

Trevor McDonald and Christina Thornley

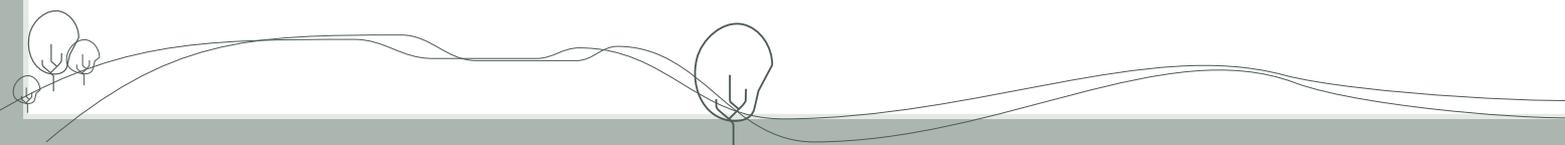
Developing teacher–researcher partnerships to investigate best practices: Literacy learning and teaching in content areas of the secondary school: A summary

Developing Teacher–Researcher Partnerships to Investigate Best Practices: Literacy Learning and Teaching in Content Areas of the Secondary School was a Teaching and Learning Research Initiative project undertaken as a partnership between Auckland Seventh Day Adventist High School, Education Associates Ltd, Roxburgh Area School, Teuila Consultancy, and Waitaki Girls' High School. During the two-year project, the partnership members in each school developed, trialled, and researched a range of literacy pedagogical approaches to determine their efficacy in improving learning and achievement for Year 9, 10, and 11 secondary school students.

Aims, objectives, and research questions

This project aimed to identify approaches that assisted students, particularly those who were achieving below national expectations, to meet the demands for successful learning and achievement across the secondary school curriculum. The following research questions guided the investigation:

- To what extent would a focus on improving literacy teaching practice lead to increased student achievement?
- To what extent would research partnerships support the professional learning needs of teachers in relation to advancing student knowledge and skills to meet content-area literacy challenges and assessment demands?
- What elements of current pedagogical practice positively impact on student achievement?
- How could research partnerships enhance our understanding of a range of practices that would positively affect the learning outcomes of a wider range of students?
- Which teaching approaches lead to long-term changes in student literacy behaviours?





Research design and methodology

The research literature showed that complex and interrelated issues impinge on the possibility of raising student literacy achievement through the improved instruction that could result from teacher–researcher partnerships (Cousins & Simon, 1996; Frankham & Howes, 2006; Graham, 1998). For that reason, in order to capture and take account of the diversity of teachers, students, researchers, and secondary schools involved, a multimethod research design was deemed necessary to identify and interpret the outcomes of the partnerships that were established. Hammond (1973, cited in Guskey, 2000), and Schallock (1995) describe a four-component design, which was adapted for use in this project. It required the identification of the project participants' (researchers, teacher-researchers, other teachers, and students) characteristics, an analysis of the professional development and research activities undertaken by the teacher-researchers and principal researchers, an analysis of the schools as the contexts for the projects, and finally the identification of outcomes for teacher-researchers, students, and principal researchers.

The project employed data collection methods that gave information to describe the participants and their contexts; capture and record the range of professional learning opportunities offered by the principal researchers and the teacher-researchers; and facilitate the identification of outcomes for teachers, researchers, and students at various points throughout the project. These methods included concept maps; interviews; observations of classroom teaching and learning; journals; field notes; analyses of curriculum, assessment and teacher planning documents; student focus-group interviews; and student assessments.

The data were analysed using a grounded-theory approach (Bernard, 2002) that afforded analyses, categorisation, and interpretation using a constant comparative approach at numerous points within the project (Charmaz, 2000). The findings from this process were considered in relation to the research literature to identify commonalities, anomalies, and themes. The information that was revealed concerning student learning, teacher-researcher knowledge and practice, and principal-researcher knowledge and practice was used to review the efficacy of literacy pedagogical approaches and research-partnership activities. Throughout the two years, using the interim findings, refinements were made to the direction of the project in accord with the project aims.

The research partnership was designed to provide professional learning for the teacher-researchers and principal researchers, and classroom learning for students. It responded to the research literature that showed the inadequacies of professional development that did not take account of teachers' knowledge,

expertise, and beliefs and subsequently failed to facilitate changes that led to improved student learning (Ball & Cohen, 1999; Borko, 2004; Putnam & Borko, 1997). The literature showed that an authentic collaborative partnership (Cole & Knowles, 1993; Goodnough, 2004), where all participants were seen as active learners who made important contributions to the professional learning and the research, had productive outcomes for student literacy learning (Berger, Boles, & Troen, 2005; Cousins & Simon, 1996; Graham, 1998).

During the design phase for each school project, discussions took place between the principal researchers, school management-team members, and teacher-researchers to identify the approach to the literacy research and the level of partnership involvement desired. In all of the schools it was agreed that the theoretical base for the research and professional development would be the scope and sequence chart of literacy skills (see McDonald & Thornley, 2005). However, during investigations into the efficacy of this theoretical tool, the ways in which it could be used to increase teacher knowledge and change teaching practice to improve student achievement were individualised to meet the specific circumstances and aspirations of each school and each group of teacher-researchers.

Findings

Increased student achievement

Over the two years of the projects, students made gains in their achievement as measured on two forms of assessment. Students were tested using aTTle at the beginning and end of each school year. Students also undertook content-area literacy assessments that were designed to assess the extent to which they used the skills identified on the scope and sequence chart in making meaning in content-area texts. Selected groups of students also participated in focus groups.

At each project school students were divided into year groups from Years 9 to 11. Seven of the nine groups of students made gains between 4 and 57 points in advance of those described in the aTTle manual as representing annual growth. One group made growth equivalent to the national average, and one group made less than the annual rate of growth. The movement through curriculum sub levels and the growth in advance of national norms of five of the seven groups is considered by the aTTle developers as indication of educationally meaningful change (Hattie et al., 2004, p. 25).

Similar growth patterns were evidenced on the content-area assessments pertaining specifically to those areas of the scope and sequence chart that teachers focused on in their instruction. In all instances and over the course of the project, students became more aware of their literacy needs and were able to speak with some authority about the literacy skills their teachers had instructed them



in. They also spoke about increased literacy learning and instruction and raised teacher expectations about the independent reading and note-making work they undertook.

Research partnerships as tools for professional learning

Collaborative research processes were gradually developed between the teacher-researchers and principal researchers over the duration of the project and were evidenced in changed relationships amongst the partners and more even arrangements of decision making and responsibility.

The principal researchers undertook teaching and other curricular activities in order to model the skills on the scope and sequence chart, and they came to understand the nature of the challenges that schools and teachers face in developing effective learning opportunities for students. The teacher-researchers became literacy and research experts, they undertook a range of research activities, and they became change agents in their schools as a result of their new knowledge. Although the notion of shared expertise had been a feature of the project from the outset, it took time for the teacher-researchers to believe that in addition to their knowledge of their students, they had expertise to bring to the project.

The second element central to the development of the partnerships concerned the role of each teacher-researcher in their schools. The teacher-researchers moved through a progression that saw them initially communicating findings to the teachers in their schools, then, in the second year of the projects, generating their own findings through the use of a range of research tools, and, finally, theorising their findings in relation to literacy, professional development, and research as an embedded activity in schools.

The third element in the partnership process concerned the creation of a culture of change in each of the schools. While the teacher-researchers continued to experience some tensions about their role in this regard, the progress of the projects allowed for an environment in which they assumed the role of researchers while maintaining their commitment and expertise within the classroom. The extent to which this focus can be maintained outside of an initiative such as the TLRI is an ongoing question.

Elements of current pedagogical practice that positively impact on student achievement

Teacher-researchers refined a number of approaches to classroom instruction that they found to be effective in working with the scope and sequence chart. In general, however, teacher-researchers described themselves as less focused on the production of written pieces or on the accuracy of content gained through reading than on the strategies or approaches students used. Along

with a focus on engaging students in their learning, teacher-researchers identified the following pedagogical approaches they found useful:

- clear articulation of the purposes for (learning intentions) and expected outcomes (success criteria) of teaching and learning
- identification of a set of generic skills that students could use across curriculum areas, including ways to gather appropriate and accurate text-based information for a range of purposes
- consistency in literacy-teaching approaches across curriculum areas to increase transferability
- multiple opportunities for students to reflect on past learning and to hypothesise in relation to future learning based on previous experience
- scaffolded instruction to support students into year-level-appropriate texts
- engaging students through reflection on learning, self- and peer assessment, and evaluation of learning
- providing frequent, clear, and specific feedback to students on their progress.

How research partnerships enhance our understanding of a range of practices that positively affect the learning outcomes of a wider range of students

This project affirms that teacher professional learning opportunities that are informed by research and responsive to teachers' contexts and needs are effective vehicles for change. Beyond the change in dynamics that occurred within the group as a result of changed beliefs concerning each participant's role, the teacher-researchers' and principal researchers' changed knowledge as an outcome of their participation contributed to the outcomes of the project. Pedagogical change occurred as teachers' literacy knowledge increased, facilitating the development, trial, and adaptation of instructional approaches that assisted students to engage with the texts they read, improving their ability to clarify, process, evaluate, and use the information.

Teaching approaches that lead to long-term changes in student literacy behaviours

While it is impossible to be definite about the long-term changes to be accrued to students' achievement as a result of a two-year study, our findings would suggest that there are a set of generic teaching and learning opportunities that have the potential to make significant changes to students' achievement. These are:

- frequent access to curriculum and year-level-appropriate extended text across the curriculum
- an orientation to a text through an analysis of the intentions behind an author's writing in a particular text form and a review of key ideas as conveyed through the text features



- analysis of the components of a task to set up independent note making
- teacher questioning that focuses on the process of gathering information
- consistency in the approach to text across content areas.

Conclusion

This research has shown that it is possible to integrate literacy instruction into the content-area classes of the secondary school in a manner that leads to improved learning and achievement for students, including those who have not acquired the skills and knowledge required for success at their year levels. Adolescent literacy has been affirmed as a field for ongoing research attention, and secondary schools must be the site of carefully planned content-area instruction using year-level-appropriate texts. The project was able to identify these things because it drew on the combined expertise of teachers, teacher-researchers, principal researchers, and students, who engaged in a collaborative research-based relationship to develop, trial, and evaluate innovative instructional strategies and content.

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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



Trevor McDonald and **Christina Thornley** are currently national co-ordinators for the Ministry of Education’s Secondary Literacy Project and are the programme developers for the the US Department of Education’s Striving Readers Project: Strategic Literacy Instruction in the Content Areas, located in San Diego.

Project team

Rosi Fitzpatrick from Teuila Consultancy; Angie Elia, Sarai Stevens, and Gloria Teulilo from Auckland Seventh Day Adventist High School; Sue Johnston, Sandy Woock, Paul Selbie, and Lyn McDonald from Waitaki Girls’ High School; and Ken Pullar, Maree Pullar, and Helen Low from Roxburgh Area School.