

Mutukaroa, school and community learning partnership: Enhancing student outcomes

Tony Trinick, *The University of Auckland*
Barbara Alaalatoa, *Sylvia Park School*
Ariana Williams, *Mutukaroa*

Abstract

In Aotearoa/New Zealand, there has been considerable disparity in student achievement between Māori and Pasifika students and their Pākehā (European) peers. Initially, the cause of this underachievement was generally attributed to a lack of parental interest in schooling. Therefore, many schools in New Zealand, particularly those with diverse communities, have been grappling with the challenge of engaging constructively with families for a number of years. Despite the best of intentions, many of the home/school partnership initiatives have failed to positively affect student achievement. Nonetheless, there are success stories. This paper reports on a successful home/school partnership project, Mutukaroa, initiated by Sylvia Park School in 2010 in consultation with its local school community. The elements that make up the intervention and the results are discussed. The research used a quasi-experimental design to investigate cause and effect relationships. The qualitative data indicates that parents and community members have developed very positive relationships with project team members and the school. Parents feel much more confident engaging in discussions with the teacher about their child's learning and feel more capable of supporting learning at home. The longitudinal student achievement data in literacy show very positive longitudinal trends.

The outstanding results of the initiative compelled the Ministry of Education to fund an expansion and adaptation of the Mutukaroa model into another 100 schools throughout New Zealand. The principal (Mrs. Alaalatoa) and project director (Ms. Williams) have had important leadership roles in the efforts to expand a localised grassroots initiative into a large-scale state education initiative. This paper discusses, from their perspective, the success and challenges of implementing the Mutukaroa model into different contexts with a variety of agencies involved.

Introduction

Home/school partnerships are used to describe a range of initiatives aimed at enhancing parental involvement in the education of their children (Bull, Brooking, & Campbell, 2008). Parental involvement in education is an "ideal" with a long history in Aotearoa/New Zealand. But the realisation of this ideal has often been limited to Pākehā (European) communities. Schools in New Zealand, particularly schools in low socio-economic and/or with culturally diverse communities have been struggling for many decades with the challenge of engaging effectively with particular communities, namely Māori and more recently Pasifika. The motivation for this was not always about involving these parents *per se*, but generally based on the belief that the Māori and Pasifika student underachievement "problem" could be attributed to a lack of interest or understanding of schooling by these communities themselves (Bishop & Glynn, 1999). These assumptions were based on deficit theorising, where academic achievement was linked to socio-economic and cultural factors (Bishop & Glynn, 1999). More recently, researchers writing from critical post-colonial perspectives have challenged these earlier assumptions and have argued that educational disparities can be attributed to power imbalances in the educational system together with monocultural school and classroom practice (Bishop & Glynn, 1999; Bishop & Berryman, 2006).

During the last decade in New Zealand, there has been a high level of interest in interventions aimed at involving parents in the education of their children as a means of raising educational achievement of children who are currently not performing to expectations in the education system. This was supported by a multiplicity of national and international research showing that parental involvement makes a significant difference to educational achievement (Ball, 1998; Hoover-Dempsey, Bassler & Brissie,

1987; Coxon et al., 2002; Bull et al., 2008). Despite parental involvement, many of these home/school initiatives have not resulted in improved achievement outcomes for students (Bull et al., 2008). This was because, in many initiatives, the multifaceted factors required to cause a positive effect were not considered—it was assumed that by simply engaging with whānau (families), change would occur. Sylvia Park School, the focus of this paper, initially shared this view.

Sylvia Park School is a culturally and socially diverse full primary school located in East Auckland. Since the 1950s, there has been significant migration to New Zealand, from linguistically and culturally diverse groups, first from the Pacific Islands and more recently from Asia. The school's population consists of a wide range of ethnicities, including 30% Māori, 50% Pasifika, 14% Asian, 4% Pākehā and 2% other. The Tongan community is the largest of the Pasifika groups. However, broad ethnic groupings can obscure heterogeneity. For example, the Tongan group is made up of families of recent arrivals from the Kingdom of Tonga and families who have been in New Zealand for some time, and are first- or second-generation New Zealanders. The challenge then for Sylvia Park was to develop a home/school model that would cater for the range of ethnicities and multilingual home situations.

In 2005, the New Zealand Ministry of Education released *Making a Bigger Difference for all Students: The Schooling Strategy 2005–2010* (Ministry of Education, 2005), an education policy that aimed to improve social and academic outcomes for all students. One of the three strategic goals was for schools to find ways to effectively link the schools with students' homes. In 2006, in response to this policy, Sylvia Park School developed a range of strategies to positively engage with its community, including regular events such as cultural festivals, sports evenings and numeracy evenings. Although some aspects of the programme were successful (for example, it felt as though the relationship between home and school had improved), critically, student underachievement patterns remained largely unchanged. The mixed outcomes of this initial home/school intervention did not deter the principal and school management from seeking a more positive solution. Nevertheless, one of the impediments to further development remained—the time and cost needed to investigate fully and embed alternative models.

Fortuitously, the principal saw an opportunity in 2008 to alleviate some of the pressures impacting on the redevelopment of the programme, particularly teacher and leadership time, by applying for an Auckland Savings Bank (ASB) Community Trust grant. The ASB Community Trust is an independent grant-making organisation that supports schools and community organisations to improve outcomes for high-need communities. The school was invited to submit a comprehensive proposal to develop and implement an effective home/school partnership project. The proposal was so compelling that in 2009, the ASB Community Trust accepted the proposal and agreed to fund the Mutukaroa: School and Community Learning Partnership for six years.

Home/School Partnership Models: What Does the Research Tell Us?

One of the first major tasks for the Mutukaroa development team was to synthesise the theoretical and empirical research that identified the factors that impacted on student achievement and then to integrate these considerations into a coherent theoretical framework. For example, while research showed that low socio-economic status (SES) children have significantly lower achievement than middle and high socio-economic status children (Biddulph & Biddulph, 2003), a home/school partnership has minimal, if any, ability to change the short term SES of whānau (family). Yet other research showed that lower levels of achievement are not inevitable. There are initiatives that show student achievement patterns can be changed, especially if early support is available. For example, in their literacy work in South Auckland schools, Phillips, McNaughton and MacDonald (2004) demonstrated that SES is not necessarily a barrier to children learning to read. What was required was sustained parental involvement in school and a focus on learning activities (Phillips et al., 2004). This could be in the form of additional resources and/or learning activities and strategies that parents/whānau could use to support their children's literacy learning. Earlier research by Elley (1992) had argued that both literacy resources in the home and home-based experiences were crucial for students' literacy development and achievement. Hohepa (1997) and Chapple and colleagues (1997) similarly argued that there was a strong link between family resources and Māori students' educational achievement. This position was confirmed by Wylie (2001), who suggested that it was the resources

available to children which mattered to their progress, not their ethnicity or culture.

Critically, Biddulph et al. (2003) suggested that supplying resources by itself was not enough. Parents needed to know how to use the various resources effectively and to understand the rationale behind activities such as reading regularly to their children or helping them to count and understand ordinality. Biddulph et al. (2003) argued strongly that a major determinant of student achievement was what parents did in their interactions with children at home, rather than the SES of the whānau.

Research by Wylie (1999) showed that parental discussions of their children's reports varied according to the decile level of the school. Whereas 72% of Decile 5–10 schools were likely to get 75% of parents engaged in discussions of children's reports with teachers, this dropped significantly to only about 38% of parents in the lower Decile 1–2 (Wylie, 1999). Research has shown there may be a number of possible reasons for parents' reticence to engage in discussions about their children's learning with teachers that are based on cultural and/or social beliefs (Gorinski & Fraser, 2006) and not on the ambivalence or lack of interest in their child's schooling that is often assumed.

Families from Pasifika communities may be reluctant to ask questions of teachers and project personnel out of respect for the authority of the school and teachers (Gorinski & Fraser, 2006). These kinds of cultural mismatches can occur when a family's beliefs differ from those of the dominant culture of the school (Gorinski & Fraser, 2006). Such conflicting beliefs may result in students and their parents exhibiting behaviours and attitudes that are culturally appropriate in their home/community environment, but are at odds with the school's practice (Garcia Coll & Magnuson, 2000). In this way, cultural mismatch impacts upon family involvement in schools. If schools do not understand such differences in beliefs and expectations, nor effectively mediate these differences, school practices can be a barrier to effective engagement (Ministry of Education, 2011).

A number of studies show Pasifika parents who attend education consultations such as parent evenings tend not to challenge the dominant discourses of New Zealand educational practice (Tuafuti, 2010). This includes how teachers and parents interact in parent-teacher interviews. Parents are not sure what are the right questions to ask. This is not helped by the complexity of the specialised educational discourse used in schools, including assessment acronyms and achievement levels used to indicate progress. For example, terms such Assessment Tools for Teaching and Learning (asTTLe), Junior Oral Language Screening Tool (JOST), Numeracy Project Assessment (NumPA), Progressive Achievement Tests (PAT), School Entry Assessment (SEA), Six Year Net or Six Year Observation Survey and stanines, levels, stages and so on are a feature of educational discourse in the New Zealand schooling system. This issue is further complicated for schools like Sylvia Park that have parents/guardians who are second (L2) or third language (L3) learners of English.

The other side of the effective home/school partnership involves the role of the school and teachers in embracing home cultures (Biddulph et al., 2003). It is not just a question of acculturation of whānau into school practices. Including activities that reflect the culture and experiences of students is important for a number of reasons. Firstly, there is strong argument that linking activities to students' cultures encourages students to engage in learning subjects such as mathematics (Meaney, 2002). Encouraging students to relate their mathematics learning to cultural and everyday activities helps them see the relevance or purpose of learning particular concepts. Secondly, it provides an opportunity to illuminate the culture and traditions of the students in positive ways (Meaney, 2002). Coxon et al. (2002) suggest that the understanding of the culture of the home by the teachers and school could help address possible barriers to parental engagement.

The Mutukaroa Conceptual Model

The name "Mutukaroa" is a traditional Māori name for a local landmark, a hill that overlooks the school. The design of the Mutukaroa model incorporated the key idea of parents engaging in 'learning conversations' with a facilitator from the project team, with the aim that parents would replicate these sorts of conversations with their own children. Mutukaroa facilitators worked with parents at a time and in a place of their choosing. They helped parents to better understand their children's progress and the ways in which they could help their children's learning at home. This included conversations to help parents better understand their children's achievement data, including the various measures and/or scales used to assess student achievement. This was based on the Mutukaroa project's own

empirical research that showed that, in general, parents in their community did not have a good understanding of assessment tools that the school used and thus were not able to maximise their participation in discussions about their children's progress. This was important, as teachers at Sylvia Park School use a variety of assessment tools to determine students' levels, what progress they are making, and where they may need extra help. The results are included in the assessment portfolios and discussed at 3-way conferences with the student, the teacher and the whānau.

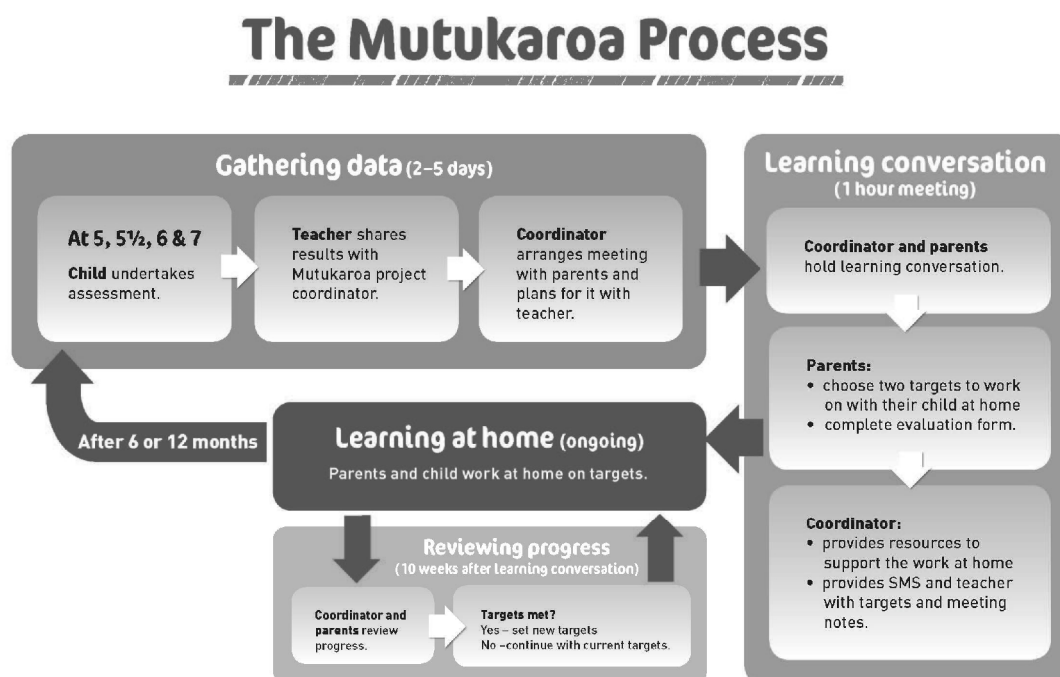
The concept of 3-way conferences (student, parent/guardian/whānau, and teacher) was built on the understanding that teachers building strong partnerships with students' parents, families and whānau helped them to be more involved in their children's learning, which in turn helped children with their learning (Hoover-Dempsey & Sandler 1995). Consequently, the school held 3-way conferences to discuss student's assessment portfolios twice a year. A portfolio is a purposeful collection of student work that exhibits the student's efforts, progress, and achievements in one or more areas of the curriculum. Portfolios can enhance the assessment process by revealing the range of student skills and understandings; support teaching and learning goals; reflect change and growth over a period of time; encourage student, teacher, and parent reflection; and provide for continuity in education from one year to the next (Hamp-Lyons & Congdon, 2000; Martin-Kniep, Cunningham, Feige, 1998). Where there are areas that need addressing from the portfolio discussion, the student co-constructs learning goals with the parent and teacher to address the learning issue. For example, a goal might be to count forward or backward from 100, which would be an important numeracy goal for a Year 1 student.

To address areas of learning concern identified in the student's achievement data and discussed in the interviews, parents were provided with a range of learning activities that could be carried out at home. These included "study hint activities", such as the provision of specific questions for parents to ask children about their learning; interactive homework requiring input from the family; and learning goals shared with families so they can reinforce their children's out-of-school learning. In subsequent 3-way conferences, all parties considered whether the student had achieved the goal or not. Thus, parents saw a direct link between their home help and their child's progress.

It was decided by the Mutukaroa project managers to focus on the Year 1 and 2 students. This decision was based on two factors. First was the funding constraint. Second was the consequent need to focus on an area where the project may have the most impact considering the funding constraints. This aspect was guided by the considerable corpus of research into student achievement in literacy and numeracy which highlighted the importance of the early years of schooling in establishing foundation knowledge and skills (see Mitchell, Wylie, & Carr, 2008).

Figure 1 presents the framework outlining the Mutukaroa process. This is the process students go through on their learning journey, supported by the Mutukaroa coordinator, their teachers and parents. The role of the Mutukaroa coordinator was to act as the initial conduit between home and school, to assess the students, to meet with parents to discuss student achievement, to ensure resources were available at home and to ensure all the appropriate information was passed onto and/or discussed with the classroom teacher.

Figure 1. Mutukaroa process



Research Programme

In collaboration with the University of Auckland, a research programme was also established to monitor the progress of the Mutukaroa programme. A research and evaluation monitoring plan to measure four key impacts of the School and Community Learning Partnership was implemented.

Table 1. School and Community Learning Partnership

Impact	Measure (Examples)
Student Achievement	Improvement in student achievement data.
School Responsiveness	Change in teacher practice with respect to student learning. Change in school's systems to better support community involvement.
Home Responsiveness	Change in home practice with respect to student learning. Barriers to effective engagement and participation identified and overcome.
Community Engagement	Change in parental confidence levels when interacting with staff. Higher level of participation regarding student learning.

The research aims of the project were to:

- evaluate the effectiveness of the Mutukaroa: School & Community Learning Partnership programme
- highlight the elements that supported effective community engagement
- examine the relationship between Mutukaroa: School & Community Learning Partnership programme and student achievement.

To achieve these aims, the research needed to be clear what “effectiveness or success” might mean in the context of this work. This project built on the earlier definition of “successful” home/school partnerships suggested by researchers such as Bull, Brooking and Campbell (2008) who defined success as including a commitment to education being a joint endeavour between school and family; a

shared understanding of the purpose of the partnership and the respective roles of those involved; and where the partners were positive about the perceived benefits of the partnership for children's learning. However, these factors by themselves do not necessarily determine if a home/school partnership is successful. One of the strong criticisms of home/school partnerships is the paucity of data that link home/school partnerships to improved outcomes for students (Bull et al., 2008). To address these concerns, the Mutukaroa project also collected and examined student achievement data to evaluate the effectiveness of the programme. It is not always easy to prove cause and effect in dynamic systems like schools and many factors are usually required to have an impact (Shadish, Cook, & Campbell, 2002), but for the Mutukaroa project, there was student achievement data available to be compared pre and post project. Therefore, this study was quasi-experimental (a controlled intervention), rather than experimental (which would have required students be randomly assigned to intervention and control groups) (Shadish et al., 2002).

Quasi-experimental evaluation

A quasi-experimental study is a type of evaluation which aims to determine whether a programme or intervention has the intended effect on a study's participants, but lacks the random assignment of study participants in a "true" experiment (Shadish et al., 2002). Because the project team considered the intervention would benefit all students, it was considered unethical in this schooling context to allocate students at random. The control group then became the pre-Mutukaroa students from Sylvia Park School who had also participated in the SEA (pre-test) and six-year observation survey (post-test). Conducting a pre-post test study addressed this ethical concern by offering the intervention to all study participants (Slavin, 2007).

While the pre-post test design allowed the project team to measure the potential effects of the intervention by examining the difference between the pre-intervention tests and post-test results, one cannot discount the change in the outcome could have been caused by something other than the intervention (Heinsman & Shadish, 1996). The challenge then is to reduce the number of variables that may cause a study's findings to be invalid or unreliable (Green, Camilli, & Elmore, 2006). A range of methods was introduced to minimise the variables that could influence validity. The control group and the intervention group were as similar as possible before Mutukaroa was introduced, i.e., same age, similar ethnicities and socio-economic groups. The researcher did not know the student participants—a method known as "masking"—and bias was minimised by including all students who had completed both pre and post tests (Slavin, 2007). Both the control group and the Mutukaroa group were of the same age when tested and the tests were identical. The only students excluded were those who participated in only one of the tests. In discussion of results with the Mutukaroa team, they could not identify possible alternate causes of change or other variables that had had an impact, and strongly believed the changes could be attributed to Mutukaroa intervention. Therefore, the evaluator considered the threats to internal validity had been minimised by the research design.

Research Method (Data Collection)

This is a long-term research project, stretching over five years from 2009 to 2014. This paper reports on the first four years of progress, utilising both qualitative and quantitative data methods.

Part A Qualitative Data

Part A reports on the quality and outcomes of parental involvement and engagement. Qualitative data collection consisted of parent evaluations of the centre's work every 6 months, parent's evaluations of 3-way conferences and interviews with teachers.

The Participants

Participants included parents and whānau/family members ($n = 30$) whose children participated in Mutukaroa programme for at least 12 months and who attended the facilitation meeting with members of the Mutukaroa team. Teacher participants were Year 1 and 2 teachers whose students participated in the programme ($n = 6$).

Part B Quantitative Data

The quantitative data included the student achievement data collected as a normal part of the school's reporting requirements to inform the school, parents and the Ministry of Education on student progress. This project has generated a significant corpus of student achievement data for analyses and investigation, including the School Entry Assessment data (SEA), asTTLe data, PAT data, and Numeracy project diagnostic interview (NumPA). For the purposes of this paper, the SEA, Six-year Net and STAR data are considered because they are literacy tests and show progress over time. These particular assessment tools are discussed in further detail in the results and discussion section.

The Participants

Student participants in this section included all Year 1 to 3 students attending Sylvia Park School from 2009 to 2013, who completed both the pre (Year 5) and post literacy tests (Year 6) and the STAR test (Year 7).

Results and Discussion

Part A reports on the quality and outcomes of parental involvement and engagement, and Part B reports on patterns of student achievement in literacy over the first three years of the project.

Part A: Parent Involvement and Engagement

A significant component of this project focused on improving the relationship and understandings between parents, the school and community. The purpose of the project was not just to inculcate parents into the school's ways of working but as a genuine partnership where school practices were also informed by parental understandings. As noted, all schools provide information on student progress and achievement, but this project went further and provided professional advice on the meaning of the various assessments, discussed the results with parents and provided information and resources on how to help their children at home to address areas of concern.

Portfolios and 3-way conferences

Parents who attended the 3-way conferences (student, parent and teacher) were asked to complete a questionnaire. The questionnaires showed that the work of the Mutukaroa support staff was a key contributing factor to a parent's ability to participate in the 3-way conferences and engage in the portfolio discussion. The surveys included families from a range of ethnicities. A number of families who participated in the 2010 survey also participated in 2011, 2012 and 2013. Response rates for all these groups were 70% to 100%. The total number of survey respondents was $n = 18$ in 2010, $n = 16$ in 2011, $n = 20$ in 2012 and $n = 17$ in 2013. Following are the questions and a selection of typical responses.

Portfolio Feedback

1. What do you do with the portfolio when your child brings it home?

The most common responses across all surveys were comments like "Read it..." "Go through it with them [child]" and "...look at it." Parents gave their children time to explain the areas that were positive and areas that needed improving. From the portfolios, parents found out what subjects their children were doing at school and how well they were progressing.

2. Does your child share some of their work from the portfolios with you and explain?

Again, the most common response to this question was "Yes ..." (80% of all families). Parents acknowledged that their younger children had some difficulty in explaining the portfolio contents but their older children were able to explain most things.

3. What do you like about the portfolios?

Similarly in all three surveys, all of the families liked to know what their children were learning at school. Additionally, they appreciated information regarding their children's progress at school,

challenging the myth that parents from lower deciles were not interested in their children's education. Parents' comments on what they liked about the portfolios included:

"Easy to understand."

"Show me where my child is at."

"I like it because I can see what they are learning."

"Keeps me updated on my children's progress."

4. Is there anything in the portfolios that you find challenging to understand?

The area parents found the most difficult to understand in the portfolios was interpreting the scales used for the different assessment tools and curriculum frameworks to report progress. For example, national standards use eight major levels and four sublevels of *at*, *above*, *below*, or *well below* for rating the standard of numeracy and literacy. In contrast, other curriculum areas have four levels for primary schools, asTTLe uses a 1,200 point scale, and so on. Therefore, one of the key foci of the 3-way conferences was to inform parents of the meaning and use of the different assessment frameworks and scales used to indicate student progress. Parents were keen to know whether their child was at the expected level of achievement for their age. While asTTLe is norm referenced, most assessments are diagnostic and/or criterion referenced, which can be confusing for parents. Subsequently, the layout of the portfolios was modified to support parents interpret the various scales used for assessment data. Feedback in 2011 and 2012 showed that this was less of an issue for parents.

5. What do you think we can do to make the portfolios better for you?

While most families felt there was no major change necessary, some families commented on minor areas they felt could be improved. More Māori families responded with suggestions for improvement in comparison to the other ethnic groups.

"Greater clarification of levels – hard to understand what level they are at for their age."

"The way it's set out is confusing – are the key competencies what the child has achieved?"

"Sheet that explains new standards."

"I need a better understanding of the learning objectives, the standards, the levels, etc."

"The level (skill) needs to be clearer..."

3-way Conference Feedback

As discussed above, the 3-way conferences are organised to discuss student progress, primarily using the students' assessment portfolio. Questions asked of parents in the questionnaire included the following.

1. How did your 3-way conference go?

The majority of families found the 3-way conference to be very positive.

"Brilliant."

"Awesome."

"Great, teacher lovely and I have confidence in her experience, passion, genuine love of teaching. Glad [student's name] has [teacher's name] as her Year 7 teacher."

"Excellent – [teacher's name] was excellent in explaining everything."

2. Did you feel well prepared for the conference?

Again, the results were consistent, where the majority of families felt they were prepared for the conference. They either read the portfolio beforehand with their children or had worked with Mutukaroa coordinator in a learning conference to discuss the assessment different tools (see next section). The minority who felt they were not well prepared made comments such as:

"Should have spent more time reading the portfolio at home."

"Not well prepared but comfortable and teacher made me feel at ease."

3. Do you think the conference was good in helping you understand your child's learning?

The majority of respondents agreed that the conference was helpful in understanding the child's learning, and it also provided an opportunity to create a good relationship between teachers, children and parents:

"Yes, very well explained."

"Yes, valid points brought up."

4. Does the 3-way conference help you think of things you can do to support your child at home?

Again, the majority of responses agreed that the conference helped them to think about what families could do at home.

"Showed us some websites to go to, to explain things."

"Yes, other than reading to them, we will now start to write sentences every night with some maths now and then."

5. Is there any way we can make the 3-way conferences better for you?

The majority of parents were generally satisfied with the conferences as they were, but a few commented they would have liked more time to discuss the portfolio results in the 3-way conference.

Mutukaroa Parent Centre Evaluation 2011-2013

As well as evaluating the assessment portfolios and the 3-way conferences, a sample of parents ($n = 8$ parents) who participated in the Mutukaroa programme were also asked annually to evaluate the service. The responses were used to modify the programme. Parents were asked the following questions in 2011–2013. Following are the questions and a sample of the responses from 30 parents/whānau members;

1. Did you find the meeting helpful and is there anything you learnt that you did not know before?

Most were positive, and found the meetings helpful;

"Yes, I definitely found the meeting helpful."

"I learnt Junior struggles with his writing. I did not know this before."

"Yes, I was able to access resources that I can use to help my daughter with her reading."

2. Did you feel comfortable during the meeting and feel like you could ask any questions?

Parents felt comfortable asking questions and appreciated knowing how they could help their children learning at home.

"Yes, the coordinator makes it very easy and comfortable and gives us the opportunity to converse freely."

"Having a culturally appropriate person [the coordinator was Māori] was very comfortable."

"Yes, and it was a long meeting."

3. How will this meeting help you support your child at home in their learning?

Parents/whānau highlighted a number of areas they now could provide support. These included areas of struggle, reading and counting:

"Now I know the area she is struggling with, I can help her."

"I can support my child to read the alphabet, she can do skip counting."

4. Is there anything in the meeting that you think we could improve or is there anything else you would like to add to this meeting?

Most said things were fine. A couple suggested extending the group to include other family members.

5. Are there any other comments you would like to make?

Consistently, parents were overwhelmingly positive about the learning conversations sessions provided by the coordinator. Parents were interested in how their children progressed and what each of the measurement tools meant in regard to their own children's progress.

Parents felt comfortable asking questions and appreciated knowing how they could support their children's learning at home. The sessions with the coordinator provided them with a range of ideas about "how to help" their children.

"The Mutukaroa parent centre is such a good idea."

"I wish this is continued on when they go to the senior school."

Part B: Student Achievement Data: SEA, Six Year Net and STAR

To help teacher's plan programmes for their students in Sylvia Park and many other New Zealand schools, students are assessed upon entry using the School Entry Assessment (SEA) tool. SEA is a tool designed to provide teachers with information about some of the knowledge and skills children have when they first begin school. The assessment tasks support children to demonstrate what they understand and what they can do in three key learning areas—oral language, early literacy and numeracy. This assessment is replicated a year later when the six-year observation survey (also known as Six Year Net) is administered to the Year 2 students. STAR (Supplementary Test of Achievement in Reading) is a standardised assessment tool consisting of 10 tests, arranged in order of difficulty and labelled according to recommended year level and test. The tests are designed for students from the beginning of Year 3 to the beginning of Year 9. Sub-tests within each test relate to word recognition, sentence comprehension, paragraph comprehension and vocabulary range. The test is administered when the child reaches age 7.

Student achievement in all three tests is measured by stanines. The scoring scale is adjusted to take into account the additional year of schooling. *Stanine* is a method of scaling test scores on a 9-point standard scale with a mean of $M = 5$ and a standard deviation of $SD = 2$. Stanines allow comparison between a school's students and a similar nationally representative group of students. The 9 stanines relate to different aspects of reading achievement, however, so an overall average is not very informative. For the purposes of this report, students are identified *At Risk*: Stanine 1–2, *Of concern*: 3–4, *At*: 5–6, and *Above*: 7–9.

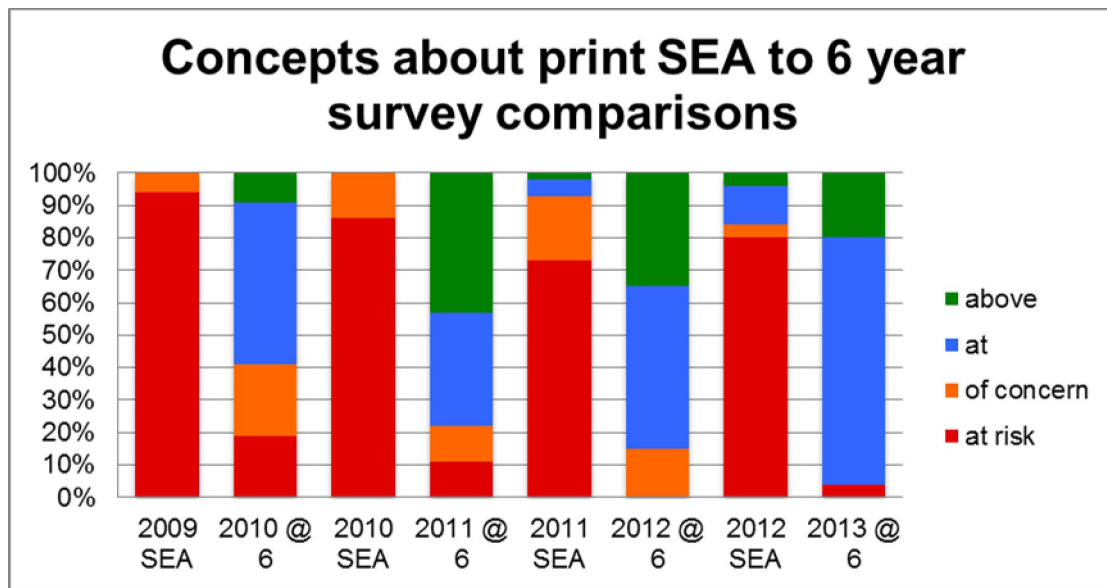
Results and Discussion Student Achievement

Longitudinal Student Achievement Results

For the purposes of this paper, the SEA and Six Year Net literacy domains of "Concepts about Print (CAP)" and "Hearing and recording sounds in word" are examined to compare the differences in student performance between the control (pre-Mutukaroa students) and the Mutukaroa students over time. Nationally CAP is the most frequently used task by schools because it meets two distinct purposes: planned formative assessment and accountability at the local level (Hawe, Dixon, Williams, & Tuck, 2003).

Figure 2 represents the results of the pre Mutukaroa students (2010–2010) in the "Concepts of Print Domain" compared with the results of Mutukaroa students from 2010–2011, 2011–2012 and 2012–2013. The number of students who completed both the pre-test (SEA) and the post-test (Six Year Net) averaged approximately 30 per year over the 4 years.

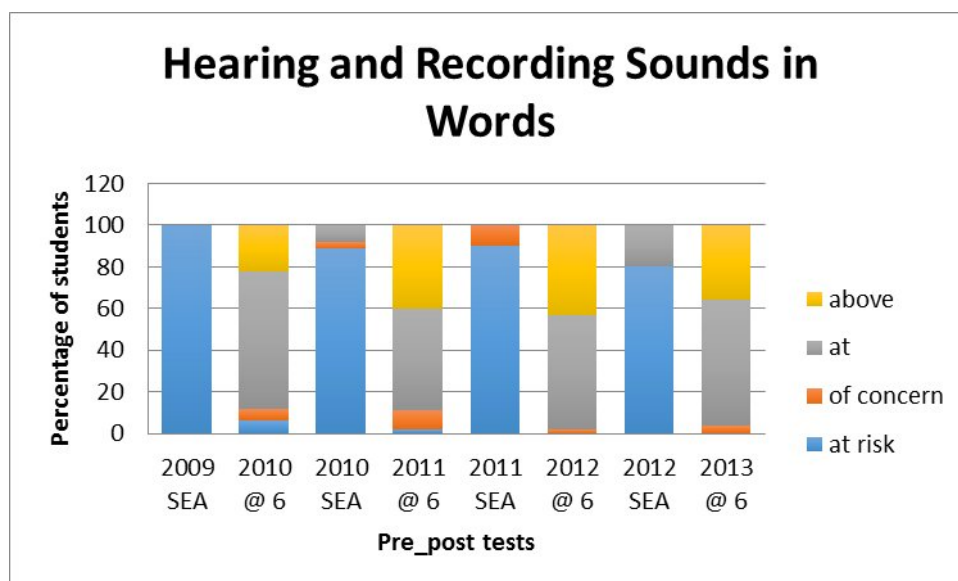
Figure 2. Concepts of print pre-Mutukaroa (2009–2010) and Mutukaroa 2011–2013



While the 2011 and 2012 cohorts had fewer students who were identified “at risk” on the pre-test than the pre-Mutukaroa students, the changes to the post-test results show the “at risk” percentage has trended downward. The “at risk-of concern” percentage of students fell from 40% in 2010 to 20% in 2011, to about 4% in 2013. Approximately 80% of Mutukaroa students tested at the “at” or “above” stanine, in comparison to 60% pre-Mutukaroa. More importantly, 40% of the students in 2011 and 2012 were in the “above” stanine band 7–9. According to national data, a stanine shift of 1–2 stanines over the period of a year is the norm (Ministry of Education, 1997). This data shows many of the Year 2 students who participated in Mutukaroa, 2011–2013, achieved between a 5–7 stanine shift over a year. According to the principal, in the five years preceding Mutukaroa, the “concepts about print” subtest has been by far and away the most difficult to get improvement on. Therefore, this is a very positive student achievement development.

Figure 3 shows the differences in performance between the cohorts of students for “Hearing and recording sounds in word.”

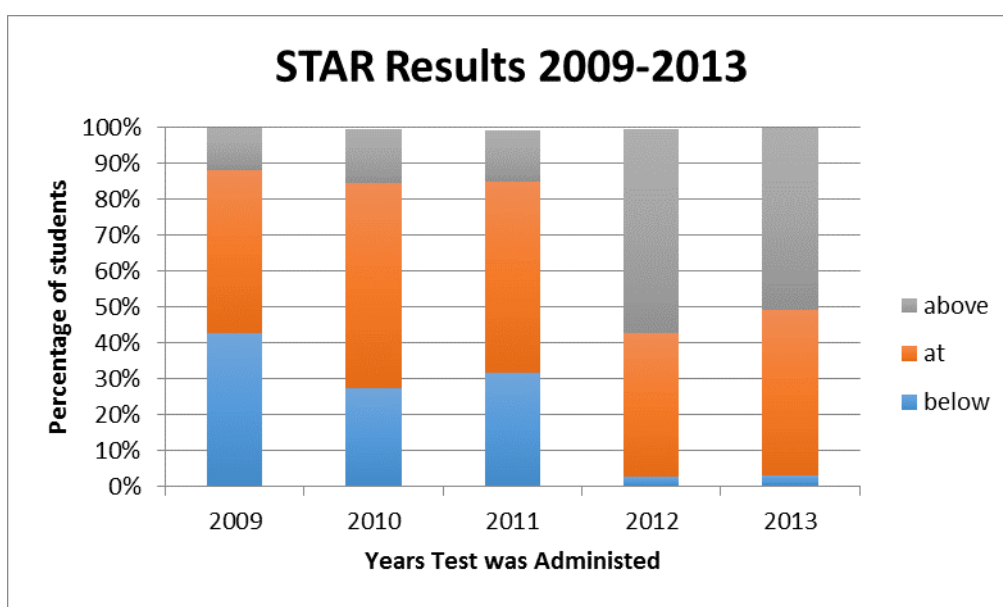
Figure 3. Hearing and recording sounds in words



Students' results upon entry (SEA) are similar across the pre Mutukaroa (2009) Year cohort ($n = 30$) and the Mutukaroa group (2010–2013, $n =$ approx 30 per year group). However, there are very positive improvements a year later with the Six Year Net results. The percentage of students at “above” rose from 20% to about 40% in 2011 and remained consistently at this level 2012–2013. The percentage of students identified “at risk” reduced in 2012 and 2013.

To confirm the improvements in student outcomes had been maintained beyond their participation in the programme, the Year 3 students STAR data is shown below in Figure 4.

Figure 4. STAR data 2009–2013



The results were very positive. For example, the percentage of students identified at “below” has decreased from 2009 and 2010 (pre-Mutukaroa) to about 2%. The percentage of students who tested at “above” increased from about 12% in 2009 to about 50% in 2013. This shows that the positive student achievement gains while students participated in Mutukaroa were maintained post-Mutukaroa.

Summary

Following are the interconnected/interrelated variables of the Mutukaroa programme that have contributed to its success. These include:

The reason parents participated in Mutukaroa– what influenced parents' decisions?

- Parents/whānau wanted the best education for their children but did not know how to help, did not know what was expected of them.
- The Mutukaroa project helped clarify their role as parents in their children's learning, and provided them with opportunities to learn how to participate in educationally related activities with their children, i.e., teaching reading and home based learning.
- They saw their involvement in Mutukaroa as consistently inviting and positive
- Coordinators were responsive to family challenges, e.g., language barriers by providing translators

Data analyses and management

- Learners were assessed using norm referenced tools that showed progress over time (assessments fit for purpose) and the data carefully analysed

- Immediate response to the data findings—individualised programmes were developed
- Records of 3-way learning conversations, learning targets etc. were made available on-line and available to all parties

Development of appropriate involvement activities and strategies that influence student outcomes.

- The 3-way learning conferences/conversations were held with parents and students in regard to the assessment data in a place, at a time and in a language that suited them and the environment was non-threatening.
- Resources—and how to use them— were made available to families

Mutual expectations between the home/school.

- The setting of learning goals/targets were between the coordinator, parents and child which complemented and supported what teachers were doing in the classroom

Parents/whānau modeled and reinforced school-related behavior

- Parents helping with reading, asking questions about child's learning that are well informed i.e., their knowledge of the assessment tools
- Giving children their interest, attention, praise (appropriate)
- Positively engaging with the teacher

Schools responsiveness

- Teachers were more confident in engaging with families from diverse backgrounds
- Schools willingness to change its procedures and practices to suit parents

Students educational outcomes

- Children felt positive about their parent's involvement.
- Positive educational outcomes for students i.e., reduced absenteeism, positive gains in literacy

From the qualitative data, it can be seen that parents are continuing to report a better understanding of assessment tools and how to help their children with their learning at home. Consequently, parents and teachers report there has been a change in home practice in regard to student learning. The survey responses show parents reporting they are more confident in interacting with staff and asking questions about their children's learning. The respondents surveyed so far indicate that this programme helped build positive relationships with the school.

The longitudinal student achievement data showed that a significant percentage of the cohort of students who enrolled in Sylvia Park School who were tested upon entry into school consistently tested at "below" (i.e., Stanine 0–3) from 2009 to 2012. In contrast to these pre-Mutukaroa (2009–10) test results, the students had made significant gains after one year of participation in the Mutukaroa programme. In addition, Sylvia Park School witnessed positive rates of progress in reading comprehension for those students who had completed a full three years supported by Mutukaroa.

Conclusion

The literature on parental involvement in children's education conveys the clear assumption that parents involvement supports student learning. However, the multifaceted factors that influence positive involvement are rarely considered, for example, how does parental involvement have a positive effect on student learning and what is the effect on student learning outcomes. This project shows that effective partnerships between schools and parents, whānau, and communities can result in better

outcomes for students. The ASB Community Trust-funded Mutukaroa programme has developed a more effective “school learning community” and is continuing to do so when the outcomes are considered. These results have considerable implications for the school and, more importantly, the students. It is well established that the early childhood years serve as an important foundation for subsequent literacy development (Neuman & Dickinson, 2001). The degree to which children acquire requisite literacy skills is known to be a strong predictor of future academic success and has long-term social and economic implications for families and societies (Snow, Burns, & Griffin, 1998). Finally, the success of this programme has attracted attention from politicians, policy makers and educationalists at local, national and international levels. The next section examines the expansion of the Mutukaroa project.

Part 2 Expansion of a grass roots initiative

In August 2013, the Minister of Education announced funding to expand and adapt the Mutukaroa model across a range of schools through the “Mutukaroa School and Community Learning Partnership Networks Project” (Minister of Education, 2013). Initially 10 schools were chosen in 2013. The Ministry of Education contracted a supplier to provide Learning and Change facilitation services to adapt and expand the Mutukaroa model in a further 50 schools in 2014 and 50 in 2013 in approximately five to seven geographical and complementary “Learning and Change Networks” each year. Each network will receive at least 200 hours of facilitation and are expected to meet up to three times per term—and more frequently in sub groups.

A Learning and Change Network (LCN) is defined as a network where “schools and/or kura working together, with their communities, to accelerate progress towards equitable outcomes for priority learners in a culturally intelligent way, recognising the diversity and opportunities of 21st century learning” (Timperley & Earl, 2012).

The Ministry is responsible for selecting schools to take part in the project, using expressions of interest for supplementary support that schools submit each year to their regional Ministry of Education office, as well as data from a range of sources¹ to select schools. The Ministry, through a Lead Development Advisor, will meet with each network and share the Ministry’s Mutukaroa LCN methodology, with a specific focus on Mutukaroa schools and community learning partnership networks. This is intended to ensure the group of schools and/or kura is aligned to the intended way of working.

Staff members from the Sylvia Park School Mutukaroa project have provided direction to the network to ensure fidelity with the Mutukaroa methodology. Aspects that they have found challenging or rewarding in their experiences of expanding a localised initiative to a state initiative follow.

Challenges

One of the greatest challenges was the sheer number of people from a range of organisations who have different responsibilities for the project both regionally and nationally. This included personnel from the Ministry of Education and the providers who worked with the clusters. Of particular concern was the lack of role definition for the many Ministry staff involved in the project. While they might have had a clear understanding of their roles, it was not always evident to the Sylvia Park School Mutukaroa team what those roles were.

Furthermore, the Sylvia Park Mutukaroa staff felt that the roll-out of the project was not sequenced properly. For example, schools were chosen well before the facilitation was contracted.

To ensure the fidelity of the Mutukaroa model, the pressure on staff from Sylvia Park School has been significant. While the cost has been offset by the Ministry of Education, staff felt it was one thing to back-fill positions and another thing to be able to carry on with direction at the pace that it requires.

Staff felt that there needed to be a clearer, shared understanding of the process by which Mutukaroa should have been rolled out. One of the biggest tensions for the project has been the role of the

¹ This includes National Standards/Ngā Whanaketanga Rumaki Māori, Public Achievement Information (PAI), regional and local information (decile, roll, student characteristics, leadership), School Charters (produced annually), School Annual Reports and Analysis of Variance and Education Review Office Report(s).

Learning and Change Network division, which required a particular methodology by which the project would be rolled out. Ideally, the learning and change methodology is a ground-up approach, whereby schools identify their educational challenges and design a response to those challenges. This methodology is at odds with expanding a project into schools based on a predefined model such as Mutukaroa.

Successes

The Sylvia Park School team, rather than a Ministry of Education team, selected the first 10 schools that were to participate in the project in 2013. These schools have collaborated well during 2013 and 2014 and have played key leadership roles in the clusters. These schools were also highly motivated to get the programme underway and have been able to enjoy a good level of success almost immediately. They are seen by the Sylvia Park team, and their own school communities, as important champions for the project.

The Ministry of Education has been very generous in supporting Sylvia Park Mutukaroa team members Ariana Williams and Barbara Alaalatoa to be able to participate in the roll-out of Mutukaroa. The Ministry of Education has also been most receptive to advice to ensure that the integrity of the model is maintained, while acknowledging clusters will modify aspects of the programme to suit their local contexts.

Having longitudinal data has been one of the most powerful levers for convincing people about taking on this project. Teachers are genuinely committed to looking at whatever means can help their students achieve.

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