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“ Write-on! ” Investigations into relationships between teacher learning and student achievement through writing

Originating in a policy context where evidence-based practice is associated with best practice (cf. Ministry of Education, 2005), a proposal for a project to address student writing literacy was developed by a group of Heads of Departments at Kakariki College, (a decile 2 co-educational ethnically diverse suburban secondary school in one of New Zealand's main centres) concerned at the level of students' achievement in writing within their school. The teachers recognised that NCEA has increased the significance of written language to the senior secondary curriculum, making attaining national qualifications dependent upon competency in writing. This was an especially challenging prospect for their students whose attainment in literacy fell short of others in similarly low-decile schools. The teachers' response was to initiate a programme of professional development on evidence-based teaching interventions that recognised and built upon the strengths of their students. In partnership with researchers from the School of Education, University of Canterbury, the project was expanded to include critical examination of the interrelationships between research evidence, teacher learning, and student outcomes in writing.

The findings reported here relate to the pilot study situated within a proposed longitudinal study, and consequently make limited claims about the effects of the project on learning outcomes, yet provide an important evidential base for considering the role of research evidence in supporting teachers' practice decisions. In general, the project built upon existing classroom and literacy studies that suggest it is crucial for teachers to examine the unintended consequences of their own actions in order to intervene in student literacy and achievement (McCarthy & Moje, 2002; Nuthall, 2001). However, we also find that this premise is complicated by the challenging sociopolitical conditions in which both schools and researchers work.

Research aim and objectives

The aim of the overall project was to investigate possibilities for improving student writing literacy and achievement within a low decile multicultural secondary school through research and theoretically informed professional development. The objectives for this pilot study were the following:

- Investigate situated and normative understandings of the intersections between writing competency, student achievement, and student diversity (particularly with regard to Māori, Pasifika and students with identified learning needs),
- Evaluate the trial of a cross-disciplinary professional development programme for secondary teachers founded on best evidence for professional learning, sustainable reform, and effective practices for teaching subject-specific writing.





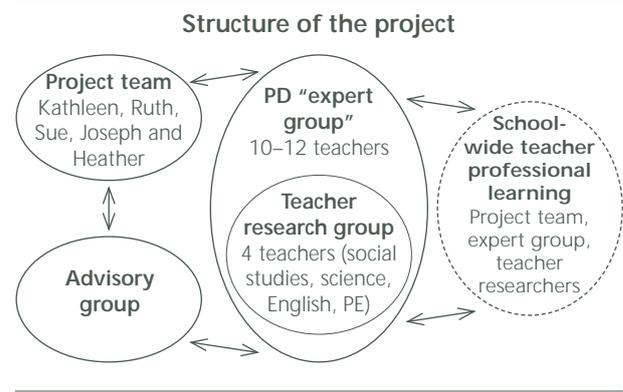
In addition to the project objectives, teacher researchers in the four case-study classrooms developed individual research questions in response to student data and their own practice needs:

1. Social studies	Do students' research report writing skills develop by conducting a research project that is relevant and meaningful to students in social studies: "What would your ideal school look like?"
2. English	Is students' sense of themselves as capable, confident and well motivated writers increased through developing "writing buddy" skills in providing high quality peer feedback?
3. Science	Can students' confidence and ability as scientific writers be improved through engaging in relevant and meaningful scientific learning processes?
4. Physical education	Originally "Exploring the use of personal journal writing as a strategy to encourage writing that is relevant and meaningful to students in P.E.". However, in response to student resistance, this was revised to become "What does it mean to be a writer in PE?"

Research design and methodology

This one-year pilot was part of a mixed method study designed to respond to the existing and future practices of the school. The overall project had three foci—a research focus, a professional development focus, and a writing literacy programme focus. The foci informed the structural design of the pilot study, and different participants were allocated different roles within each (see Figure 1). The university researchers led the research aspect of the project, with the intention that this aspect of the project would inform school leadership of the professional development and writing literacy foci. These intentions were revised in the course of the project, as it became apparent that despite attempts by both the university and school researchers to develop an equivalent and authentic partnership, due to a range of epistemological and structural constraints school personnel had limited capacity and felt reluctant to take on roles equivalent to those of the university researchers. This resulted in severance between the TLRI project and the school's professional development initiatives after one term in the school.

Figure 1. Proposed Structure of the Project



In spite of these challenges, the project continued with research and data collection in the following three broad domains: 1) a survey of teaching and learning practices in Year 10 with an emphasis on subject-specific writing (including semistructured interviews, observations, achievement data, questionnaires), 2) case study ethnographic research in four year 10 classrooms (social studies, English, physical education, and science), and 3) contextual data on professional learning within the school (interviews, emails, field notes, policies, and documents). While the project members negotiated considerable challenges over the course of the research it is significant to note that at the time of writing the principal and researchers continue to work together on the implications of the pilot study findings.

Main findings

The findings of this pilot reflect both the research concerns of the school and university researchers. We report on the university and teacher researchers' findings about teacher and Year 10 student understandings of writing competency, student achievement, and student diversity. These results correspond with two of the three main areas of data collection: 1) a baseline survey of the experiences and perceptions of Year 10 students and teachers and, 2) four Year 10 case studies on the effects of research-informed writing interventions in different subject areas. The quantitative survey, classroom observations, and teacher/student interviews revealed that interpersonal relationships had a significant role to play in how Year 10 students at Kakariki College were constructed as learners. Whilst the teachers acknowledged and attempted to accommodate diversities evident within their school population, the extent to which individual students were successful in practical terms appeared dependent upon the extent to which their identity as learners meshed with school norms, which were determined largely by national norms dictated by external assessment. These norms of success were made problematic by the heterogeneous nature of

the school population at Kakariki College and how much it deviated from national norms of student achievement. However, within this environment success appeared more likely when students' interpersonal relationships with peers, teachers, family members, and others were founded on shared curriculum interests and values regarding the function of schooling.

In response to these findings, the four teacher researchers worked collaboratively with students and the university researchers to develop a research agenda that would help them to address writing literacy in the specific contexts of their classrooms. The teachers were asked to reflect upon the baseline data, their own interests/experiences and selected research literature on learning and writing literacy in their subject area. The case studies investigate four interrelated themes on the provision for writing literacy: 1) rich content provision (highlighted in the case study on science), 2) personal relevance (highlighted in the case study on social studies), 3) interpersonal relationships that support learning (highlighted in the case study on English) and 4) sensitivity to the demands of writing within particular subject areas (highlighted in the case study on physical education) (e.g., Moll et al., 1989; Moje et al., 2001, McPhail et al., 2000, Palincsar & Magnusson, 2001).

What the case studies reveal is the extent to which learning and literacy was shaped by the dynamics of the school and its community beyond the scope of individual teachers and classrooms. We found that largely the turbulent political environment of Kakariki College was mirrored within classrooms and departments. This turbulence partly accounted for the teachers' limited effects on the entrenched norms of behaviour, literacy, and learning. The university researchers contend that it is also impossible to divorce the overall aim of the project, which fundamentally sought a means to raise the writing literacy and achievement of Kakariki students, from the complex political realms of the public schooling sector, and its intersections with wider social issues and agendas (such as economic globalism see Olssen et al., 2004). As the teachers at Kakariki know, opportunities for achievement and mobility through schooling are limited by their students' cultural, social, and economic location. Radical structural change or political intervention could overturn the inevitability of most Kakariki students remaining within their social milieu and failing to attain the same qualifications as students from wealthier neighbourhoods. However, this possibility is unlikely to occur soon, and is certainly no compensation for the immediate needs of Kakariki students and the teachers who want to support them.

While the teacher researchers made only limited progress in overturning the negative consequences of the social practices of the school and wider community on writing literacy, it must be recognised that they did achieve

some success in connecting students' interests (in terms of content as well as their best interest) and identities to the authorised curriculum. This occurred through the combination of: 1) reflecting upon empirical research evidence, 2) deepening their knowledge of learning and literacy, 3) undertaking a theoretical analysis of the findings and 4) developing purposeful literacy interventions. These findings suggest that continuing to support teachers and school leaders to make overtly theoretically informed analyses of the issues faced by the school may enable sustained progress in addressing student literacy levels.

Questions regarding sustainability have also contributed to the other significant outcome of this study, an in-depth investigation of the challenges of addressing student achievement through evidence-based programmes within schooling contexts of significant inequality and instability. The TLRI project occurred at a time when Kakariki College was in a state of transition, with changing leadership and the legacy of previous financial and managerial concerns. As such, the professional development focus within the school was also in a state of flux. The researchers set out to understand the dynamics that resulted in a severance between this project and other professional development initiatives at the school. It appears that whilst the project attempted to build on existing initiatives within the school in order to develop a programme of sustainable professional development, the instability of the school culture meant that the TLRI project was subject to the same conflicts as other professional development initiatives. Undertaking this contextual analysis, situating the conflicts we experienced within wider sociopolitical concerns regarding teacher professional knowledge, practice and student outcomes *and* engaging school personnel in discussions on these issues have been fruitful.

Building capability and capacity

In the early stages of the project, the link between the teacher researchers and the existing school professional development was severed, and the case studies with accompanying teacher professional development through classroom-based research became the central work of the project. However, feedback from the teacher researchers indicates that involvement in the project was a powerful learning experience. To support their participation in the project, they took part in three professional development days, had feedback from university and student observers on their teaching interventions, and were encouraged to write about their experience and developing knowledge.

Teacher comments indicate that while professional development initiatives were prevalent within the



school, the climate of change and uncertainty, as well as limited reference to a clear guiding philosophy of professional development, meant that they were unlikely to be supported and maintained within the school. However, during the course of the project, and perhaps in response to the project's findings, a professional development committee was established within the school, charged with reflecting on professional development and making decisions about its provision within the school.

Discussions held with the principal and project team members over the draft of the report findings were fruitful in terms of the school's willingness to engage with the implications of the project's findings for the current and future direction of the school. The ongoing willingness of the school and university partners to build on the research undertaken to date has the potential to address student learning outcomes within the school.

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The full reports of all TLRI projects are published on the TLRI website (www.tlri.org.nz).

Lead authors and researchers



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Kathleen Quinlivan is a lecturer in the School of Educational Studies and Human Development at the

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Thanks also to our school partners who cannot be named to protect their anonymity.