as a Ministry of Education writing assessment tool in the two years prior to the project and, secondly, they can be used diagnostically as a basis for establishing the "next steps" for students. Thirdly, they were considered a powerful tool to enhance teachers' knowledge about the features and processes of writing, and as a base to extend their metalanguage as a basis for interrogating writing (Limbrick, Kirton, Knight, Funaki, & Evans, 2004; Limbrick, Knight, & McCaulay, 2005).

2.3 Development of a teacher-researcher focus

A major focus for the project was to use student assessment data more effectively to inform teaching and to target students' needs using an action research process. Each participating teacher-researcher undertook a problem-solving approach to improve the writing achievement of students in the class. In each school, teacher-researchers specifically focused on analysing students' writing and used the evidence to target instruction for students, particularly those who

were struggling with writing. This involved an iterative process of identifying and analysing the problem and fact finding (assessment and reflection), planning (consultation and reviewing relevant literature), acting (implementing the plan), monitoring and observing, evaluating and reflecting, modifying, redefining, and replanning (Cardno, 2003). The teachers worked collaboratively with the university researchers at each step of this process.

Using the English Writing Exemplars as a diagnostic tool, teachers identified the strengths and needs of their students, and used this information to establish a specific teaching focus. Some teachers decided to concentrate their research focus on a small group while others identified a particular aspect of writing pedagogy for the whole class. The teacher-researchers were encouraged to keep a research log in which they recorded the identified strengths and needs, not only of their students but also on reflection—of their own teaching strengths and needs. The university researchers provided advice and guidance on both the research process and writing pedagogy. They documented the process keeping field notes. In doing so they were able to evaluate, reflect on, and refine their understandings of the requirements of action research, and to evaluate their own knowledge of writing pedagogy.

2.4 Developing understandings about writing and the assessment of writing

At the beginning of 2006, a workshop for the participating teacher-researchers in all schools was held to develop an understanding of the purpose and use of the English Writing Exemplars. Most of the teachers in the participating schools were not familiar with the English Writing Exemplars and lacked confidence in using the indicators to assess surface and deeper features, despite the fact that they were nominally adopted by schools in the MEI area in previous years. The workshops included opportunities to negotiate and ascribe levels to the students' writing based on the indicators of the Exemplars, and to identify how this information might be used to establish "where to next?" in meeting the needs of the students. Following the workshops, schools undertook moderation of students' writing, basing their justification on evidence linked to the Exemplars. Recent research (Limbrick et al., 2004; Limbrick et al., 2005) has suggested that a focus on students' writing and opportunities to discuss writing and writing achievement has led to teachers being more knowledgeable about the writing process. Through close analysis and moderation of student writing achievement, both within and between schools, teachers have developed greater confidence in their ability to assess and teach writing based on robust evidence.

University researchers met twice a term with the teacher-researchers in each school to:

- examine samples of students' writing, identifying strengths and needs in relation to surface and deeper features of writing
- discuss action plans, and share knowledge and understanding of practices that would:

- target students' learning needs in writing
- extend and refine teachers' knowledge about writing pedagogy and the writing process
- introduce teachers to relevant resources
- support teachers' development of a metalanguage for writing to scaffold further discussions
- deepen awareness of the process of researching one's own practice.

2.5 Professional discussion

As an integral component throughout the research, professional, school-based discussions were planned and undertaken between the literacy leaders, teacher-researchers, and university researchers. Professional discussions were also established between the teacher-researchers and literacy leaders independently within the schools. The focuses of these discussions were the teachers' goals based on reflection on the data and their own teaching practice. The in-school discussion groups, which were referred to as "quality learning circles" (QLCs), were included because recent research has suggested that discussion in QLCs can help teachers develop and refine a metalanguage for written language (Limbrick et al., 2004). It has also been suggested in both New Zealand and overseas research that when teachers engage in "learning talk" there can be positive outcomes for student achievement (Annan et al., 2003; Ball & Cohen, cited in Robinson, 2003, p. 29; Timperley, 2003). Professional discussion can enhance teacher knowledge and student achievement. Through such discussions, teachers can examine their own pedagogy in relation to student achievement, building on identified sound practice, strengthening weaknesses, and overcoming gaps in knowledge (Robinson, 2003). However, Timperley (2007), in her inaugural professorial address at the University of Auckland, emphatically makes the point that talking is not enough: talk must also transform teacher practice:

Professional development can make a difference, for example, but only if the focus is on how teachers can make a difference to their students if they do things differently. (p. 7)

"Doing things differently" became an important aspect of each teacher's action plan.

Professional discussion also took place at interschool meetings on two occasions in 2006, and again in 2007. These interschool meetings provided the opportunity for teacher-researchers across the schools to discuss their research focus, developments, and concerns in relation to the major aims of the study and the research partnership process. They also provided rich opportunities for data collection.

2.6 The second year of the project, 2007

The structure of the project during the second year, 2007, was similar to that of the first year. Seven schools were part of the project at the beginning of 2007. One school decided not to

participate because of substantial teacher turnover. In the latter part of the year, a second school had to withdraw. Although the aim was to maintain the same spread of year levels across each school, teacher reallocation within some of the schools meant that this was not possible. Planning meetings were held early in 2007, and progress meetings took place at various times during the year with the literacy leaders and the Ministry of Education MEI leaders. Two full meetings of literacy leaders, 2006 teacher-researchers, university researchers, and an MEI representative were held.

2.7 Enhancing the partnerships to ensure sustainability

In order to meet the aim for the second year, which was to consolidate the aims established for the project and to develop systems to sustain the teachers' professional growth and continue the achievement growth for students, the 2006 teacher-researchers undertook greater leadership in the research partnership.

2.7.1 Extending the research partnership: Writing mentors

Late in 2006, teacher-researchers who had participated in the project were invited to take on a mentoring role with one or two colleagues during 2007. As discussed later, not all 2006 teachers were able to take on this role, because either they had left the school or personal circumstances precluded their participation. The intention was that they would act as models for, and coaches to, their colleagues in becoming practitioner-researchers. They would be encouraged and supported to use similar collaborative processes to those established between themselves and the university researchers in 2006. These teacher-researchers were designated "writing mentors". The literacy leaders, in consultation with the writing mentors, selected new teachers with whom to work during 2007. These teachers are referred to as "the 2007 teachers".

Early in the year a workshop in coaching skills was undertaken by a literacy leader. Literacy leaders in the MEI had been engaged in professional development to develop coaching skills with the MEI facilitator during the previous year. This was to be supported by peer feedback and support structures in the schools, together with ongoing professional discussion with the university researchers.

The three main focuses of the project as described for 2006 were continued. These were: assessment of students' writing; an action research process using writing assessment data to guide teachers' action plans for teaching; and professional discussion between university researchers, within school QLCs and through interschool meetings.

Both writing mentors and 2007 teachers were involved in the problem-solving process of identification, analysis, and fact finding (reflection); planning based on consultation and relevant literature; implementation of the action plan; monitoring and observing; evaluating and reflecting; and modifying, redefining, and replanning for their own teaching. The writing mentors modelled

the research process within their own classes and supported their colleagues, the 2007 teachers, to develop similar action plans, and to view themselves as teacher-researchers. Both writing mentors and 2007 teachers identified professional teaching strengths along with areas for development in the teaching of writing. They also collaboratively identified students' strengths and needs, and established at least one specific teaching focus within their writing practice, recording these on the same proformas as those used by the teacher-researchers in 2006 (see Appendix B).

Peer coaching through observation and feedback was included to enable a shared focus on the goals they had established. The reflective sessions provided for the examination of teachers' own pedagogical practice in relation to targeted teaching. The discussions were also opportunities to give and receive feedback. In discussing the place of dialogue involved in peer coaching, Hill et al. (2006, p. 17) cite Southworth (2000) who claims it is essential that teachers engage in this sort of dialogue if they are to improve student achievement. These observations of each other's teaching by the writing mentors and 2007 teachers, and subsequent discussions, took place through internal school arrangement. However, challenges for school organisation meant that these did not occur as frequently as planned.

2.7.2 Professional discussions

Two meetings per term were held between university researchers and writing mentors to discuss the mentoring process, progress on goals, challenges, and highlights. While providing for focused, reflective links to the aims of the research project, they also aimed to generate professional discussion on practical strategies and useful resources as required. The purpose was to support the mentors in their guidance role with the 2007 teachers.

Interschool meetings were held twice during 2007. A mid-year interschool meeting focused on progress and challenges. The writing mentors and literacy leaders discussed their participation and learning to date. A final interschool meeting was held in November 2007. Discussion was based around three key questions. These presentations were prepared collaboratively by the writing mentors, 2007 teachers, and literacy leaders within each school. All discussions were taped and notes taken during the forum. The forum enabled teachers to contribute their authentic experiences and responses, and to assess their achievement of the research aims and their perceptions of what it meant to be a teacher-researcher. At this meeting schools were asked to identify how they were going to ensure sustainability of the focus on raising student achievement in writing and what were the key understandings that they had gained as teacher-researchers through the project.

In summary, the major focus for the second year of the project was on developing systems to support sustainability of the professional development in the schools and to consolidate teachers' roles as teacher-researchers.

2.8 Data collection

To provide evidence of student achievement the following assessment tools were used:

- asTTle Writing (students in Years 4–8)
- English Writing Exemplars (students in Years 1–3).

Teacher anecdotal reports complemented the standardised assessment tools. To provide evidence of teachers' use of evidence to inform teaching, knowledge about writing and writing pedagogy, implementation of the mentoring process for sustainability, and teacher-researchers' knowledge and application of the research process, the following sources were analysed:

- action planning documents
- field notes from teacher-researcher and university researcher meetings
- literacy leaders' summary notes to contribute to milestone report
- prepared documents by teacher-researchers and literacy leaders
- transcripts from interschool meetings.

3. Findings

3.1 Student achievement

To gauge whether the project met its main goal of raising student achievement, asTTle Writing (Years 4–8) and English Writing Exemplars were administered in March and September/October of each year (see Section 2.2). While it was accepted that standardised assessment tools need to be used in order to compare achievement across a time span, it was also recognised that using data from “one-off” assessments of writing samples to assess the impact of changes in teacher pedagogy and ongoing interactions with students is problematic when working with small numbers of students. Reliability of data can be affected by issues such as students’ response to the atypical writing context of a formal assessment task, students’ interest in the standard writing topic and text form of the task at any one assessment point, and student attitudes on the day. Any of these factors can influence students’ outputs and markedly skew mean data when the group is small in number. Furthermore, mean data obscures within-class variability of the student achievement data. Examination of specific patterns of student achievement can enrich the insights into students’ outcomes, and the possibility of judging whether particular patterns of student achievement may have been contingent on changes in teachers’ practices. Therefore specific student data within some individual classes in the participating schools will be discussed later.

There were a number of problems which potentially compromised the reliability of the student writing achievement data set obtained. The systems established by the university researchers in consultation with the schools in the first year led to inadequate data in a number of cases. Problems arose because a substantial number of students were not present at both the first and second assessment time. This was further compounded because the coding of samples, to ensure anonymity by the teachers, was inconsistent. In some cases the resultant sample was very small. In addition, some class data were not received for analysis from the schools. It was evident that the expectations of the university researchers were not sufficiently clearly articulated to be actioned by teachers coping with complex pressures in classrooms. These issues are further discussed in Section 4, Limitations.

As a result, more reliable systems were put in place during the second year of the project. Better processes for the collection of the data from schools were put in place and the coding of samples was undertaken by a research assistant to ensure consistency. Even so, data sets from some schools are still incomplete. It became evident that data collection in schools needs to be

managed in a reliable and systematic manner so accurate evaluation of student achievement can be ensured.

The following section will comment firstly on overall patterns of achievement in the schools, and then examine some specific schools, so that a greater understanding of students' response to the interventions can be evaluated.

Writing sample scores were examined to evaluate change over the seven months (March to October) in each year independently. Although comparison of gains in two adjacent years may have provided further insights into the impact of the project, it was not possible to make comparisons between 2006 and 2007. Students could not be tracked from one year to the next, a number of teachers moved year groups, and both students and teachers left the schools.

The achievement data are presented as follows:

- overall curriculum levels and curriculum levels for surface and deeper features of writing (Table 1)
- overall mean asTTle Writing scores for all students in 2006 and 2007 (Tables 2 and 3)
- overall mean asTTle Writing outcomes for surface and deeper features presented in consular form to indicate achievement in relation to national norms and variance (Appendix D.1)
- median scores together with scores indicating 75 percent and 25 percent percentiles and upper and lower limits of the range of scores for each year group in 2006 and 2007 (Appendix D.2).

Case study school data (for the case study schools) in 2007 are reported in Appendix E. Data from 2006 are included for only two of the case study schools as some class data are missing and, overall, the numbers are small and thus very unreliable. The data presented include:

- 2006 asTTle Writing for schools B and C (Appendix E.1)
- 2007 asTTle Writing presented in tabular form for classes across year groups with mean total scores, overall mean curriculum levels, mean curriculum levels for surface and deeper features of writing, and mean change in overall scores and curriculum levels between March and October (Appendix E.2)
- asTTle Writing in 2007 reporting median scores, scores for the 25th and 75th percentiles, the upper and lower range of scores, and differences between the March and October assessment points for each participating year group (Appendix E.3)
- writing achievement of students below Year 4 assessed using the English Writing Exemplars (Appendix E.4).

3.1.1 Overall writing achievement (asTTle Writing)

Curriculum levels to be achieved by each year group are only broadly described in *English in the New Zealand Curriculum* (Ministry of Education, 1994), but a general expectation is that one sublevel a year represents satisfactory progress. It can be noted in Table 1 that, across the participating year groups for both the asTTle Writing scores and for surface and deeper features of

writing, an average of one sublevel was achieved. This suggests at least satisfactory progress according to curriculum expectations has been achieved. However, given that students in these schools have had baseline scores considerably below New Zealand norms, such “satisfactory gains” should not be accepted: gains need to be more than “satisfactory” if the low levels of writing achievement in the schools are to be improved.

Table 1 **2006 and 2007 asTTle mean scores, curriculum overall levels, and levels for surface and deeper features of writing (consolidated sample)**

| | 2006 | | | | | 2007 | | | |
|---------------------------|-------|-------|---------|--------|---------------------------|-------|-------|---------|--------|
| | Score | Level | Surface | Deeper | | Score | Level | Surface | Deeper |
| March | 414 | 2P | 2P | 2P | March | 324 | 2B | 2B | 2B |
| October | 470 | 2A | 2A | 2A | October | 385 | 2P | 2P | 2P |
| Difference (sublevels) | 56 | 1 | 1 | 1 | Difference (sublevels) | 61 | 1 | 1 | 1 |

However, examination of the raw scores suggests that reference to changes in level only may be misleading. Assessing gains based on asTTle Writing scores provides a more exact measure of actual gains in performance on the asTTle Writing task. The asTTle V4 manual (Ministry of Education, 2005) reports that, for appropriate progress according to New Zealand norms, gains scores should be, on average, 27 raw score points. Consolidated data across the schools from the March and October assessment points (Table 1) demonstrate students in the schools made, on average, a gain of 56 during 2006 and 61 during 2007, periods of less than a year. Thus schools participating in the project were exceeding New Zealand norms by 100 percent.

The mean asTTle levels are lower across the total sample in 2007. This is due, probably, to the slightly larger proportion of students from Years 4 and 5 and the lower proportion of students in Year 8 in the 2007 sample:

2006 = 106 students:

35 in Year 4; 10 in Year 5; 26 in Year 6; 15 in Year 7; 20 in Year 8.

2007 = 383 students:

152 in Year 4; 70 in Year 5; 78 in Year 6; 37 in Year 7; 46 in Year 8.

Due to a number of factors, data collection was problematic in the first year of the project, resulting in small samples. In 2007, more robust data collection processes were implemented.

In Tables 2 and 3 the asTTle mean scores at the first and second assessment times for 2006 and 2007 for each year group, and the mean gain scores across the schools, are presented. Although mean scores at the end of each year are generally lower than the means expected according to the asTTle norms, the gains, especially for the younger cohorts of students, were considerably greater than those reported in the asTTle normative data. The gains for Years 4, 5, and 6 in 2006 were 46, 80, and 80 points respectively, and in 2007, 101, 68, and 45 points respectively. However, equivalent gains were not apparent for Years 7 and 8. Gains for these classes were less than

expected according to asTTle norms (21 and 44 respectively in 2006 and 11 and 16 in 2007). Notwithstanding the low gains, it should be noted that the available data for Year 7 and Year 8 classes in 2006 (530 and 556 respectively) indicated mean scores slightly exceeded the national mean data (520 and 535 respectively) at the end of the year. In 2006, not all data from the schools with Years 7 and 8 classes were available; however, the sample included the one decile 10 school in the cluster, which had Years 7 and 8 classes. This school subsequently had to withdraw in 2007, thus contributing (possibly) to the overall lower means at the beginning and end of the year (422–431 and 441–457 respectively) in comparison with the 2006 means (511–530 and 512–556 respectively).

Table 2 **Mean scores for all students in Years 4, 5, 6, 7, and 8, and total sample, 2006**

| | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Total |
|---------|--------|--------|--------|--------|--------|-------|
| March | 349 | 409 | 419 | 511 | 512 | 414 |
| October | 395 | 489 | 499 | 530 | 556 | 470 |
| Gain | 46 | 80 | 80 | 19 | 44 | 56 |

Table 3 **Mean scores for all students in Years 4, 5, 6, 7, and 8, and total sample, 2007**

| | Year 4 | Year 5 | Year 6 | Year 7 | Year 8 | Total |
|---------|--------|--------|--------|--------|--------|-------|
| March | 255 | 307 | 357 | 422 | 441 | 324 |
| October | 356 | 375 | 387 | 431 | 457 | 385 |
| Gain | 101 | 68 | 30 | 9 | 16 | 61 |

The asTTle V4 manual (Ministry of Education, 2005) reports that, for appropriate progress according to New Zealand norms, gains scores should be: Year 4 (28); Year 5 (22); Year 6 (14); Year 7 (18); Year 8 (54), with a mean gain score of 27.

In Appendix D.2, median, 25th, and 75th percentiles, upper and lower ranges for each year group across the sample are reported. Medians are derived from examination of the asTTle consoles. Median, percentile, and range data are included to provide an indication of the variance in the achievement scores. Overall patterns of progress can be obscured in reporting mean data only where there are extreme outlying scores. Examination of these tables indicates that there is an increase in the **median** scores for each year group with the exception of Year 7 in 2006.

Visual analysis of the consular asTTle data (Appendix D.1) also suggests that at the second assessment period there is less variance. The difference between the scores for the 25th and 75th percentiles is reduced for most year groups, largely the result of the scores marking the 25th percentile being considerably higher at the October assessment point than the March assessment point (Appendix D.2). For all year groups in 2006 (changes from 45–145 in asTTle Writing), and Years 4, 5, and 6 in 2007 (changes from 45–180 in asTTle Writing), the achievement change for

the 25th percentile has considerably exceeded the expected growth for that year group. There also appear to be fewer outliers, particularly in what has been referred to as the “tail of achievement”. The asTTle consular data, as well as Appendix D.2, suggest that fewer students have extreme low scores at the October assessment period in comparison with the March period, the exception being Years 7 and 8 in 2006 and Year 8 in 2007. Once again it is evident that relative gains in achievement have been greater for the younger students than for the older students.

There was further evidence of more than satisfactory growth for the younger students in the Year 2 groups across the sample, some of which had Year 1 students included. On the English Writing Exemplars most students’ writing achievement increased by at least one sublevel during 2006 and again in 2007 (Appendix D.4). Optimistically, the increased writing achievement in these younger classes will be the basis for stronger growth as they progress through primary school. There is considerable evidence that judicious intervention within the first couple of years at school can ensure a more positive trajectory of achievement in later years (McDowall, Boyd, & Hodgen (with van Vliet), 2005).

Overall, as will be discussed later, the student achievement data suggest that this project is beginning to meet one of the TLRI’s strategic goals, that is, raising student achievement, especially of those representing the “tail of achievement”.

3.1.2 Student achievement in selected schools

Three schools have been selected to demonstrate how close analysis of student data as a starting point for teachers’ personal instructional goals can lead to more positive outcomes for students. The careful collection of data in these schools appeared to reflect a high level of commitment, and a sense of accountability towards both the project outcomes and their students. Further analysis of these schools will be undertaken through the case studies described in Sections 3.4, 3.5, and 3.6, to try to gain some insights and provide some explanations. To some extent these schools could be considered as “exemplary”. That is, they demonstrated what may be possible when teachers’ practice is informed by evidence, and by pedagogical content knowledge. As will be highlighted in the case studies, these are schools where there was an evident commitment by leadership to specific professional development focused on student achievement. In this section we look closely at student achievement in these schools.

3.1.2.1 School A

For School A, data are reported only from 2007. 2006 data were incomplete as two of the participating teachers left the school towards the end of the year, before the final data collection.

In 2007, School A teachers of students from five year groups participated. Relatively strong gains in writing achievement as assessed by asTTle were noted, particularly in Years 4, 5, 6, 7, and 8 (Appendices 5.1, 5.2, and 5.3) with quite exceptional gains in Year 4 (gains in asTTle Writing of 149) and Year 5 (gains in asTTle Writing of 107). In each of these classes a gain of at least one

sublevel was recorded. For Year 4, mean scores at March were substantially below national expectations. At October they were at, or above, expectations for the deeper features and close to expectations for the surface features. Of the 11 students in the class for whom both sets of data were available, six achieved an overall score of 3B (asTTle Writing scores of 384–398) representing a gain of three sublevels over eight months.

For the Year 5 students, the mean score increased by 107 on asTTle Writing. Two of the 14 students gained three sublevels (gains in asTTle Writing of 170–220) and four gained two sublevels (gains in asTTle Writing of 93–153). These students were still below national norms at the October assessment point but, nevertheless, this represents a rate of progress exceeding expectations. A similar pattern was evident in Year 6 and Year 7 (gains in asTTle Writing of 71–215) with a number of students gaining two or more sublevels during the period. In both classes, mean scores were substantially below national expectations in March but close to the norm in October. Based on their assessment levels at the beginning of the year, it can be argued that this is likely to represent a change in the trends of their achievement. However, one student in Year 7 dropped by three sublevels (137 asTTle Writing points). Reasons for this can only be surmised but it possibly indicates a negative response to the test on the day. The gains for the Year 8 students did not match those of the asTTle normative sample. Furthermore, no student achieved a score equivalent to a curriculum Level 3 or greater by the end of the year. As these students will be at secondary school less than six months from the point of assessment, this is of great concern. The reason for this marked difference in achievement can only be surmised, and may be the outcome of a long history of poor achievement.

3.1.2.2 School B

Two of the three participating classes gained one curriculum sublevel during 2006. These were Year 4 (with an asTTle Writing gain of 43) and Year 2 as assessed using the English Writing Exemplars (Appendix E.4). Students in the third class, Years 5/6, made gains of three curriculum sublevels, achieving a mean of curriculum 3A (mean gain in asTTle Writing of 130) at the final asTTle assessment. This level was above the national expectations of the means for their year groups, yet they had been below the norms at the beginning of the year.

In 2007, the achievement outcomes were very different for Years 4, 5, and 6. At the end of 2007, the Year 6 class, in contrast with the 2006 Year 6's class score of 3A (October asTTle Writing mean 505: gain = 77) had a mean score of 2B (October asTTle Writing mean 364: gain = 37). This represents a full curriculum level lower. The pattern of achievement for Year 5 (October asTTle Writing mean 363: gain = 52) and Year 4 was similar (October asTTle Writing mean 361: gain = 28). Although these gains are not as marked as in 2006, they nonetheless represent gains greater than expectations based on national norms.

The Year 2 students, on the other hand, demonstrated strong development. Fifty percent of the 17 students gained a “Best Fit” of one sublevel and four gained two sublevels. Eleven students scored Level 2 in relation to one or more writing features in October and for six students the Best

Fit (overall level) was Level 2. At the March assessment time no students had equivalent achievement. (Note that the English Writing Exemplars do not record sublevels.)

These outcomes are consistent with those of School A. The data suggest that, even though the asTTle Writing levels are still very low at the end of 2007, there is evidence that students' rate of progress in their writing achievement is increasing.

3.1.2.3 School C

In 2006, Year 4 students were markedly below national expectations at the beginning of the year with an asTTle mean score of 247. By the end of the year, while mean scores (343), were still below the norm, students' writing had achieved an overall gain of 95—three times greater than national norms. This represented a gain of at least one sublevel overall, as well as for surface and deeper features, in all three participating classes, and was particularly evident in content, language resources, and spelling. In this class, from an analysis of the English Exemplars, vocabulary development had been identified as a key aspect for attention. This focus appears to be reflected in the improvement in these aspects of writing.

For the Year 6 class, the development was also substantial, with an overall mean gain of 77, five times greater than national norms, representing an increase of two curriculum sublevels in less than a year. Of these 10 students, nine were achieving at the beginning of curriculum Level 3 by the end of the year. No student scored below Level 2P. This suggests that these students' writing levels provide a reasonable base from which to move on to the demands of the intermediate school.

In 2007, the Year 6 students had remarkably different outcomes. They entered the year with extremely low achievement levels (asTTle mean score of 290), and although achievement gains were greater than national norms (77 points) there was no shift in curriculum level. Final assessment scores suggest that their writing achievement was three curriculum sublevels (135 points) lower than the Year 6 students in 2006, and lower than the students in Year 4. The reason for this can only be surmised, but as noted above, this pattern was apparent in other schools. National data reported by the National Education Monitoring Project (NEMP) (Crooks et al., 2007; Hood, 2000; Ministry of Education, 2006) have all noted a trend to an achievement “slippage” at Years 6–8. However there is clearly a more positive trajectory for these students as well as the younger students.

The Year 4 students demonstrated a mean asTTle Writing gain of 100, nearly four times greater than the national norm, and the Year 2 students, assessed using the English Exemplars, had mean gains of one sublevel across the period March to October. This positive trajectory suggests gains comparable with national expectations. If this progress is maintained there may be further evidence of a reversal of a pattern of continued low progress.

3.1.3 Summary

In relation to the aims of the project, there is some evidence that the partnership processes have led to enhancement of student achievement and a rate of progress that is, for most students, exceeding the expected rate according to national norms. Achievement over the period of the two years cannot be documented due to the fragile nature of the data from 2006. Nonetheless there are some concerns. While tentative conclusions can be made about the positive impact of teachers implementing action plans formulated on the basis of an examination of student achievement data during the first year of the project, these outcomes were not consistently maintained in schools during the second year. Furthermore, we have particularly grave concerns that there was evidence of continued low achievement at Years 7 and 8 and that expected gains in writing achievement according to asTTle norms were not evident. The partnership processes implemented within this project have not been adequate to reverse the trends of low achievement so that students can cope with the demands of secondary schooling impacting within the next two years. Nonetheless, it is very encouraging that there appears to be some evidence that more focused teaching may be having a particular impact on students at the bottom end of the continuum of writing achievement. Furthermore, students' achievement gains appeared to be showing a more positive trajectory with some "shortening of the tail", alongside rising achievement levels of the more successful students.

3.2 Enhancing capacity to analyse students' writing using the English Writing Exemplars

At the start of the project the teachers had variable knowledge of, and experience in using, the English Exemplars. Discussion with the literacy leaders early in the project identified a need for a workshop on understanding the purpose of the English Writing Exemplars, followed up by ongoing support. Most of the teachers were aware of the English Exemplars but regarded them as a tool for reporting student achievement levels, rather than viewing them as a much broader resource for diagnosis and as a basis for planning and teaching. This is evident in analyses of the initial goal-setting profiles, teacher discussion during meetings with university researchers, and from focus group discussion. From early analysis of the Exemplars, many of the teachers were able to see the potential for targeted teaching and also for giving their students effective feedback.

The following is an example from the goals established by a 2006 teacher as a result of close analysis of her students' writing. Her analysis identifies student strengths and a number of quite specific features that needed to be worked on:

| STUDENT STRENGTHS | ASPECTS FOR DEVELOPMENT |
|--|--|
| <ul style="list-style-type: none"> • Logical sequence • Sentence variety • Can identify and write to an audience • Use of diagrams | <ul style="list-style-type: none"> • Use of topic-specific vocabulary • Effective planning • Structure and use of language features of specific genre • Enriches deeper features • Application of reading skills in writing |

This led her to reflect on and question her practice and to identify her own development needs. These she articulated as:

| TEACHER NEEDS |
|--|
| <ul style="list-style-type: none"> • Analysis and interpretation of student (learning) needs • Developing a writing toolbox for students • Effective use of conferencing • Developing and using effective teacher models • Being seen as a writer |

Modified from summary presented by the teacher at the annual conference of the New Zealand Association of Research on Education, 2006.

In response to questioning regarding progress towards the first aim of the project which is focused on analysing student writing in order to provide evidence on which to base teaching, a teacher explains:

Yes, teaching is more directed and purposeful because gaps are able to be identified. Comparison of samples with Exemplars informs teaching practice with specifics for future teaching / learning. It's great to have the 'before and after's to enable the kids to be part of scaffolding themselves. (2006 teacher)

The teachers' close study and use of the Exemplars can be seen as giving them a shared language to discuss important understandings about writing, and to make informed decisions for planning and teaching. Teachers who struggle to identify, or notice, gaps or inconsistencies in student learning often have an insufficient knowledge base or, as noted by Ball and Bass (2000), lack the ability to use that knowledge to assist learning. At an interschool meeting late in 2006, literacy leaders involved in this project noted the increased confidence with which teachers were able to articulate what they knew and how they were using that knowledge to meet specific learning needs:

Teachers are more confident in using their professional knowledge to assess the levels of children's writing against the Exemplars and at our school we have moderated across the school several times now and the teachers have a better understanding of the development stages at the different levels. Specific note is being taken of the areas of development needed and this information informs the teaching planning cycle. (Literacy leader)

Early in the second year of the project it was reported that all the new writing mentors (2006 teachers) had established goals and supported their 2007 colleagues in setting goals based on the identification of student strengths and learning needs from using the Exemplars: "We are now teaching to children's needs, not just following a programme" (2007 teacher). Furthermore, teachers claimed they were not only using student data to inform their teaching but were also interrogating and critiquing their own practice. There has been a continued shift towards teachers—both writing mentors and the new 2007 teachers—assessing students more consistently and meticulously, and integrating this information into their teaching:

Teachers are more self-aware . . . they are identifying their own strengths and weaknesses, as well as the children's. We are becoming aware that if a child has not achieved at a certain level it may be because we haven't taught it effectively. (Literacy leader)

As 2006 progressed, more of the teachers began to discover the possibilities of using the English Exemplars with their students. For example, a teacher successfully used them to clarify for her Year 2 students specifically what they needed to do to improve their writing. At the same school, a teacher working with Year 6 students justified one of her goals for 2007 as follows:

The purpose of this goal is to examine ways that the Exemplars can be used by the learner as well as the teacher. I want to develop a child-friendly rubric that gives the student a framework in which to critique a given text, and to highlight its features, so that they will be able to use these features in their own writing. (2006 teacher)

The two teachers quoted above taught at a school that had already started to use the Writing Exemplars to develop and compile its own school-wide portfolio of student writing. These writing samples have been annotated to demonstrate a shared understanding of the writing levels evident in their school. This portfolio has proven a powerful model for other schools in the project.

The Exemplars have been the focus of staff meetings, professional learning circles, and meetings between university researchers and teacher-researchers. Literacy lead teachers have recognised the importance of developing a shared understanding about the progression of writing and, more importantly, the way these new understandings can inform teaching practice:

Teachers on the project have used the Exemplars throughout their meetings to analyse students' work. This has enabled them to be reflective on their own practice and set goals, e.g., where to go next. They have also shared the Exemplars with their students and have worked on raising student beliefs in themselves as writers. (Literacy leader)

3.3 Teacher knowledge about the writing process and pedagogy for writing

Although it was not possible to measure teachers' pedagogical content knowledge directly, it was possible to document their knowledge about writing and their ability to teach writing. Field notes from meetings between university researchers and teacher-researchers, and documentation of teacher goals and action plans, together with teacher responses within focus group discussions and structured group interviews, provided evidence to support tentative conclusions about the development of teacher knowledge about writing.

From an analysis of the transcripts and field notes, articulation of knowledge about writing could be grouped into categories: knowledge about the nature of writing and its aspects/components; knowledge about the assessment of writing; knowledge about the writing process; knowledge about pedagogical approaches for teaching writing; and awareness of research and resources to support the nature of writing.

3.3.1 The nature of writing

Through the sustained focus on writing and talking about writing, the teachers have expressed increased confidence in their knowledge about writing and understanding what the terms meant; that is, having a metalanguage of writing. This is reflected in the comments of a 2006 teacher reflecting on what she has learnt from the project:

Talking about writing. Knowing the terminology. I didn't know what it was before . . . I used to make it up. I know these sorts of things and the children know these sorts of things.

Greater understanding of the surface and the less obvious deeper features of writing such as voice, impact, and audience has been important in clarifying the different qualities to recognise in student writing:

Now we know what we are talking about; we know the (terminology) and the children know (the terminology) so that we can talk about writing . . . This has led to a greater excitement about writing. (2006 teacher)

Awareness of the importance of teacher knowledge and the link to student outcomes is clearly expressed by one of the 2006 teacher-researchers when she said, "How can you help a child . . . if you don't know yourself?" and, further, "(We're) thinking about what we're doing and we're doing it better. We are getting better so they (the children) are (too)." When asked at the final focus group meeting what they considered to be the attributes of a "good teacher of writing", one of the lead teachers said she believed "a good teacher of writing is able to articulate what good writing is". The continued discussion around and about writing, and the focus on student writing samples, has meant the teachers are much more aware of what constitutes "good writing" at different levels. More importantly, these understandings inform their teaching and their belief that writing can be specifically taught.

3.3.2 The assessment of writing

At the start of this project most of the teachers were aware of the English Exemplars but knowledge about their purpose was variable. As noted by Poskitt (2002), “Rather than viewing the exemplars as the nexus to learning, teaching and assessment, some teachers saw them only as an assessment tool, and indeed, often as a test” (p. 7). The possibilities for using the English Writing Exemplars to understand student writing achievement, and the consequent use of this information to address student learning needs, has been an integral part of the project:

Before I came on board with this project I didn’t understand the surface features and the deeper features . . . and how to separate those . . . I knew about them but I didn’t know what they were called, I guess. (2006 teacher)

The Exemplars (and matrix) were used by the university researchers and teacher-researchers in school meetings to identify what writing samples demonstrated, explore possible “next steps”, and make informed decisions about the focus for teaching. The “meeting logs” kept by the research team reveal the extent to which this focus on analysing student writing and making use of this evidence has sharpened the focus on teacher practice and student writing:

Teachers on the project have used the Exemplars throughout their meetings to analyse students’ work. This has enabled them to be reflective on their own practice and set goals, e.g., where to go next. They have also shared the Exemplars with students and have worked on raising students’ beliefs in themselves as writers. (Literacy lead teacher)

Increasingly, the teachers’ comments indicated that their view of assessment was becoming more ongoing and formative, rather than just summative for reporting. Their increased knowledge of the structure and language of different texts, and of surface and deeper features, is reflected in conversations and feedback with students that is much more specific and useful for learning:

Developing success criteria with the children and establishing learning intentions related to their needs has helped them (the students) become more focused and helping them develop a working knowledge of the criteria. (Literacy leader)

3.3.3 The writing process

The focus on consistently monitoring children’s writing for evidence of progress towards specific goals has led teachers to consider new approaches for meeting those goals. This excerpt from a meeting log kept by the research team records a focus for the procedural and organisational aspects of initiating change that was shared by many other schools:

| MEETING | FOCUS FOR NEXT SESSION |
|--|---|
| Teacher 1 Formative assessment—how this is reflected in teacher modelling & indiv conferencing with students | <ul style="list-style-type: none"> • Use of conference cards • Discuss organisation of class/groups • Final draft of goal & decision re focus on 1 group/whole class |
| Teacher 2 Adding detail & description to writing—clarified difference between procedural & recount writing. Discussed group to be focused on for goal | <ul style="list-style-type: none"> • Bring 1 or 2 samples from focus group • Finalise goal |
| Teacher 3 Organisation and management of the writing programme—justification for goal | <ul style="list-style-type: none"> • Watch <i>Writing in Years 1–6</i> (video) focus on how Jac organises and manages • Choosing topics/publishing chn’s work |

Meeting Log, School A, Wednesday 10 May

A greater awareness that organisation is critical to the successful teaching of writing was noted by many teachers. For example, teaching to specific identified needs required teaching in groups rather than to the whole class. To achieve this successfully, teachers need routines and organisation that are predictable and where the expectations for learning and behaviour are negotiated and understood by everyone. One junior school teacher developed a task board to encourage this self-management. This was subsequently adopted by other teachers, not only at her own school but also at others in the TLRI cluster.

The following notes from a school meeting are in response to an earlier discussion with two teachers working with students in Years 7 and 8. Their concerns focused on negative student attitudes to some writing, in particular their boredom with a lengthy focus on topic-based genre writing. Similarly, NEMP (Crooks et al., 2007) notes the decline of interest in writing between Year 5 and Year 8. The notes below provide some insight into two teachers’ actions and their willingness to involve students in the process of making change. Both teachers were interested in understanding the factors that contribute to student confidence, competence, and enjoyment of writing, and were willing to review their programme in light of student responses:

Both teachers have discussed with their students their views on writing—what they find difficult, what they enjoy, feel confident about. The resulting brainstorm shows students wanted to have more choice over their writing and areas they struggled with, including getting ideas, revising, editing, and achieving a flow to their work.

Class discussion followed on reasons for writing and focused on the importance and value of keeping hold of the stories about our families and ourselves.

One of the teachers shared with her class a book her father made after his stroke and modelled for the students her own story based on one of the incidents in her father’s book.

Students wrote their own memory stories and published them. Students were engaged, motivated, and sustained interest in their writing through to the publication stage. Their response was such that the teacher copied their work so they could have a copy to take home and one at school.

The other teacher was caught up in the interest and enthusiasm generated in the other class (they share published work) and is currently focusing her attention on writing comic strips.

(2006 teachers, School D)

This explicit knowledge of key elements of the writing process is also evident in the following description of another teacher's writing focus:

Modelling writing; thinking out loud when co-constructing a piece of writing with the class. Using Exemplars as part of student learning when giving direct instruction as well as independent learning tasks. Interpretation of students' writing and using this information to establish future learning goals. (2006 teacher)

In both these examples the teachers are involved in making important decisions about what they teach and how they teach it. They make complex decisions that take into account the whole class, groups, individuals, instructional strategies, texts, and relationships. The critical role teachers play in making these kind of pedagogical decisions is highlighted by Kamler and Comber (2005) who also argue that for these decisions to be effective, they should be based on an understanding of the writing process shaped by observations and interactions with students. It was exactly these observations and interactions that led the teachers in School B to acknowledge student preferences in rethinking their programme. This awareness of student views may well be important in reversing the lack of engagement and motivation noted in older students (Crooks et al., 2007).

3.3.4 Pedagogical approaches for the teaching of writing: You can teach it!

For one of the 2006 teachers, her understanding of knowledge about writing and the teaching of writing is best summed up by her revelation that, "You can actually teach it."

Content knowledge, and in particular knowledge about writing, impacts on the decisions teachers make about the routines and organisation they put in place, the topics they select, and the specific skills and strategies they teach to individuals, groups, and the whole class. The Education Review Office (2002) in its study evaluating the effectiveness of writing programmes in Years 5–8 identifies the significant impact that teachers' knowledge of learning and writing has in determining all aspects of their approach to teaching. In the context of 2007 teacher-researcher meetings it became apparent that not only were teachers becoming more confident in articulating knowledge about writing and teaching writing but also new pedagogical practices were being trialled in their classrooms. This was noted by one of the literacy lead teachers who stated that:

The teachers can see that the suggestions given (by the research team) are practical, pedagogically sound, and make sense. This encourages teachers to seek help or identify issues they need help with and discuss it with others (in the quality learning circles), then take on board the suggestions to try in their rooms.

Many of the teachers identified the impact of purposeful modelling and conferencing on their approach to teaching: “Teacher modelling helped children know what to work on”, and the same teacher went on, “When children saw teachers write, it had a huge impact.” Effective conferencing requires a clear focus, organisation, and, as one of the teachers explained, “establishing conference groups where it is safe to talk with others—where students have ownership of the process (is a priority)”. This teacher also identified the importance of “relationships with [your] own students and a belief in them as writers”.

3.3.5 Awareness of research and role of professional discussion to support the teaching of writing

The importance of engaging in focused professional discussion is reflected in the commitment expressed by literacy leaders to engage teachers in professional discussion, in many cases around professional readings. It was not possible for the university researchers to take an active part in school-based QLCs because of teaching commitments. However, teacher-researchers and literacy lead teachers in most schools reported that they met as small groups on a regular basis. From comments made by both teacher-researchers and literacy lead teachers, it would appear that these meetings provide valuable opportunities to challenge, extend, and deepen understandings about the teaching and assessment of writing. Reflecting on their own role, the literacy leaders identified the QLCs as something they all felt worked well. For example:

I have been thrilled to sit and listen to the teachers on this project sharing their ‘best’ practice and learning from each other. The critical reflection that is taking place and each other’s ideas being trialled shows the trust and strength of the QLCs. However, some teachers need to be helped in letting others have their turn within the conversation and gain benefits from also listening. (Literacy leader)

The importance of engaging in focused, professional discussion has also been acknowledged as rewarding by the teacher-researchers although the difficulty of finding time for school-based professional discussion is a major constraint:

One of the hardest things to do in a school is to sit down and talk about what you’re doing and why you’re making the decisions that you’re making. (Literacy leader)

However, a shared commitment to improvement and supporting each other’s professional development is evident in the following responses:

I’ve found it positive to reflect on my teaching . . . and written language, and just having the time to discuss with peers and experts. (2006 teacher)

The learning conversations that went on with the two (researchers) we had coming in, pushed that deeper thinking . . .without it just being us. (Literacy leader)

Another teacher describes it thus:

What we've been doing was, at staff meetings, those of us who were involved . . . would bring along samples of the children's work . . . and how you got there. The professional discussions that went on were so valuable . . . it was a way of dispersing what we were learning and practising . . . getting those out to the rest of the staff. . . It's very valuable. (2006 teacher)

Teachers in two of the schools agreed it was "crucial to establish the professional learning circles . . . wonderful professional discussion. They provide opportunities to link own practice to theory." However, one noted the importance of carefully chosen (manageable) articles, "in particular the value of relevant New Zealand-based readings".

3.4 Case studies of three participating schools

The three case studies that follow were selected because they exemplify aspects of the partnership process that led to the enhancement of student achievement (see Appendices 5.1, 5.2, 5.3, and 5.4). The involvement, interest, and enthusiasm of the teacher-researchers in developing their professional knowledge and responding to the identified learning needs of their students supports the strategic, research, and practice aims of TLRI.

3.4.1 Case study: School A

School A has been selected because it set a precedent in using the Writing Exemplars. It was also notable for meticulous data gathering and whole-school commitment.

School A had already begun to unpack the Writing Exemplars before the project started. It had developed and compiled its own school-wide portfolio of student writing. These writing samples have been annotated to demonstrate a shared understanding of the writing levels evident in the school. The whole staff had been involved in this process, which had given the teachers ownership and developed a shared understanding of progression in writing. This portfolio provided a powerful model when it was shared with other schools involved in the project:

It is a good idea for a school to develop their own writing exemplars. This increases the ownership of the process and it also enables teachers to be empowered in the administration and analysis of writing tasks. I feel it is all too easy to download exemplars that are done for us, but it is imperative to the professional development process that teachers 'buy in' and realise the absolute potential of the overall procedure. (Literacy leader)

Teacher-researchers were released to meet individually with the university researchers for each visit in 2006. Notes from a meeting in 2006 reveal the content of discussions with each teacher and an agreed focus for the next meeting. In each case the subject of the meeting derived from an initial focus on looking at samples of writing from each class then deciding a priority. This involved the teacher-researchers using their professional judgement, and then, in collaboration

with the university researchers, making decisions about how information could be used to make a difference to student learning. For example, in the meeting notes below, Teacher 1 wanted to improve the feedback/feedforward she gave her students within the context of her own modelling and conferencing. This required her to make some important decisions regarding the organisation and management of her class so she could have quality learning conversations with individuals and groups of students.

| MEETING | FOCUS FOR NEXT SESSION |
|--|---|
| Teacher 1 Formative assessment—how this is reflected in teacher modelling & indiv conferencing with students | <ul style="list-style-type: none"> • Use of conference cards • Discuss organisation of class/groups • Final draft of goal & decision re focus on 1 group/whole class |
| Teacher 2 Adding detail & description to writing—clarified difference between procedural & recount writing. Discussed group to be focused on for goal | <ul style="list-style-type: none"> • Bring 1 or 2 samples from focus group • Finalise goal |
| Teacher 3 Organisation and management of the writing programme—justification for goal | <ul style="list-style-type: none"> • Watch <i>Writing in Years 1–6</i> (video) focus on how Jac organises and manages • Choosing topics/publishing chn’s work |

Meeting Log, School A, Wednesday 10 May

The progress this school has made towards using data to inform their teaching both at the time of the project and for future practice is expressed by one of the 2006 teachers:

I would like to see the aims and philosophy of this project maintain their momentum throughout the school. I will continue to work with the literacy team and my own syndicate team to explore new ways to improve students’ writing and to involve other teachers in the process.

At the final forum in November 2007, this school was asked to report on its new understandings about enhancing the teaching of writing:

| | |
|--|---|
| 1. What do you as a school, and as individual teachers, know now, that you didn't know before about enhancing the teaching of writing? | |
| Teacher 1 (2006) | I am much more confident with developing children's metacognitive processes. I have enjoyed seeing the children using the assessment rubrics, and even beginning to design their own. I am becoming more aware of the need to also look at writing from an holistic view, rather than focusing on the "mechanics" of writing, assessing the whole, and including the creative, emotional aspect of writing as well as just the obvious and external features. |
| Teacher 3 (2006) | I can't think of any specific knowledge that I have now that I didn't have before (although there is plenty). Mostly I think my confidence has improved in my ability to teach writing. |
| Teacher 4 (2007) | Writing Exemplars can be used as a great starting point with students to begin to analyse their own work and highlight areas for strength and improvement. Reflecting on my own teaching is crucial and an integral part of the planning, teaching, and evaluation process. |

Writing achievement data

As reported in Section 3.1.2.1 (and Appendices 5.2 and 5.3), all participating classes, with the exception of Year 8 in 2007, had gains markedly exceeding expectations based on national asTTle norms. The success of School A could be attributed to the fact that it started this project from a position of strength. At the beginning of this project this school had already established a moderated school-wide exemplar portfolio which was subsequently widely used as a model by other schools in the project.

The school management team strongly supported the project throughout its duration. It is notable that in order to overcome the common problem of lack of relievers at School A, the literacy leader herself went into classrooms to release teachers to ensure the process was carried out effectively.

The teacher-researchers provided very full and reflective documentation consistently over the two years of the project, carefully recording their progress. As a team they regularly attended interschool meetings and kept in touch with university researchers. The school has made plans to continue the focus on raising student achievement in writing in 2008 by continuing the moderation process, focusing on reading/writing links, and organising for a video to be made of effective practice in their school.

3.4.2 Case study: School B

School B was selected to show how one exemplary writing teacher can have a positive impact on a school community.

School B was not using the Exemplars as assessment for writing in the early stages of the project. The literacy lead teacher appeared knowledgeable about writing practice and wanted to raise the staff's commitment to using writing assessment data to inform "where to next?" in the school. She

also aimed to have a consistent tool for assessment in the school. A professional development session was held to inform the staff about the purposes of the Exemplars, and to provide opportunities to practise assessing and discussing some of writing samples using the Exemplar matrices.

At the initial goal-setting meeting, this teacher noted that her students were more confident in the surface features than the deeper features of text, but needed a strong pedagogical focus on vocabulary enrichment in order to raise achievement. Her chosen research focus was therefore on vocabulary development in her higher achieving children, and she was confident in her ability to achieve this, once a focus was established.

As the project developed, increased confidence in using the Exemplars was noted. She also appreciated the value of professional learning circles in enhancing teachers' knowledge about writing. By the end of 2006 this teacher was consistently planning for groups, establishing individual goals based on assessment findings, and more effectively integrating reading and writing. A feature of her pedagogy was the extensive use of factual texts, both written and visual, which she used strategically to build vocabulary. Writing for particular purposes and audiences became a new focus. Conferencing was more frequently focused on the message rather than the surface features, and this resulted in renewed enthusiasm. Furthermore, she observed that as children progressed they initiated conversations about their writing goals.

| KEY DISCUSSION POINTS | ACTION NEEDED |
|---|--|
| <p>Teacher 1</p> <p>Assessment data showed:</p> <p>Student strengths: confident with surface features.</p> <p>Student needs: vocabulary development.</p> <p>Discussed also planning for writing using semantic webs as a basis for vocabulary and language use; a range of approaches (e.g., shared reading, poetry).</p> <p>Place of conference for editing.</p> | <ul style="list-style-type: none"> • Project goal: increasing vocabulary richness, with emphasis on audience and purpose with higher achieving group. • Use reading–writing links as a basis for vocabulary development. • Visualisation in reading. • Importance of drawing and labelling, especially for newer learners of English. • Need to emphasise “editing” not “proofreading”. |

May 2006 meeting notes for this teacher

As a result of staff changes, with a new principal and an experienced literacy leader moving on, Teacher 1 became the literacy lead teacher. She continued her mentoring role in 2007 which provided an opportunity to consolidate the 2006 learning, and to support colleagues at the same class level. She views the continued process of moderating samples across the school as essential to develop shared understandings and metalanguage.

Writing achievement data

Section 3.1.2.2 and Appendix E.4 describe the high gains made by this teacher's Year 2 students during 2007. In her role as literacy lead teacher, this exemplary teacher of writing has much to offer both students and teachers as a strong model of effective practice. It is expected that the high quality of teaching in this junior school class will continue to have positive implications for achievement as the students progress further up the school. In a conference presentation, she reflected on the extent to which she had met research project aims:

I have greater confidence in analysing children's writing. I know the skills they need to develop next and we all eagerly anticipate daily writing sessions. There is shared disappointment if a special event means our regular writing programme is disrupted! I am more self-reflective and have continued to make ongoing changes to my planning and assessment. (Teacher 1)

3.4.3 Case study: School C

School C was selected to show how a strong school-wide commitment and enthusiasm for the action research project can impact on overall achievement.

By 2006 the school had already begun the process of learning how to use the Exemplars and to analyse students' writing. Strong leadership and professional support were both important features that contributed to the cohesiveness of the teacher research team in 2006. Professional development was valued highly in the school, along with a passion to enhance the quality of teaching and learning.

The teachers, having established that they needed to continue their expertise in the analysis of their students' work and offer deliberate teaching, reported gaps in their own knowledge about the writing process, text forms, and language features. These requests showed the need for specific professional development in writing pedagogy. As new insights occurred, teachers became aware that they needed to use varied teaching strategies. Aspects of pedagogy such as modelling writing forms with students, planning writing together, and knowing how to manage conferencing were common themes. They also asked about strategies for managing writing groups.

An example of the content of a meeting follows:

| KEY DISCUSSION POINTS | ISSUES AND/OR ACTION NEEDED |
|--|---|
| <p>Request for information on both modelling and conferencing.</p> <p>Discussion points: text forms for different purposes, using excerpts of high-impact writing from literature to share with children, writing with the children using a think-aloud strategy to articulate aspects of focus (e.g., choice of descriptive words).</p> <p>Conferencing: making connections, establishing criteria based on “where to next?”, providing a conferencing framework, using the “language” of writing appropriately with children, building a shared understanding of aspects of the writing process.</p> | <ul style="list-style-type: none"> • Access and discuss useful professional resources • Text forms, language features, and modelling: <i>Write Ways</i> (Wing Jan), <i>Dancing with the Pen</i> (MoE) • Conferencing: e.g., Gadd–Reading Forum, N.Z. Reading Association, <i>Dancing with the Pen</i> (MoE) • Observe Literacy leader who has offered to model writing with class • Observe peer at same class level • Conference cards |

Meeting, 23 August 2006

Teacher-researchers observed the literacy lead teacher demonstrating the teaching of writing with their classes, and also observed each other’s practice. In October, Teacher 3 commented on this peer observation process:

It was good to be able to choose your peer and have a critical friend to give good, strong, critical feedback. It’s important to be honest in assessment and feedback.

Another teacher also stated the importance of having a specific focus for both observations and teaching. Setting targeted success criteria was promoted widely by the school leadership. Teachers reported positive responses from their students as they became more focused on particular success criteria for writing based on students’ actual needs and abilities. One of the teachers stated that there was now evidence of his own modelled writing around his room that had not been there before, and an improvement in his ability to model learning actions by thinking aloud as he wrote with the students.

Peer conferencing was enhanced by the way he modelled feedback during conferencing:

There’s also evidence in the comments they give to each other [in peer-conferencing and editing]. Children are picking up the language to talk about language. (Teacher, School C)

There was also a greater awareness of maintaining the integrity of the students’ ideas during conferencing and editing:

I’m trying not to take over the children’s voice and ideas. (Teacher, School C)

Another teacher stated that her organisation and pedagogy had changed as she began to understand the purposes of various aspects of the writing process. She recognised the need to manage the learning more effectively so started teaching writing using group rather than whole-

class teaching. Her comments showed a new enthusiasm for writing and a greater confidence in her role as a teacher of writing:

I have writing groups now. I didn't used to. I can do that whole conference thing. I get it! I'm learning what's appropriate for juniors, like report writing at this level. And the task-board . . . and the children have understood about fluid groups too . . . I enjoy teaching writing now—before, it was something you had to do. (Teacher, School C)

Writing achievement data

In both years of the project the participating classes made steady gains, starting from extremely low levels, which exceeded expectations based on national asTTle norms (see Section 3.1.2.3 and Appendices 5.1, 5.2, 5.3, and 5.4). Whole-school commitment to the project was exemplified in the efforts of the literacy leader to organise and attend meetings, provide observation opportunities, and facilitate productive discussion meetings.

One of the teachers was given the opportunity to co-present at a conference in 2006 and again, this time overseas, in 2007.

Unfortunately, three of the four 2006 teacher-researchers have now left this school. It would be expected that their expertise will benefit students elsewhere, but this transience exemplifies one of the frustrations of action research programmes, even in settings such as School C that work rigorously towards enhancing the quality of their practice.

3.5 Sustaining the project beyond 2006

3.5.1 Establishing collaborative peer coaching within schools

A major aspect of the research project for 2007 was the establishment of the writing mentor role to meet the sustainability aim that was added in 2007. The focus remained on the assessment of student writing, use of assessment data to inform teaching, regular meetings with the university researchers, and interschool meetings. At the end of 2006, teachers involved in the project were invited to take on a mentoring role with one or two colleagues within their school. It was seen as critical that they continue to interrogate their own teaching while providing guidance to teachers new to the project. Mid-year reports from the mentors suggested that they felt successful as role models and were providing useful guidance to the teachers they were working with:

The mentees are establishing writing groups with more focused teaching related to the goals they have set based on analysing their children's writing, as a result of my modelling and our discussions. (2006 teacher, Year 2)

Despite organisational and time challenges, most schools had implemented peer observations with follow-up discussion. These observations were undertaken by the mentors of the new teachers and

vice versa. Several teachers commented on the power of these peer observations, and valued the opportunity to see another classroom at work. Through discussions in professional learning circles and peer observation, teachers have become more aware of writing pedagogy as it develops across the primary years:

I know now from watching a middle school lesson what my students need to achieve by the time they reach that level. (2007 teacher, Year 2)

It is important to note, however, that peer coaching is challenging, as illustrated in this comment from a writing mentor's contribution to the mid-year milestone report:

It is challenging when you feel someone is not quite on your wavelength. It is often easier to identify weaknesses than it is to lead someone else to see the same points in their own work. It is also difficult to avoid 'spoon feeding' a quiet colleague who wants you to tell them the right answers and have everything identified and solved for them. I have learnt to reduce my expectation of how many points can be tackled at one time and now see that this mentoring will need to continue past the end of the year. (2006 teacher)

It is evident that establishing mentoring and peer collaboration can put significant challenges and pressure on teachers and schools, and yet most of the teachers identified the value of these practices in spreading interest and knowledge about writing in their schools. In some schools the organisation for this to happen was prioritised by the school management team and in other schools it happened on a more ad hoc basis.

Finally, in the words of one writing mentor:

The level of professional discourse has been of a high quality throughout this process. Individual teachers and the school as a whole have gained valuable experience from this process. The process of setting goals has helped teachers to become more aware of their students' (achievement and) learning needs and has provided an essential focus for the development of their teaching practice. As a mentor, I have gained a new perspective on the research process and an insight into the bigger picture. I have found the workshops helpful with regard to specific knowledge and teaching strategy. I am pleased to be part of the project for two reasons: (1) I have taken on a leadership role, which has in itself improved my understanding of the research and mentoring process; (2) The experience has consolidated and increased my content and pedagogical knowledge. (2006 teacher)

3.5.2 Processes for sustaining achievement: The teachers' view

A focus of the final interschool forum was on maintaining the impetus developed over the two years of the project. The school groups were asked to consider advice they would give other schools embarking on a similar project. Their responses acknowledged the importance of professional learning circles supported by carefully selected (and manageable) readings. The opportunity to work across syndicates and levels in these learning circles was seen as significant in building a shared understanding of effective practice across the school. In particular, it developed a sense of progression of students' learning over time, "an understanding of where

children come from and where they go” (Literacy leader). Each school noted the critical importance of building relationships of trust when initiating and sustaining change. This involved relationships both between colleagues and with the university researchers: “The learning conversations that went on with the two (researchers) we had coming in, pushed that deeper thinking” (2006 teacher). The enthusiasm of the initial participants was recognised as a powerful motivating force and another crucial factor was the enthusiasm and involvement of the management team. The opportunity to take part in school-based peer observations focused on agreed goals was useful and could have been extended between schools. Other points included the benefit of school-wide focus on one curriculum area and attention to organisation that sets up meeting/observation times early in the year. This should be “not an add-on (but) part of our practice” (Literacy leader).

The participants have indicated that their involvement in the project has provided them with the motivation and encouragement to change, enhanced their understanding of the writing process, and introduced them to strategies and innovations that have impacted on their teaching and on their schools:

We asked, ‘Do you want to be part of the writing group next year?’ and practically every . . . teacher in the school has indicated they want to be part of the process . . . That’s a positive spin-off . . . they’re buying in without me telling them to buy in. (Literacy leader)

3.5.3 Sustaining the achievements into 2008 and beyond

The strong commitment expressed by the schools for sustaining the increased interest in writing and development of effective writing pedagogy is evident in the planning decisions they had made at the end of 2007 which they shared at the final interschool forum. Decisions already made for 2008 and beyond include:

School A:

- will video effective practice around the school—our teachers exemplifying this
- will continue with moderation process and ongoing focus on reading/writing links.

School B:

- school-wide focus on writing continues which will include moderating writing across year levels twice a year (whole staff)
- literacy targets for 2008 are in place
- literacy lead teacher will work intensively with two teams that have been identified as needing support
- professional development on new English scheme—establishing “best practice”—using learning intentions/success criteria.

School C:

- will continue writing/inquiry focus
- will keep mentors/mentees and move mentees into mentoring roles when ready
- will continue moderation of writing samples
- has planned a teacher-only day devoted to literacy to bring new teachers on board.

School D:

- one 2006 teacher will be released as a literacy lead teacher for the year while the other will mentor two more teachers and will set processes in place for 2009.

School E:

- school-wide focus on writing will continue with strong management leadership and support
- some staff members planning to undertake further development in writing at the University of Auckland in 2008.

School F:

- has established a literacy curriculum team to continue focus on developing exemplars—2007 teachers will lead
- will keep professional learning circles.

4. Limitations

Partnership projects between institutions such as school and universities, while very satisfying, and with potential benefits to teachers, university research, and ultimately students, are fraught with challenges. During the two years of this project a number of issues arose which imposed limitations on the outcomes of the project. Some of these are issues that will be inherent in all projects of this kind. They need to be identified but cannot always be ameliorated. Others, in hindsight, could have been pre-empted, with better outcomes. We address these here so that other projects can be aware of potential problems. Some of the issues are similar to those that have been reported from other TLRI projects (e.g., Hill et al., 2006; McNaughton et al., 2006). Several of these issues are related to organisational factors; for example, availability of time, access to schools, and school management systems. Others are more directly related to issues implicated in research studies, especially those with a practitioner focus.

4.1 Time

Overall, the theme of time constraints has been reported as the most significant limitation, for both schools and researchers. Some schools managed to prioritise writing achievement, and were deeply committed to the project. In those schools, staff were supported by creating time and space for research-related discussion (in QLCs, for example), sharing successes in students' achievement, discussing professional challenges, and facilitating teachers' peer observations. Unless professional discussion and peer observations are timetabled and relievers located (where available), the opportunity for focused and rigorous discussion and peer feedback is compromised. This management thrust was viewed by the university researchers and teacher-researchers as a significant positive factor in maintaining the focus on their students' writing achievement, and on the development of their own teacher knowledge. The roles of the literacy lead teachers in the schools were increasingly viewed as pivotal to the success of the project in achieving its aims. It is acknowledged that the same management staff, literacy lead teachers, and classroom teachers were also committed to other activities in the MEI, and most schools were involved in multiple forms of professional development, beyond the demands of their classroom responsibilities. Several of the participating schools were committed to other schooling improvement initiatives. As a result, teachers' commitment and energy were dissipated.

4.2 Availability of time in schools: Locality of schools and professional demands

Linked to the constraints of time was the issue of locality. In 2006, the teachers worked in partnership with the university researchers at each step of the iterative process. In order to establish strong collaborative relationships between the teachers and university researchers, the four researchers worked in pairs with four schools each. The decision to work in this way was based on the belief that this would provide a form of triangulation and strengthen the collaborative discussion, planning, and evaluation. However, the schools' localities led to excessive travel times. Furthermore, the time budgeted in the project did not take account fully of the time demands spent in schools with the 25 teachers and 10 literacy leaders, planning, reviewing, and reflecting.

Moreover, all of the university researchers were engaged in extensive teacher education classes, and management responsibilities. Teaching demands and inflexible course timetables compromised the time available for the university researchers to spend in schools. Consequently, the research team was unable to take part in the school-based QLCs, though other forum meetings arranged were valuable. Hill et al. (2006) have also cautioned about insufficient time being budgeted that can compromise in-depth analysis of project outcomes.

4.3 Student achievement data

As noted earlier, there are some limitations associated with standardised writing tools particularly with students who have not experienced success in writing. While it is essential to use standardised and norm-referenced assessment tools in order to report achievement gains, the standardised assessment process may impact on students' attitude to the task completion. This may be especially so for students for whom writing is challenging; for example, usual motivational strategies are not permitted and required writing topics may not engage the interest of the students. Mean data from small samples may be skewed as a result of such factors.

4.3.1 Data collection

Difficulties with the collection of the standardised writing assessment data (asTTle Writing and English Writing Exemplars) resulted in limited pre- post data on which to evaluate gains in students' writing achievement in 2006, have also been noted earlier but need to be recorded here as a limitation which could have been addressed more effectively earlier in the project. Some schools had not previously administered asTTle, so additional time was required to become informed, explain the tasks to the teachers, and code samples appropriately to assure anonymity. Even so, coding systems used by the teachers were varied and at times it was not possible to match samples consistently from students taken in March and October. Added to this was the transience of students and the reorganisation of classes. On reflection, it was clear that the

university researchers had made assumptions about schools' experience in managing standard assessment data and needed to provide clearer guidelines on procedures to follow. In 2007, better data collection processes were put in place which resulted in more complete data that could be used for pre- and post-assessment.

Teacher-researchers' action plans, including analysis of students' writing achievement, together with reflections on their teaching, were a rich source of data when thoughtfully completed. However, not all were able to meet the expectations of the research project to document the process and their learning. As Hill et al. (2006, p. 31) stated in reference to their teacher-researchers, "It could be argued that the teachers were more committed to action learning than action research." The same may well be true for some of the teachers in this project. They were committed to improving their practice, but not to the research documentation processes.

4.3.2 Analysis and interpretation of data

One problem that arose was the composite nature of many of the classes. Few classes were straight year groups to which the asTTle data could be directly applied. Therefore a decision was made to treat all Years 3/4 classes as Year 4, Years 5/6 classes as Year 6, and Years 7/8 classes as Year 8. While this will have affected comparisons with New Zealand norms to some extent, these differences were consistent between the beginning and end-of-year samples.

asTTle and the English Writing Exemplars provide clear indicators against which to assess writing. Nonetheless, assessment of writing will always require a professional judgement which implies a certain level of subjectivity. Reliability checks are therefore important. Although no formal reliability measures were used, cross-marking indicated that the four researcher-analysts were generally in agreement—approximately 85 percent for both asTTle samples and the English Writing Exemplars. In 2007, a research assistant trained in asTTle analysis assessed all samples, while the Exemplars were again analysed by the four researchers who cross-marked independently, then engaged in discussion over points of difference. Despite the efforts to ensure that writing levels were accurately assessed, reliability could also have been affected by students' responses to the set topics. For the Years 1/2–4 samples assessed using the English Exemplars, there were some variations in, for example, topic or genre choice within each class. Writing samples for these younger students were collected during normal writing sessions in the class. Administration procedures may not have been as rigorous as for the asTTle assessment.

The design of the research could have been strengthened by including writing achievement data from classes with nonparticipating teachers. While this was considered, it was not possible to include comparisons within the budget of this project. Later, however, some comparisons may be possible within the schools.

4.4 Evidence of teacher knowledge about writing and writing pedagogy

A further limitation of the project lies in the type of evidence gathered to report on teachers' knowledge about the principles and practices of effective pedagogy for writing. Teacher self-reporting, as noted earlier, is not viewed as a reliable source of evidence of teacher knowledge, nor of enhancement of pedagogy. While indicative, it does not provide any assurance of changes in practice. It is important to state, however, that teachers wrote detailed goals and action plans with researchers in 2006, based on their own teaching strengths and needs, and on achievement evidence based on analysis of students' writing. Each undertook a problem-solving approach to improve writing achievement of students in the class. There were opportunities to evaluate in their writing their own goals and progress in teacher knowledge, as well as to report comments on improved pedagogy as a result of the project. Evidence of causality, however, will continue to be limited without more robust and detailed self-analysis beyond the scope of the current project. Obtaining direct evidence of changes in teacher practice was not possible within the funding structure of the project. However, this would be important to include in a future project.

4.5 Implementation of the mentoring process

In 2007, the 2006 teachers became writing mentors taking on a leadership role in guiding their colleagues to become teacher-researchers. Working as a mentor with colleagues requires special skills and understandings. On reflection, there was insufficient support for the writing mentors to implement this role with their peers. It was intended that literacy leaders would follow up on the initial workshop with ongoing guidance for coaching colleagues. Aspects such as providing honest and specific feedback, maintaining accurate records of goal setting and evaluation, and managing resistance to change are skills not acquired easily. Not only was time difficult to allocate to these coaching sessions in some schools, but adequate ongoing support was not planned for.

The 2007 teachers were again invited to maintain portfolios in which to record the processes of reflection and goal setting. Completion of these was variable, with some 2006 mentor-teachers continuing to maintain detailed records of their reflections and actions, while other teachers kept minimal, ongoing documentation. A more comprehensive requirement for the keeping of this portfolio may have added further data upon which to comment and may have provided support for the 2006 teachers to negotiate completion of these documents with their 2007 colleagues.

In 2006, discussions with the university researchers kept a focus on the research process and on development of effective writing pedagogy. Summaries of jointly decided recommendations for refining and extending pedagogical and knowledge-based goals were discussed and recorded. The extent to which the 2006 mentors were able to provide consistent professional support for the teachers in 2007 could have been a factor in the variable student achievement outcomes. The

lower gains in some classes may be the outcome of some teachers being less clear and focused about the action research process.

4.6 Other issues

Other issues also impacted on the outcomes of the project. Some teachers left mid-way through the year so that neither student achievement data nor teachers' research records were available. Teacher movement also resulted in limited numbers of teachers being able to become writing mentors and to sustain the professional learning community in their schools. This is an ongoing issue for sustainability of professional development in schools such as these in the MEI area, where teacher turnover each year can be as high as 33 percent.

There were associated, ethically related, issues which also arose. It is considered important to identify them so that they can be taken into account when other projects are implemented. First are the tensions that arose around some ethical issues, several of which have been identified in another TLRI report (Hill et al., 2006). One is the tension between the roles of researcher and professional developer undertaken by university personnel involved in teacher education. In this project, at times it was clear that some of the teachers viewed the process as one of professional development, with the university researchers, as teacher educators, in a position to assist them in the practice. For example, one teacher commented:

. . . to properly enhance the teaching of writing PD is required that involves someone physically coming into the school and running workshops, spending time in each class for every teacher on staff. (2007 teacher)

This was exacerbated in a couple of instances because the teachers had been either pre-service or in-service students of the university researchers. Such relationships made it difficult to keep the researcher lens clearly to the fore at all times. Notwithstanding these tensions, it was evident that most of the teachers were taking a more reflective and analytical approach to their practice and saw themselves as teacher-researchers.

Another issue was that of teacher and school confidentiality within a community where particular personnel can be easily identified. Three of the teachers have been co-presenters at national and international conferences, thus making it impossible to maintain anonymity and to ensure confidentiality. Furthermore, and most appropriately, teacher-researchers were sharing their experiences in the wider MEI community, both formally and through their community networks.

Finally, as in a number of professional development initiatives, it is not possible to attribute direct causality of gains in student achievement to the action research process implemented within the university researcher/teacher-researcher partnerships. Other factors, such as extensive ongoing professional development as part of the wider MEI, will have had a simultaneous impact on the achievement reported. Certainly the outcomes of the project suggest that three key aims were met to some extent, and the future plans for sustainability suggest that in most of the schools there is a

commitment to maintaining a teacher-researcher perspective in order to maintain improved student achievement in writing.

5. TLRI values

In this section we discuss the outcomes of the project in relation to the extent to which they have met the strategic, practice, and research values, and related principles, of the TLRI in 2006 and 2007. (It is acknowledged that these have subsequently been amended.) It will also identify issues that have arisen that may have implications for future TLRI projects, and provide insights into research that the university researchers have gained while in partnerships with teacher-researchers.

5.1 Strategic values: Nga hua rautaki

A TLRI project is expected to address at least one of a number of themes which have been articulated to be of strategic importance for education in New Zealand today. In varying degrees, this project has contributed to all these themes: reducing inequalities; addressing diversity; understanding the processes of teaching and learning; and exploring future possibilities.

5.1.1 Addressing diversity and reducing inequalities

From the student achievement data, it is apparent that the project has contributed towards reducing inequalities and to addressing diversity for students in participating classes. The evidence-based goal setting for their practice, a key aspect of the action research process that was implemented by the teacher-researchers, resulted in gains in asTTle scores that, in many cases, greatly exceeded expected gains based on the asTTle norms. Student achievement scores were more closely clustered around the mean at the October assessment for most classes with few outlying student scores. This was particularly noticeable in some schools: for example, School A (2007, Years 4, 6, 7, 8); School B (2007, Years 2, 5), School C (2006, Years, 4, 5/6; 2007, Years 3, 4, 5, 6). The shifts in achievement suggest that for these students the inequalities identified in a range of studies (e.g., NEMP, 2002, 2006) may be beginning to reduce. Within each class and school, and to some extent across the entire project, the data suggested that the “tail of writing achievement” had reduced at the end of each year for the participating classes.

However, of great concern was the continued low achievement for most students in Years 7 and 8. The majority of students at the second assessment point in both year groups were achieving no higher than Level 2A and yet the expectation of the New Zealand curriculum is that most students entering secondary school should be achieving Level 4. Furthermore, the gains they were making did not match the mean gains of the normative asTTle sample. It may be that earlier, unsuccessful

experiences with learning to write have been cumulative, influencing both attitudes to, and knowledge of, writing that have been difficult to ameliorate.

McNaughton (2002) has described students who are underachieving being viewed, traditionally, as “at risk”. He claims that they should be more aptly viewed as students for whom school has been a “risky place”. For the students in the lower school years for whom achievement in writing is improving, it could be argued that school is becoming a less-risky place when teaching and learning decisions are based on evidence and not on assumptions. Greater achievement will, optimistically, provide a springboard to greater achievement for these students as they reach the upper levels of primary school. It would appear that when teachers commit to becoming practitioner-researchers, understanding and theorising their practice and applying new understandings about the teaching of writing, they can make a difference to student outcomes in writing.

5.1.2 Understanding the processes of teaching and learning

The findings of the project provide insights into an understanding of teaching and learning, not only for students, but also for the professional development of teachers.

For teachers, the insights were into processes of teaching and learning of writing to enable them to improve their practice in order to raise student achievement in areas where achievement has been historically low. The teacher-researchers within the project made a commitment to closely analysing students’ writing samples, to ascertain learning and teaching needs, and to reflect on, and enhance, their own knowledge and skills in order to optimise students’ learning. Although the use of evidence of student achievement as the basis of effective teaching and learning is widely known (e.g., Clarke, Timperley, & Hattie, 2003; Phillips et al., 2002), it has not been widely implemented in teacher practice (Timperley & Parr, 2004). Nonetheless, the teacher-researchers in this project were able to show that when the use of evidence was at the heart of their teaching, students’ achievement in writing improved. A very clear example of this is the marked shifts in achievement of the Year 4 class in School A (see Sections 3.1.2.1 and 3.4.1).

The potential impact of robust professional discussion has been acknowledged as pivotal to successful professional development (e.g., Annan et al., 2003; Timperley, 2007). However, it has also been argued that these discussion groups must involve “critical reflection on practice, rather than a comfortable collaboration in which ideas are simply shared” (McNaughton et al., 2006, p. 16). This project was designed to incorporate both in-school and interschool critical professional discussions. In some schools the in-school discussions (QLCs) were achieved, but only because within the overall organisation and leadership of the school the pivotal role of such discussion was acknowledged. Teacher-researchers who had the opportunity to share ideas within QLCs commented favourably on the opportunities to share their research and practice experiences. Unfortunately, however, the university researchers were unable to participate in the QLCs and, consequently, it is questioned whether these were critical and rigorous professional discussions, as anticipated, or more collegial and mutually supportive. Establishing the expectations and trust

necessary for such dialogue, as well as the ability to openly challenge colleagues, requires support and guidance which may not have occurred. In retrospect, the project should have strengthened this component. Assumptions were made that these were being organised and led by the literacy leaders. For robust professional discussion to become established and embedded as an integral part of teacher practice requires the full support of the leadership of the school. Without such commitment it is unlikely to occur, and will certainly not be sustained.

5.1.3 Exploring future possibilities

The connections to the theme of exploring future possibilities may seem somewhat tenuous, and yet there are clear implications from this project for building sustainability of professional development, and for supporting teachers to reconceptualise their role as being central to student learning. We have addressed some of the lessons that we have learnt are essential if teachers' practice is to optimise students' learning. There are opportunities for future projects to learn from our experiences, including omissions or oversights which we have identified. Moreover, all schools that participated in the TLRI project have made commitments to maintaining a teacher research perspective on their practice in relation to the teaching of writing during 2008, and perhaps into the future. Some teacher-researchers also commented that the research lens they were using for writing was being applied to other curriculum areas. One teacher (School D) remarked that she attributed improved students' reading performance to the fact that she was carefully analysing data from PAT tests and then applying this knowledge about her students' achievement to her instructional programme.

5.2 Practice value: Nga hua ritenga

This project was strongly guided by Principles Five and Six with the practice value articulated by the TLRI guidelines an integral component.

5.2.1 Partnerships between practitioners and researchers (Principle Six)

From its inception, this project was a partnership between the schools and the university researchers from the Faculty of Education, University of Auckland. Throughout the two years of the project, literacy leaders, teacher-researchers, and university researchers and, at times, the Ministry of Education Advisory Group, met to discuss, plan, and evaluate the research. The literacy leaders contributed information to the milestone reports which had been jointly compiled with the teacher-researchers. At all stages of planning and implementation of the project, the emphasis was on the "co-construction" of learning about writing, the use of evidence to enhance student achievement outcomes in writing, and the role of applying a research perspective to practice.

It was deemed essential from the outset to view the relationship between the schools and the university personnel as a “partnership contract”. A contract was developed and signed between the university researchers and the boards of trustees on behalf of the teachers in their schools, which clearly established the mutual expectations of the parties. The participant information sheets and consent forms essential for ethical approval, obtained for the project from the University of Auckland’s Human Participants Ethics Committee, clearly outline the requirements of participating in a research project and provide assurances of the responsibility of the researchers. Entering into a “contract” formalises the partnership. We would recommend that this be encouraged in future partnership research supported by TLRI.

The responsibility to disseminate the outcomes of the project was viewed as a partnership responsibility. Papers presented at the New Zealand Association for Research in Education (NZARE) conferences in both 2006 and 2007 were jointly prepared and presented. At the 2006 conference, as a result of the teachers’ voices powerfully articulating their learning and experiences as researchers, the project team received a grant to present at the Canadian Society for Studies in Education Conference in Saskatoon, Saskatchewan, in May 2007. The three teachers who presented with the university researchers commented insightfully on the difference between their experiences as partners in a research project and the role of teachers in the research paper presentations they attended. They were surprised, they said, to find that most research was “*on*” teachers or “*about*” teachers, with teachers clearly identified as subjects of the research. This, they claimed, had not been their experience in the TLRI project, which they recognised as one of partnership concerned with knowing more about improving students’ achievement in writing. It was clear these three teachers, as well as the teacher who presented at another of the conferences, perceived their role as pivotal to the research, with joint responsibility for the research outcomes.

5.2.2 The central role of the teacher in learning

The central role of the teacher in learning has certainly been a clear outcome of this project. Teachers, through interrogating their own practice through analysis of student outcomes and reflection on their own teaching, have become more aware of the central and critical role they play in their students’ learning. Rather than viewing the students as having deficits in their learning, they began to realise that if a student wasn’t learning then the reason may be in their teaching. As one teacher exclaimed, “I have just realised that (the research project) is all about me . . . not about the children. I am the one who has to change if we are to improve students’ achievements” (Teacher, School G). Another even stated that she had come to realise that you do in fact have to *teach* writing! The teacher-researchers had become more competent, and confident, in identifying what it was that their students needed to know to achieve the next steps in writing. In discussing their writing pedagogy, teachers more consistently articulated a rationale for the approaches they employed and demonstrated a metalanguage for writing. While it is acknowledged that teacher-espoused beliefs and reports about practice (Parr, Timperley, Reddish, Jesson, & Adams, 2006), through documentation and professional discussion, are not a reliable

indication of teacher beliefs and practices in action, it is argued there is evidence the project had impacted on their practice. Nonetheless, to provide stronger evidence of “teacher transformation”, future projects would be advised to design data collection procedures that would allow direct observation of teacher practices. A TLRI project that is currently being completed (Parr, Hawe, & Sinnema, in press) is developing an observation guide which could well be a useful tool.

5.3 Research value: Nga hua rangahau

5.3.1 Developing research capacity: The role of the TLRI in developing teachers’ and university staff capacity as researchers

Recent New Zealand research on developing professional capacity in schools (e.g., Annan, et al., 2003; Hill et al., 2006; McNaughton et al., 2004; McNaughton et al., 2006; Robinson & Lai, 2006; Timperley, 2003, 2007) influenced the aims and design of the project. Underlying the development of the partnerships with the schools, and specifically the literacy leaders and teacher-researchers, was research that specifically argued for teachers seeing themselves as practitioner-researchers. For the teacher-researchers, the process of interrogating their students’ achievement in relation to reflection on their own work has, in most instances, helped them not only to refine their practice but also to see themselves as integral to students’ learning. Becoming a practitioner-researcher as part of a “community of teacher-researchers” appears to have enhanced their sense of personal accountability to their students and to each other.

It has been acknowledged (p. 65), however, that at times it was difficult to separate the teacher (or professional developer) and researcher roles for the university researchers as well as the teacher-researchers. Nonetheless, the experience of collaborating on a practice-based research project has resulted not only in the teachers applying a researchers’ lens but it has also enhanced the university personnel’s research experience. With the exception of the principal investigator, none of the university team had been involved in a major research study, particularly one that extended over a two-year time frame. For the university team, involvement in the project has been an opportunity to broaden and deepen critical understandings of research processes, understandings which at times have been gained through learning from methodological errors. For teacher educators at universities there is an imperative not only to teach from a research-informed perspective but to be able to become researchers on their own practice as well. This project has provided a valuable opportunity to build capability not only for the participating teachers but also for the university researchers.

5.3.2 Dissemination of the project outcomes

Teacher-researchers and university researchers have presented at conferences nationally and internationally (NZARE, 2006, 2007; British Educational Research Association [BERA], 2007; Canadian Society for the Study of Education [CSSE], 2007) and at seminars at the Faculty of Education, University of Auckland. Additionally, several of the teacher-researchers have shared their experiences of the research process, as well as new knowledge about the teaching of writing, with the MEI cluster and wider communities of practice. As a result of the shared focus on improving the teaching of writing in the participating schools, the literacy leaders and teacher-researchers have compiled a shared, research-informed resource to use in local schools. With the transience of teachers in this area, a record of shared learning will help sustain growth and the commitment to enhancing and refining writing pedagogical content knowledge in order to improve students' achievement in writing. There has been a shift in achievement, although not marked, and an apparent positive change in the trend of development in writing across the years. If the project aims can be continued, and there is indeed an articulated commitment to do so, then it would appear that the project has gone some way to achieving the strategic, practice, and research priorities of TLRI.

In conclusion, there has been the development of a community of shared interest in practitioner research in the area of writing. As Morton and Gordon (2005, p. 99) have stated in examining the place of practitioner research within the framework of Performance Based Research Funding:

Practitioner research can build a community of shared interests, with researcher and school practitioner working together to make key decisions throughout the research process, and developing programmes of research, including critical dialogue, peer review and dissemination, that are meaningful to all of the participants.

For the teacher-researchers and university researchers in the partnership, this project has been one that has been meaningful to all participants. We are grateful to the support of the Teaching & Learning Research Initiative in funding this research.

References

- Aikman, M. (1999). *Non-narrative writing*. Unpublished master's thesis, University of Auckland, Auckland.
- Annan, B., Lai, M. K., & Robinson, V. (2003). Teacher talk to improve teacher practices. *set: Research Information for Teachers, 1*, 31–35.
- Ball, D., & Bass, H. (2000). Interweaving content and pedagogy in teaching and learning to teach: Knowing and using mathematics. In J. Boaler (Ed.), *Multiple perspectives on mathematics teaching and learning* (pp. 83–104). London: Ablex.
- Buly, M. R., & Valencia, B. W. (2002). Below the bar: Profiles of students who fail state reading assessments. *Educational Evaluation and Policy Analysis, 34*(3), 219–239.
- Cardno, C. (2003). *Action research: A developmental approach*. Wellington: New Zealand Council for Educational Research.
- Clarke, S., Timperley, H., & Hattie, J. (2003). *Unlocking formative assessment*. Auckland: Hodder Moa Beckett.
- Crooks, T., Flockton, L., & White, J. (2007). *Writing assessment results 2006*. Dunedin: Educational Assessment Research Unit.
- Education Review Office. (2002). *Writing in years 5 to 8: An evaluation of writing programmes*. Available from: <http://www.ero.govt.nz/>
- Glasswell, K., Parr, J. M., & McNaughton, S. (2003a). Working with William: Teaching, learning and the joint construction of a struggling writer. *The Reading Teacher, 56*(5), 494–501.
- Glasswell, K., Parr, J. M., & McNaughton, S. (2003b). Four ways to work against yourself when conferencing struggling writers. *Language Arts, 80*(4), 291–299.
- Hill, M., Robertson, J., Allan, R., Bakker, T., Connelly, D., Grimes, M., Murrphy, L., & Sutton, M. (2006). *Great expectations: Enhancing learning and strengthening teaching in primary schools with diverse student populations through action research*. Retrieved from: http://www.tlri.org.nz/pdfs/9204_finalreport.pdf
- Hood, H. (2000). *Left to write too* (2nd ed.). Palmerston North: Dunmore Press.
- Kamler, B., & Comber, B. (2005). Designing turnaround pedagogies and contesting deficit assumptions. In B. Comber & B. Kamler (Eds.), *Turn around pedagogies: Literacy interventions for at-risk students* (pp. 1–14). Newtown, NSW: Primary English Teaching Association.
- Labbo, L. D., Hoffman, J. V., & Roser, N. L. (1995). Ways to unintentionally make writing difficult. *Language Arts, 72*(3), 164–170.
- Lai, M. K., McNaughton, S., MacDonald, S., & Farry, S. (2004). Profiling reading comprehension in Mangere schools: A research and development collaboration. *New Zealand Journal of Educational Research, 29*(1), 223–240.
- Limbrick, L., Buchanan, P. Z., Goodwin, M., & Schwarcz, H. (2005). *Developing a self sustaining professional development programme in writing in a group of schools in the Manurewa Enhancement Initiative*. Unpublished manuscript, University of Auckland, Auckland.
- Limbrick, L., Kirton, N., Knight, N., Funaki, A., & Evans, J. (2004, November). *Teachers learning from student achievement data in writing*. Paper presented at the national conference of the New Zealand Association for Research in Education, Wellington.

- Limbrick, L., Knight, N., & McCaulay, S. (2005, December). *Teachers' reflection on professional development in writing*. Paper presented at the national conference of the New Zealand Association for Research in Education, Dunedin.
- McDowall, S., Boyd, S., & Hodgen, E. (with van Vliet, T.). (2005). *Reading Recovery in New Zealand: Uptake, implementation, and outcomes, especially in relation to Māori and Pasifika students*. Wellington: Ministry of Education. Retrieved from: http://www.tki.org.nz/r/literacy_numeracy/pdf/reading_rec_uptake.pdf
- McNaughton, S. (2002). *Meeting of minds*. Wellington: Learning Media.
- McNaughton, S., MacDonald, S., Amituanai-Toloa, M., Lai, M., & Farry, S. (2006). *Enhanced teaching and learning of comprehension in years 4–9 in seven Mangere schools*. Retrieved from: http://www.tlri.org.nz/pdfs/9206_finalreport.pdf
- McNaughton, S., Phillips, G. E., & MacDonald, S. (2004). Profiling teaching and learning needs in beginning literacy instruction: The case of children in “low decile” schools in New Zealand. *New Zealand Journal of Educational Research*, 35(2), 703–730.
- Ministry of Education. (1994). *English in the New Zealand curriculum*. Wellington: Learning Media.
- Ministry of Education. (2003). *Effective literacy practice in years 1–4*. Wellington: Learning Media.
- Ministry of Education. (2005). *asTTle: Assessment tools for teaching and learning, V4*. Wellington: Author.
- Ministry of Education. (2006). *Effective literacy practice in years 5–8*. Wellington: Learning Media.
- Morton, M., & Gordon, L. (2005). What counts as research? Practitioner research as counter discourse. In Richard Smith & Joce Jesson (Eds.) *Punishing the discipline—the PBRF regime: Evaluating the position of education: Where to from here?* (pp. 95–100). Auckland: University of Auckland.
- Oliver, A. (2005). *The TLRI: Teachers' perspectives on partnership and research*. Retrieved from: http://www.tlri.org.nz/pdfs/AlexOliver_paper.pdf
- Parr, J. M., Hawe, E., & Sinnema, C. (in press). *Teachers' perspectives on partnership and research*. Wellington: Teaching & Learning Research Initiative.
- Parr, J. M., Timperley, H., Reddish, P., Jesson, R., & Adams, R. (2006). *Literacy professional development project: Identifying effective teaching and professional development practices for enhanced student learning*. Wellington: Ministry of Education.
- Poskitt, J. (2002). *National consultation on exemplars: What difference does it make for teachers?* Retrieved from: www.tki.org.nz/r/assessment/research/mainpage/research
- Pressley, M., Allington, R., Wharton-McDonald, R., Block, C., & Morrow, L. M. (2001). *Learning to read: Lessons from exemplary first-grade classrooms*. New York: Guilford Press.
- Robertson, J. (2005). *Coaching leadership: Building educational leadership capacity through coaching partnerships*. Wellington: New Zealand Council for Educational Research.
- Robinson, V. (2003). Teachers as researchers: A professional necessity? *set: Research Information for Teachers*, 1, 27–29.
- Robinson, V., & Lai, M. (2006). *Practitioner research: A guide to improving classrooms and schools*. Thousand Oaks, CA: Corwin Press.
- Symes, I., & Timperley, H. (2003). Using achievement information to raise student achievement. *set: Research Information for Teachers*, 1, 36–39.
- Timperley, H. (2003). *Shifting the focus: Achievement information for professional learning: A summary of the sustainability of professional development in literacy: Parts 1 and 2*. Wellington: Ministry of Education.
- Timperley, H. (2007). *Making a difference to student outcomes in compulsory sector schooling: Inaugural professorial address*. Auckland: Faculty of Education, University of Auckland.

- Timperley, H., & Parr, J. (2004). *Using evidence in teaching practice: Implications for professional learning*. Auckland: Hodder Moa Beckett.
- Wray, D., Medwell, J., Fox, R., & Poulson, L. (2000). The teaching practices of effective teachers of literacy. *Educational Review*, 52, 75–84.

Appendices

Appendix A: Partnership agreement between the project co-ordinator/researchers and teachers

Partnership Agreement between the Project Co-ordinator/Researchers and Teachers For a project:

A research partnership to enhance capacity to analyse students in writing in order to raise student achievement in writing through using evidence more effectively

This agreement covers the partnership between the Project Co-ordinator/Researchers and the school for xxxxxxxxxxxxxxxxxxxxxxxx during the period of 2006/2007. We intend to undertake this project in a collaborative manner, with due recognition of each other's skills and values.

Because the project involves observation of students and teaching, it is important that the project is carried out in an atmosphere of trust and respect. This agreement therefore specifies the expectations for each of the project participants.

As project partners, we will co-operate to achieve the project aims and objectives:

The proposed project has 3 main aims:

1. to raise student achievement in writing and reduce reported disparity in writing achievement for Maori and Pasifika students through strengthening teachers' understanding and use of assessment data in writing to modify instructional programmes;
2. to enhance teachers' capacity to analyse students' writing, using the English Exemplars (2003), and to strengthen teacher practice in using evidence to inform teaching;
3. to enhance teachers' knowledge about the principles and practices of effective pedagogy for writing through engaging in robust professional discussion in quality learning circles.

The following objectives stem from these aims:

1. to investigate and strengthen teachers' understanding of the writing process in schools that have high proportions of Maori and Pasifika students ;

2. to enable teachers to use writing achievement data to inform the teaching of writing processes
3. to investigate the role of professional discussion about students' writing to enhance teachers' knowledge about writing processes and writing pedagogy
4. to investigate teachers' perception of their own confidence and competence in teaching writing as a result of participation in quality learning circles focused on writing.

Specifically, the Project Coordinator/Researchers will:

- submit an ethics proposal to The University of Auckland and act in accordance with its requirements
- maintain strong lines of communication about the project's progress, plans and issues arising
- take responsibility for organising the project's tasks, reports and timetabling
- liaise with the TLRI funders where necessary
- ensure that participants are paid as per the project budget
- collect and analyse observation data
- interview project participants throughout the duration of the project
- search and secure necessary resource material/research findings relevant to the project
- report project findings accurately and sensitively, while respecting anonymity and confidentiality
- help disseminate project findings as agreed by the project team

The participating teachers will:

- attend planning meetings and workshops as appropriate and contribute to the project's activities
- organise and participate in observations
- carry out these tasks in a sensitive and supportive manner
- undertake the collection of observation data as planned for the project
- be interviewed by the researchers throughout the project
- participate in the review of project reports
- have the on-going right to withdraw from the project
- help disseminate project findings as agreed by the project team

Signed by the Project Co-ordinator on behalf of the Researchers

Name: Libby Limbrick

Signature:

Date:

Signed by the Principal on behalf of the xxx School

Name:

Signature:

Date:

Appendix B: Planning documents

Template for recording TLRI project

| 1. Class Writing Profile | | |
|--|----------|----------|
| | Children | Teaching |
| Strengths (based on Writing Exemplars) | | |
| Needs (based on Writing Exemplars) | | |

| 2. Focus Area/s | |
|--|------------------------------------|
| Select 3 possible focus areas for this project | Why have you selected them? |
| a) | |
| b) | |
| c) | |
| Final choice (in discussion with Research team) | |

| Research Process: Timeline/Action Plan/ Reflections | | | | |
|---|------|-----|-----|---------------------------------------|
| When | What | Why | How | *Issues that have arisen *Comments |
| | | | | |

Example of planning communication

TLRI MEETING OF MARINEKE AND LIBBY WITH SCHOOL 'X' TEACHER RESEARCHERS 9.00 – 12.00 JUNE 14TH

To all teacher researchers

We are looking forward to meeting with you again. Before we do please remember to send us your final focus.. that is the goals for your writing programme.

Remember that these need to be based on evidence of students (or teacher) need from the students' writing samples you have looked at.

If this could be emailed to Marineke (m.goodwin@auckland.ac.nz) and Libby (l.limbrick@auckland.ac.nz) by Tuesday June 27th. It would be helpful if you could let us know also what your current class or syndicate theme/topics for this part of the term are.

This will allow us some time to think and about, and gather, any resource material that may help you.

Please come to the meeting with :-

1. Your focus/goal and rationale clearly stated. Remember that this must be from you analysis of your students' writing using the Exemplars. We still have an opportunity to refine this;
2. The action plan drafted with possible timeframe and what you plan to do, ... remember to have a reason for doing it based on the evidence you have identified.
3. Think carefully about the steps you need to put into place to achieve each stage of your timeframe. You may wish to put this in draft form if you are still not sure about how you are going to achieve your goals.
4. If you have made a start, come prepared to share with us your experience of what has happened so far. For example if you have any samples of your modelling, and /or any resources you have used. Think about what this tells you about your teaching
5. Please also bring some samples of writing from the children you are working with, that you would like to discuss with us.

We would like to use this time to think about what we are all learning from these opportunities in relation to the project goals (see attached). This could include any insights you are having about looking closely at your students' writing in terms of your teaching. It could also include any challenges or problems you are having...or any issues at all you want to bring up.

See you soon

Libby and Marineke

Appendix C: Documents used during the project

Peer observations of writing

Name:

Year groups;

School:

Date:

| | | |
|---|---|-------------------------------------|
| <p><i>To be completed before the lesson</i> Focus for observation (this should be related to your goal and specific)</p> | <p>Rationale Why this is my focus and what I want to achieve in this lesson</p> | <p>Peer discussion notes</p> |
|---|---|-------------------------------------|

| | | |
|--|--------------------------------------|---|
| <p>I want you to look for evidence of</p> | <p>Peer observed evidence</p> | <p>Peer discussion notes after observation</p> |
|--|--------------------------------------|---|

| | | |
|--|--------------------------------------|---|
| <p>I want you to look for evidence of</p> | <p>Peer observed evidence</p> | <p>Peer discussion notes after observation</p> |
|--|--------------------------------------|---|

Interschool meeting, November 2006

QUESTIONS FOR TLRI FOCUS GROUPS MEETING

Introductory blurb: thank you for being part of the research team and for coming this afternoon to share your experiences: your learning and the challenges for you and what if any impact there has been on the students' writing.

So that your comments will be anonymous can you number yourselves clockwise. You will then be recorded as Teacher 1,2 etc.in each group.

The questions noted below are only to keep us on track and to guide discussion around your experiences and responses to being in the project. They will not necessarily all be covered individually as some of these issues may arise incidentally.

Let's start with some general feelings. Can each person identify some PMIs (Positives, Minuses and Interesting points). Let's start with the positives first. Can we hear from each of you in turn?

1. What have been some 'positives' for you of taking part in the TLRI project focus on writing?
2. What have been some 'negatives' of challenges for you of taking part in the TLRI project focus on writing? What could be improved in the process?
3. What have been some interesting, or surprising, outcomes for you as a result of taking part in the TLRI project focus on writing?
4. At the heart of this project has been the establishment of a goal or goals based on knowing about your students' achievement and reflection on your own practice. In what way did a focus on a specific aspect of your practice influence your teaching?
5. What changes have you made to your practice (if any)? Can you describe one aspect of your practice that you have changed? (for example modelling, conferencing, publishing, organisation,). Try to be explicit and focus on big picture stuff . Was this related to your goal or specific focus?
6. What effect has this had on your students' writing? (or what changes have you seen. in your children's writing and their attitude to writing). Why do you think it has had that effect?
7. How and for what purpose do you use English Exemplars in your classroom? (for example establishing learning intentions/success criteria, modelling, conferencing, publishing or other)
8. What do you know about writing and the teaching of writing that you didn't know before this year?

9. What do you think makes a good teacher of writing? Why these factors important?
10. Are there any other comments (or suggestions) you would like to make about the TLRI project?

TLRI Interschool meeting, August 2007

WRITING MENTORS/LITERACY LEADERS/ 2007 TEACHERS)
Please comment from your perspective – (separate forms for each group)

| | What are the benefits? | What are the challenges? | What needs to happen to ensure sustainability of writing instruction professional development |
|-----------------|------------------------|--------------------------|---|
| For students? | | | |
| For teachers? | | | |
| For the schools | | | |

TLRI final forum proforma, November 2007

1. What do you as a school, and as individual teachers know now, that you didn't know before about enhancing the teaching of writing?

2. If you were to be asked to advise another school on how to go about enhancing the writing achievement of their students, based on what you have learnt from being involved in the project about the teaching of writing and about professional development within a school, what would be some of the key messages? *(for example it may include knowing about your students writing from using the English Writing Exemplars, developing goals for focused teaching, having professional discussions about approaches and resources, peer observations etc etc.. these are just prompts for your thinking, not putting ideas into your head)*

3. What have you planned or will you put in place in 2008 to maintain the focus on students' writing achievement throughout the school?

Appendix D: asTTle Writing scores 2006–2007: Console reports

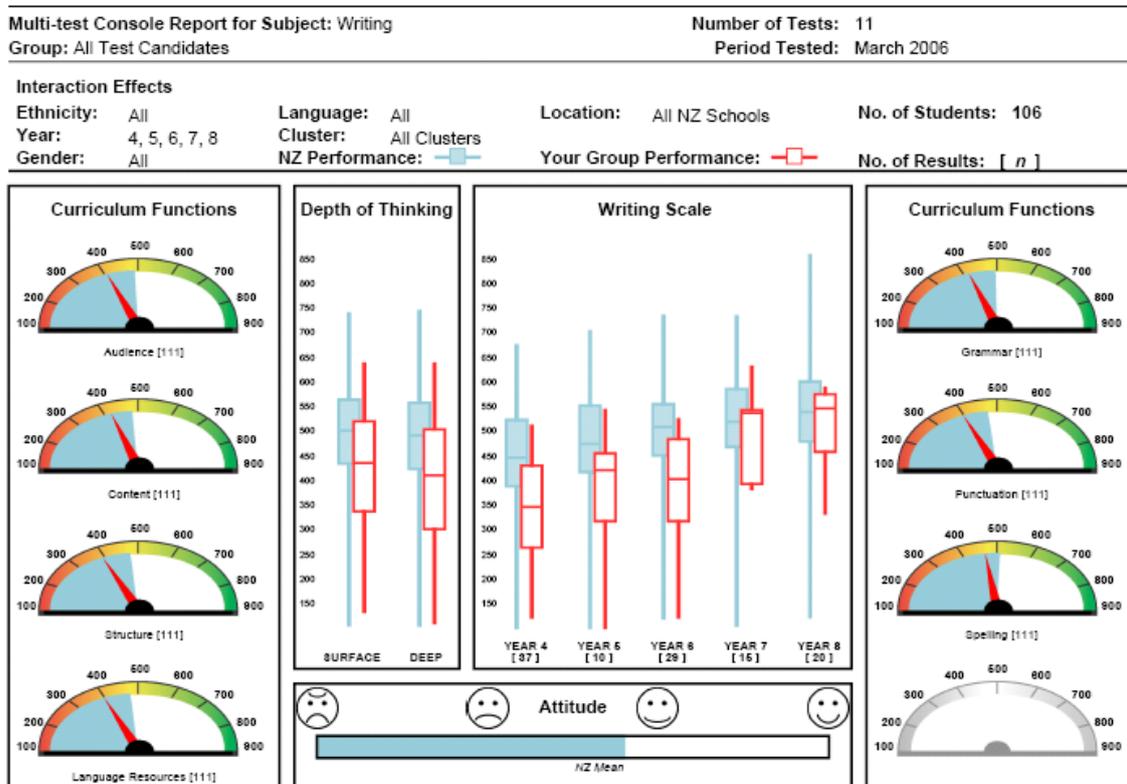


Figure 1: March 2006

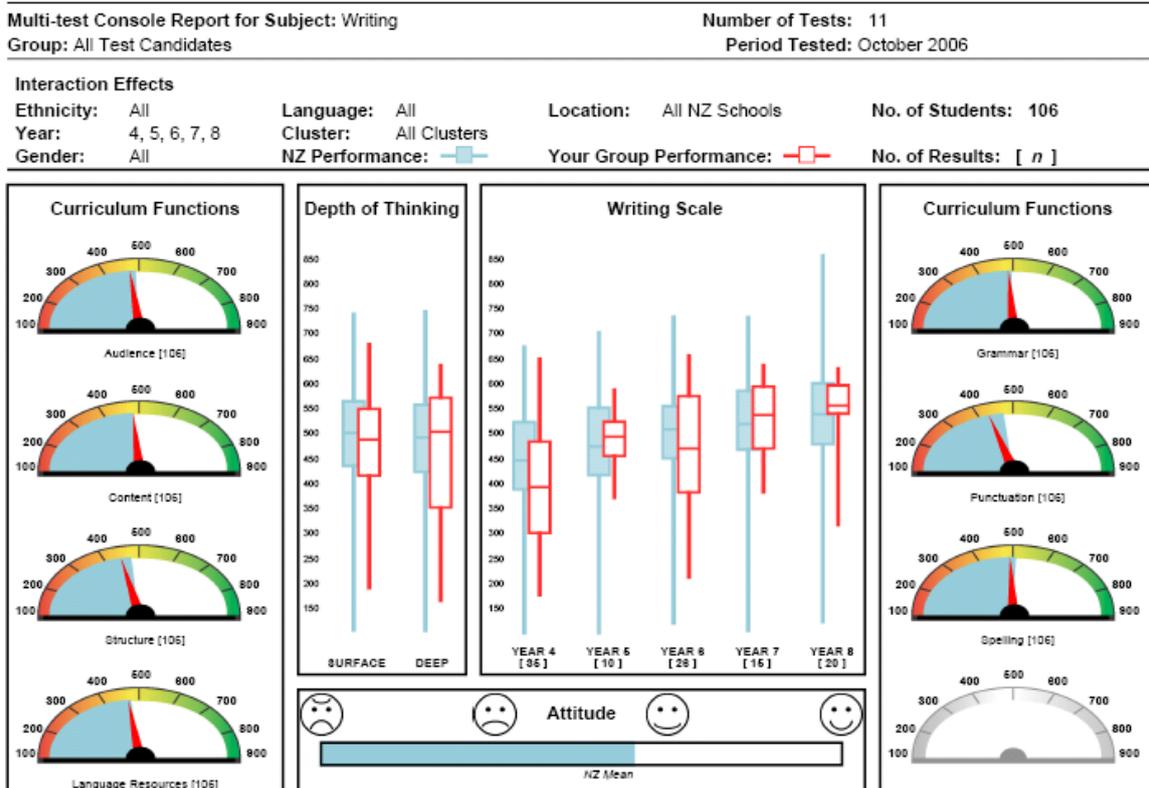


Figure 2: October 2006

Interaction Effects

Ethnicity: All Language: All Location: All NZ Schools No. of Students: 383
 Year: 4, 5, 6, 7, 8 Cluster: All Clusters
 Gender: All NZ Performance: Your Group Performance: No. of Results: [n]

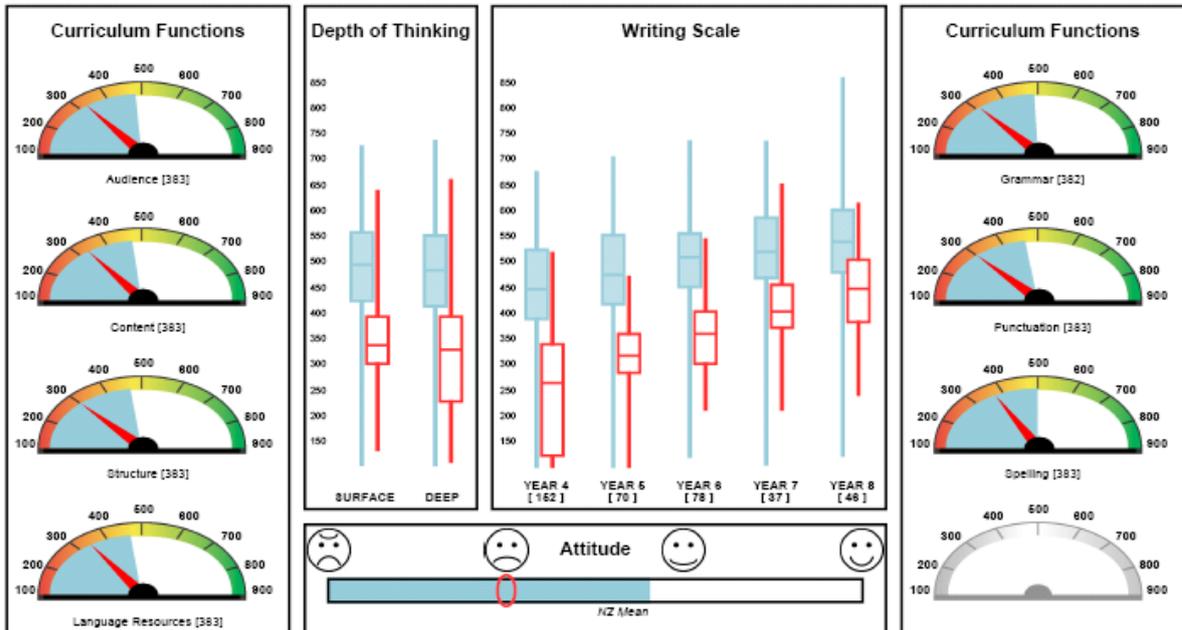


Figure 3: March 2007

Interaction Effects

Ethnicity: All Language: All Location: All NZ Schools No. of Students: 383
 Year: 4, 5, 6, 7, 8 Cluster: All Clusters
 Gender: All NZ Performance: Your Group Performance: No. of Results: [n]

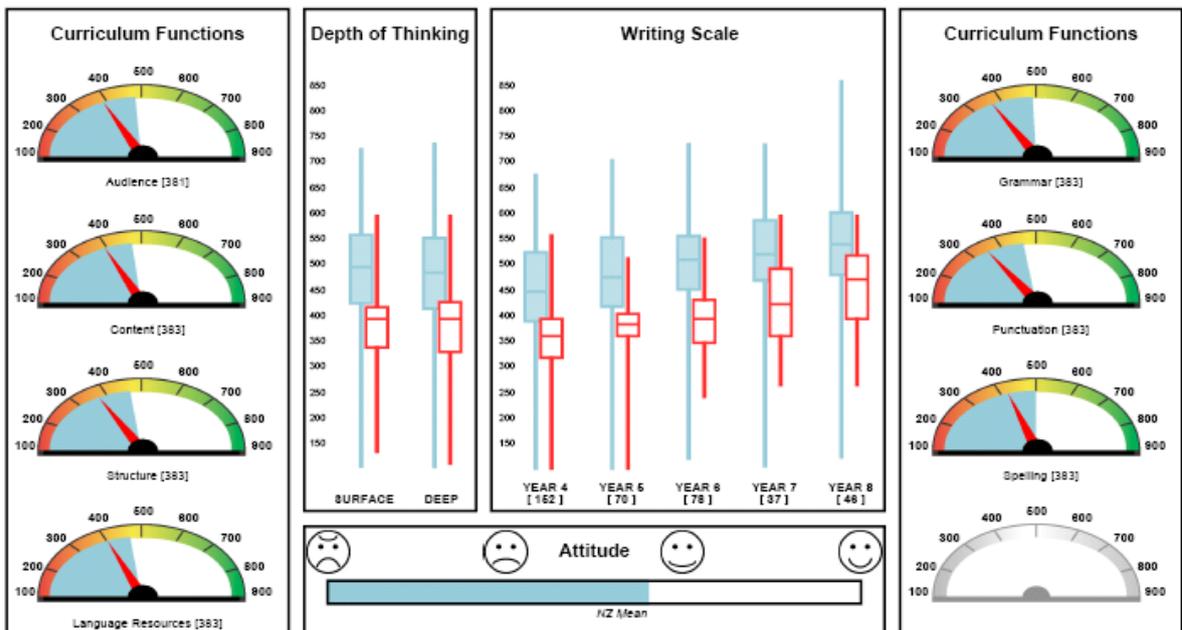


Figure 4: October 2007

2006 Raw scores for median 75th and 25th percentiles and ranges (NZ norms for means, available only for the end of the year for asTTle V4, in brackets)

| | Median | 75 th percentile | 25 th percentile | Upper range score | Lower range score |
|------------|------------|--------------------------------|--------------------------------|-------------------------|-------------------------|
| Year 4 | | | | | |
| March | 350 | 435 | 260 | 510 | 110 |
| October | 400 (455) | 490 (525) | 305 (390) | 650 (675) | 170 (175) |
| Difference | 50 | 55 | 45 | 60 | 60 |
| Year 5 | | | | | |
| March | 425 | 460 | 310 | 545 | <100 |
| October | 495 (480) | 520 (550) | 455 (405) | 675 (700) | 355 (<100) |
| Difference | 70 | 60 | 145 | 130 | >255 |
| 6 | | | | | |
| March | 400 | 455 | 310 | 555 | 110 |
| October | 455(505) | 560(550) | 360 (445) | 650 (740) | 200 (130) |
| Difference | 55 | 105 | 50 | 95 | 90 |
| Year 7 | | | | | |
| March | 525 | 530 | 390 | 630 | 380 |
| October | 520 (520) | 595(590) | 465 (460) | 635 (740) | 375 (100) |
| Difference | - 5 | 60 | 75 | 5 | -5 |
| Year 8 | | | | | |
| March | 540 | 560 | 450 | 580 | 315 |
| October | 555 (535) | 595 (590) | 540 (470) | 630 (880) | 310 (110) |
| Difference | 15 (54) | 35 | 90 | 50 | 5 |

Table: 2007 Raw score for median 75th and 25th percentiles and ranges

| | Median | 75 th percentile | 25 th percentile | Upper score | range | Lower score | range |
|------------|------------|--------------------------------|--------------------------------|----------------|-------|----------------|-------|
| Year 4 | | | | | | | |
| March | 260 | 345 | 130 | 520 | | <100 | |
| October | 360 (450) | 395(525) | 310(390) | 505 (680) | | <100(<100) | |
| Difference | 100 | 50 | 180 | 15 | | | |
| Year 5 | | | | | | | |
| March | 320 | 355 | 270 | 470 | | <100 | |
| October | 385 (480) | 405 (550) | 355 (405) | 510 (700) | | <100(<100) | |
| Difference | 65 | 50 | 85 | 40 | | | |
| Year 6 | | | | | | | |
| March | 355 | 400 | 300 | 445 | | 210 | |
| October | 390 (505) | 420 (550) | 345 (445) | 550(740) | | 240 (130) | |
| | 45 (14) | 20 | 45 | 105 | | 30 | |
| Year 7 | | | | | | | |
| March | 400 | 450 | 355 | 650 | | 210 | |
| October | 420 (520) | 490 (590) | 360(460) | 600 (730) | | 255 (110) | |
| | 20 | 40 | 5 | 50 | | 45 | |
| Year 8 | | | | | | | |
| March | 450 | 495 | 370 | 600 | | 220 | |
| October | 460 (535) | 510 (590) | 390 (470) | 595 (850) | | 255 (110) | |
| Difference | 10 | 15 | 20 | -5 | | 35 | |

Tables 2 and 3 suggest that for Years 4,5 and 6 in both 2006 and 2007 not only were mean gain scores greater than expected, but that the scores for the students in the 25th percentile increased substantially and students in lower range of scores improved more than expected according to the New Zealand norms.

Appendix E: asTTle Writing

2006 AsTTle WRITING SCORES FOR MARCH AND OCTOBER AND GAINS

Mean AsTTle Writing (means and curricula levels)

School B Year 4

| | Score | Level | Surface | Deeper |
|-----------------------|-------|-------|---------|--------|
| March | 382 | 2P | 2P | 2P |
| October | 425 | 2P | 2A | 2P |
| Difference(sublevels) | 37 | 0 | 1 | 0 |

School B Year 5/6

| | Score | Level | Surface | Deeper |
|-----------------------|-------|-------|---------|--------|
| March | 459 | 2A | 2A | 2A |
| October | 589 | 3A | 3A | 3A |
| Difference(Sublevels) | 130 | 3 | 3 | 3 |

School C Year 4

| | Score | Level | Surface | Deeper |
|-----------------------|-------|-------|---------|--------|
| March | 247 | <2B | 2B | <2B |
| October | 342 | 2B | 2P | 2B |
| Difference(sublevels) | 95 | 1 | 1 | 1 |

School C Year 5/6

| | Score | Level | Surface | Deeper |
|-----------------------|-------|-------|---------|--------|
| March | 428 | 2P | 2P | 2P |
| October | 505 | 3B | 3B | 3B |
| Difference(Sublevels) | 77 | 2 | 2 | 2 |

**2007AsTTle WRITING SCORES FOR MARCH AND OCTOBER
AND GAINS**

Mean AsTTle Writing (means and curricula levels)

School A Year 4

| | Score | Level | Surface | Deeper |
|-----------------------|-------|-------|---------|--------|
| March | 286 | 2B | 2B | 2B |
| October | 435 | 2P | 2P | 2A |
| Difference(Sublevels) | 149 | 1 | 1 | 2 |

School A Year 5

| | Score | Level | Surface | Deeper |
|-----------------------|-------|-------|---------|--------|
| March | 310 | 2B | 2B | 2B |
| October | 417 | 2P | 2P | 2P |
| Difference(Sublevels) | 107 | 1 | 1 | 1 |

School A Year 6

| | Score | Level | Surface | Deeper |
|------------------------|-------|-------|---------|--------|
| March | 380 | 2P | 2B | 2P |
| October | 452 | 2A | 2A | 2A |
| Difference (Sublevels) | 72 | 1 | 1 | 1 |

School A Year 7

| | Score | Level | Surface | Deeper |
|-----------------------|-------|-------|---------|--------|
| March | 435 | 2P | 2P | 2A |
| October | 502 | 3B | 3B | 3B |
| Difference(Sublevels) | 67 | 2 | 2 | 1 |

School A Year 8

| | Score | Level | Surface | Deeper |
|-----------------------|-------|-------|---------|--------|
| March | 414 | 2P | 2P | 2P |
| October | 420 | 2P | 2P | 2P |
| Difference(Sublevels) | 6 | 0 | 0 | 0 |

School B Year 4

| | Score | Level | Surface | Deeper |
|-----------------------|-------|-------|---------|--------|
| March | 333 | 2B | 2B | 2B |
| October | 361 | 2B | 2B | 2B |
| Difference(sublevels) | 29 | 0 | 0 | 0 |

School B Year 5

| | Score | Level | Surface | Deeper |
|-----------------------|-------|-------|---------|--------|
| March | 311 | 2B | 2B | 2B |
| October | 363 | 2B | 2P | 2B |
| Difference(Sublevels) | 52 | 0 | 1 | 0 |

School B Year 6

| | Score | Level | Surface | Deeper |
|-----------------------|-------|-------|---------|--------|
| March | 327 | 2B | 2B | 2B |
| October | 364 | 2B | 2P | 2B |
| Difference(Sublevels) | 37 | 0 | 1 | 0 |

School C Year 6

| | Score | Level | Surface | Deeper |
|-----------------------|-------|-------|---------|--------|
| March | 290 | 2B | 2B | 2B |
| October | 354 | 2B | 2B | 2B |
| Difference(Sublevels) | 64 | 0 | 0 | 0 |

School C Year 5

| | Score | Level | Surface | Deeper |
|-----------------------|-------|-------|---------|--------|
| March | 299 | 2B | 2B | 2B |
| October | 366 | 2B | 2B | 2B |
| Difference(Sublevels) | 67 | 0 | 0 | 0 |

School C Year 4

| | Score | Level | Surface | Deeper |
|-----------------------|-------|-------|---------|--------|
| March | 301 | 2B | 2B | 2B |
| October | 401 | 2P | 2P | 2P |
| Difference(Sublevels) | 100 | 1 | 1 | 1 |

**AsTTle WRITING SCORES FOR MARCH AND OCTOBER AND GAINS
MEDIAN, 75th PERCENTILE, 25th PERCENTILE AND RANGE**

School A

Table: 2007 Raw score for median , 75th and 25th percentile, and ranges

| | Median | 75 th percentile | 25 th percentile | Upper range score | Lower range score |
|------------|--------|-----------------------------|-----------------------------|-------------------|-------------------|
| Year 4 | | | | | |
| March | 275 | 350 | 245 | 355 | 160 |
| October | 484 | 485 | 385 | 500 | 330 |
| Difference | 209 | 135 | 140 | 145 | 70 |
| Year 5 | | | | | |
| March | 340 | 355 | 280 | 450 | 120 |
| October | 430 | 475 | 395 | 510 | 100 |
| Difference | 90 | 120 | 115 | 60 | 20 |
| Year 6 | | | | | |
| March | 360 | 440 | 350 | 505 | 235 |
| October | 455 | 465 | 420 | 540 | 365 |
| Difference | 95 | 25 | 70 | 35 | 130 |
| Year 7 | | | | | |
| March | 371 | 520 | 355 | 550 | 350 |
| October | 525 | 555 | 420 | 600 | 410 |
| Difference | 154 | 35 | 65 | 40 | 60 |
| Year 8 | | | | | |
| March | 380 | 500 | 275 | 445 | 240 |
| October | 430 | 440 | 375 | 465 | 355 |
| Difference | 50 | 60 | 100 | 20 | 115 |

School B**Table: 2007 Raw score for median , 75th and 25th percentile, and ranges**

| | Median | 75 th percentile | 25 th percentile | Upper range score | Lower range score |
|------------|--------|-----------------------------|-----------------------------|-------------------|-------------------|
| Year 4 | | | | | |
| March | 310 | 365 | 280 | 515 | 205 |
| October | 355 | 395 | 335 | 555 | 240 |
| Difference | 45 | 30 | 55 | 40 | 35 |
| Year 5 | | | | | |
| March | 310 | 355 | 250 | 445 | <100 |
| October | 390 | 395 | 340 | 445 | 245 |
| Difference | 80 | 40 | 90 | 0 | >145 |
| Year 6 | | | | | |
| March | 305 | 350 | 280 | 490 | 240 |
| October | 330 | 390 | 300 | 540 | 260 |
| Difference | 25 | 40 | 20 | 50 | 20 |

School C**Table: 2007 Raw score for median , 75th and 25th percentile, and ranges**

| | Median | 75 th percentile | 25 th percentile | Upper range score | Lower range score |
|------------|--------|-----------------------------|-----------------------------|-------------------|-------------------|
| Year 4 | | | | | |
| March | 280 | 335 | 210 | 415 | 165 |
| October | 405 | 410 | 360 | 455 | 300 |
| Difference | 25 | 75 | 70 | 40 | 135 |
| Year 5 | | | | | |
| March | 300 | 355 | 285 | 460 | <100 |
| October | 365 | 395 | 310 | 450 | 240 |
| Difference | 65 | 45 | 25 | 10 | >140 |
| Year 6 | | | | | |
| March | 295 | 315 | 255 | 355 | 205 |
| October | 355 | 400 | 305 | 450 | 245 |
| Difference | 60 | 85 | 50 | 95 | 40 |

English Writing Exemplars 2006

Writing levels for Writing Exemplars are not exact as they are estimated as a 'Best Fit' mean of the individual students scores

School A Year 1/2

| | Surface (x) | Deeper | Best fit |
|--------------------|-------------|--------|----------|
| March | 1ii | 1 i | 1i |
| October | 1ii | 1ii | 1ii |
| Change in sublevel | 0 | 1 | 1 |

School B Year 2

| | Surface (x) | Deeper | Best fit |
|--------------------|-------------|--------|----------|
| March | 1iii | 1 iii | 1iii |
| October | 2 i | 2i | 2i |
| Change in sublevel | 1 | 1 | 1 |

School C Year 2

| | Surface (x) | Deeper | Best fit |
|--------------------|-------------|--------|----------|
| March | 1i | 1 i | 1i |
| October | 1ii | 1ii | 1ii |
| Change in sublevel | 1 | 1 | 1 |

2007

Writing levels for Writing Exemplars are not exact as they are estimated as a 'Best Fit' mean of the individual students scores. No Year 2 class participated in the project from School A in 2007.

School B Year 2

| | Surface (x) | Deeper | Best fit |
|---------|-------------|--------|----------|
| March | 1ii | 1 ii | 1ii |
| October | 1iii | 1iii | 1iii |

NB. In March no student scored Level 2 against any indicator except 2(N=17) students with spelling. In October 6 students 'Best Fit' was level 2 with 11 students scoring Level 2 in relation to one of more indicators.

School C Year 2

| | Surface (x) | Deeper | Best fit |
|---------|-------------|--------|----------|
| March | 1i | 1 ii | 1i |
| October | 1ii | 1ii | 1ii |

6 of the 11 students shifted 1 sublevel.

Manurewa East Room 15

| | Surface (x) | Deeper | Best fit |
|---------|-------------|--------|----------|
| March | 1i | 1 i | 1i |
| October | 1ii | 1ii | 1ii |

7 of 9 shifted 1 sublevel