CHAPTER 3

Pacific Pedagogies for Literacy and Language Development: Exploring a research-practice intervention

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Abstract

The Pacific Literacy and School Leadership Programme (PLSLP) was a three-year intervention in three Pacific primary school systems. PLSLP was funded by New Zealand MFAT and delivered through a partnership between the University of the South Pacific's Institute of Education and the University of Auckland. Its overall goal was for improved literacy learning and language development. PLSLP took a design-based research (DBR) approach to working collaboratively with Ministries of Education and schools across Solomon Islands, Tonga, and Cook Islands. In this paper, we provide an overview of the programme and how the DBR approach was implemented within the different contexts of PLSLP. The paper is based on reflections of four PLSLP team members with a particular focus on the interface of literacy and language, and the development of contextually tailored learning resources. We maintain that the DBR approach, as co-constructed by the researcher-practitioners involved in each country, responded well to the challenges faced by Pacific Ministries of Education and their Development Partners in designing and delivering effective interventions for learning improvement. Underpinning PLSLP was the belief that aid interventions must contribute to enhancing student learning outcomes in a way that is contextually appropriate, and by building sustainable local capability for ongoing improvement. The central focus of PLSLP on teacher-student interactions, the pedagogical exchange, and co-design methods offered through DBR, ensured our interventions were built from and for the contexts engaged in.

Introduction

Concerns about students' literacy learning outcomes have been paramount

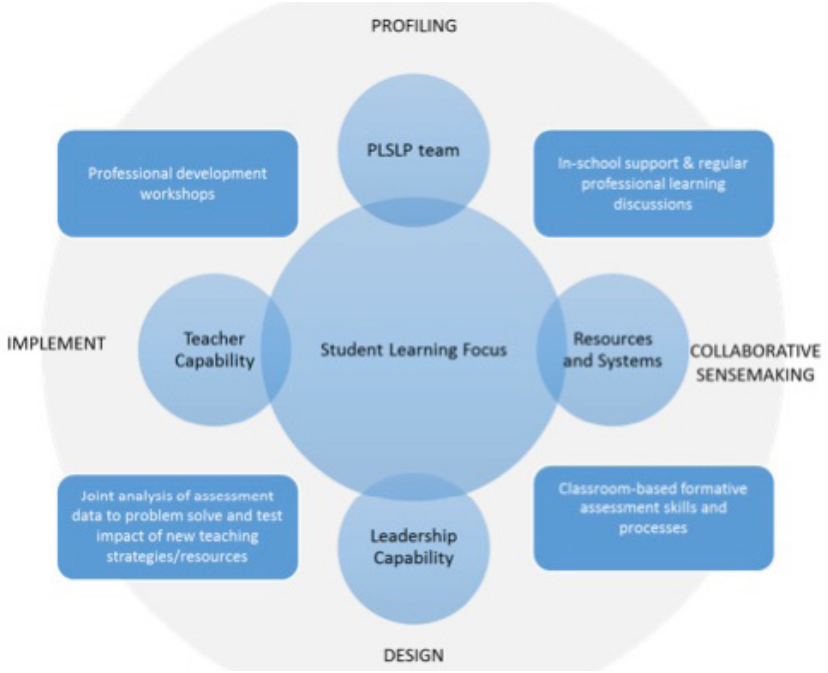
within Pacific Island countries for some time. The Pacific Literacy and School Leadership Programme (PLSLP) was designed to respond to these concerns through a research-practice collaboration. The design focused on working at the classroom level to improve student literacy learning outcomes, in a manner that is contextually appropriate and builds sustainable local capability for ongoing improvement. This paper provides an overview of PLSLP and the design-based research approach employed in the programme. Three members of the PLSLP team then share their reflections on key aspects of the programme, with a particular focus on the literacy and language intersect within PLSLP contexts, linking back to the Ako theme of Pacific learning contexts and practices.

Overview of PLSLP

The Pacific Literacy and School Leadership Programme (PLSLP) was initiated by the New Zealand Ministry of Foreign Affairs and Trade (NZ MFAT) in 2014, in response to growing concern across a number of Pacific Island ministries of education that high proportions of students were not meeting expected literacy levels (NZ MFAT, 2014). Central to the genesis of the programme, was a sense of dissatisfaction with the extent to which previous interventions had failed to demonstrate sustained improvements at classroom level, and that they were infrequently based on robust evidence of the actual patterns of teaching and learning within Pacific Island classrooms (ibid). Initial scoping for the programme uncovered a desire for a different approach, an approach strongly grounded in understandings of the context of Pacific schools, and in evidence about the patterns of teaching and learning that occur within Pacific classrooms (PLSLP Implementation Plan Phase One, 2014). PLSLP was therefore also designed to contribute a stronger evidence base for how best to support effective literacy teaching and learning within the specific context of Pacific Island nations.

A research-practice collaboration involving the University of Auckland and the Institute of Education of the University of the South Pacific was selected by NZ MFAT and the participating ministries of education to implement the programme. The PLSLP team worked with 42 primary schools across three countries – Cook Islands, Tonga, and Solomon Islands – over a three-year period, beginning in mid 2014. A design-based research (DBR) approach (explained below) was adopted as the means of responding to the desire for a stronger evidence base and delivering contextualised interventions that build capability at the school level to sustain on-going improvement, beyond the injection of finite project funds (Jesson and Spratt 2017). Key programme activities are represented in Figure 1.

Figure 1. Key components of PLSLP



By the end of the programme, evidence demonstrated significant gains in student achievement across the three countries compared to baseline (Pacific Literacy and School Leadership Programme, 2018). Significant increases in both instructional and school leadership practices identified as supportive of students' learning in targeted areas were also achieved across all three countries (ibid). Interviews with teachers and school leaders involved in the programme revealed that the majority valued the approach of PLSLP and recognised it as different from other programmes, in particular the collaborative "co-design" approach (explained below) and the recurrent provision of professional development support at the school level (ibid).

Design-Based Research Approach

As described in detail elsewhere (Jesson and Spratt, 2017, Veikune and Spratt, 2016), PLSLP employed a DBR approach, which has key features of:

- Involving collaboration between researchers and practitioners;
- Being based within a real education context and focused on immediate problems of practice for educators in improving student learning; and

- Involving iterative cycles of data collection from the local context, and the use of that data to design and test interventions. (Anderson & Shattuck, 2012; Fishman, Penuel, Allen, Cheng & Sabelli, 2013)

Adopting the DBR approach meant the interventions used in PLSLP were not pre-designed and there were no prior assumptions of what the key "problems" or appropriate "solutions" were or should be. Instead, PLSLP started with a "profiling" phase involving the collection of data about current patterns of student learning, teacher practice and school leadership practices specific to the participating schools. In "sense-making" sessions the PLSLP team facilitated a collaborative process with the schools for making sense of the data, reaching agreement on the most important student learning challenges, and developing hypotheses about what changes in practice are needed to address those challenges. The outcomes of this process informed the design of professional learning for the teachers and school leaders and the development of teaching and learning resources including formative assessment tools. This cycle of data collection, collaborative sense-making, and co-design of interventions was repeated throughout the programme, and involved stakeholders at every level (school level, with Ministry partners, and within the PLSLP team itself).

The implementation of PLSLP demonstrated several strengths of the DBR approach for the design and successful implementation of interventions to improve student learning. First, the DBR approach enabled PLSLP interventions to be developed within context; responsive to local priorities and incorporating local knowledge, while integrating academic knowledge and maintaining theoretical and practical validity (Jesson and Spratt, 2017). Described by Veikune as the "weaving" of academic and practical knowledge, the co-design process based on locally collected data ensured interventions were "woven with rather than for school communities" and that "teachers' knowledge about what sits behind the data is essential to weave into the analysis alongside "outsider" researchers' interpretations" (Veikune and Spratt, 2016, pp. 93, 77).

Second, the sense-making process served as an important professional learning opportunity, in making visible the relationship between patterns of student learning and teacher practice, and enabling teachers to further refine their understandings of effective learning and teaching in their context (Jesson and Spratt, 2017).

Third, the design-based research approach, in placing less emphasis on the "fidelity of implementation"(whether teachers implement interventions exactly as designed) and more on the "integrity of implementation" (doing

what matters most and works best while accommodating local needs and circumstances) allowed space for a more sustainable approach to capability building of teachers and school leaders (Le Mahieu, 2011). Schools are dynamic; every year new students arrive with different learning strengths and challenges, teachers and school leaders may change, demands of the curriculum may change. Sustained improvement in student learning, therefore, requires schools to have systems, routines, and capabilities in place to support on-going improvement. The involvement of school leaders within PLSLP was particularly important from this perspective.

This section has provided a broad overview of PLSLP and the DBR approach adopted in the programme. The following section provides reflections about the programme design and implementation of the DBR approach within the Tongan context from Heti Veikune. This is followed by two sections, by Robert Early and ‘Ana Taufe’ulungaki respectively, looking at the intersect of language and literacy, and the way in which PLSLP responded to this in the Solomon Islands and Tongan contexts.

Making Sense of the Known to Weave into the Unknown

PLSLP, known in Tonga as LALI (Literacy and Leadership Initiative), gave researchers the opportunity to engage with principals, teachers, and students in the 15 schools across 3 island groups in Tonga, on many different levels. The initial profiling in late 2014, using classroom observation and teacher and principal talanoa data, together with national Secondary Entrance Examination (SEE) results, enabled the team to plan to address what the data revealed about what was happening in the teaching of literacy in classrooms in Tonga.

The DBR approach employed by the programme was a new undertaking for many of involved in the team, as well as for the schools involved. Our unfamiliarity with this approach was hard at the beginning, especially in the early days of taking the profiling data back to the schools for sense-making and for planning. But once principals and teachers understood what the data meant and could see how useful it was for informing their school and classroom planning, it was easier for all of us. Principals and teachers felt empowered because they were allowed to look at their data and to select what area of “need” they could work on; for example, they chose reading comprehension because the SEE results revealed areas of weakness in the participating schools.

The professional learning that was planned addressed the opportunities for learning revealed in the classroom data. Workshops were targeted

for specific needs, such as vocabulary building, shifting from Tongan to English, asking questions, moving from question and answer to talk and think about reading/writing, how to use text resources effectively, setting up learning communities etcetera. Over time, teachers became more open about what kind of professional assistance they required in order to lift the results their students were showing.

A key to the success of this programme was the buy-in, not only by principals and teachers, but by the community as well. The development of new text resources targeted to the areas of learning need was particularly valuable, as these books provided teachers with the material to implement our newly-reminded and introduced strategies. We witnessed these resources being used right across all levels and in both Tongan and English. We took the reading materials to the home villages of the schools and showed parents how they could use their everyday activities and conversations to foster literacy and the added use of the books was a bonus. It is hoped that principals and teachers will continue to allow the children to go home with the books.

My role, as Coordinator and Literacy Facilitator for LALI, was to oversee arrangements for travel and for workshopping/classroom visits and to work with the University of Auckland team to facilitate workshops and classroom visits, to be involved in data collection and profiling, and to maintain contact with the 15 schools we worked in. It has been a huge learning curve for me, one that has allowed me to travel to our schools in the islands, to engage/interact with practitioners and leaders in the field, to learn from my team member colleagues, and it has enabled me to work with teachers and children in a way I had not done before in my teaching career. My awareness of the positive outcomes from using student learning data to inform planning, resourcing, and delivery has been most useful in my own work with the University of the South Pacific as well. At the end of these three years of the programme, the shifts in teacher and leader practice are most encouraging, and the shifts in student achievement are be celebrated and, hopefully, can be sustained for a long time.

The Language/Literacy Intersect in PLSLP

The design model of PLSLP forced project planning and implementation to be highly cognisant and reflective of the distinct contexts of each of the three countries. This was particularly evident in relation to language issues. There is now a fairly widespread understanding and acceptance of the importance of the child's first language in early learning, but the language/literacy intersect displayed distinct features and challenges in

each of the project locations. This section provides an overview of the language contexts in each of the three countries that PLSLP worked in and highlights how the programme responded to these contexts. A more in-depth description of a vernacular pilot undertaken in Solomon Islands as part of PLSLP is provided.

Cook Islands language context

In the Cook Islands, the Māori language exists as the dominant Rarotongan dialect on the main island, but there are also several other distinct dialects on other islands that PLSLP worked with; for example, Mangaia. There are also some other language varieties that are distinct enough to be regarded as languages in their own right; for example, the language of Pukapuka. There are strong attachments to these local speech varieties as markers of identity for the populations outside Rarotonga. The formal school vernacular education programme recognises and supports the use of these other language varieties. However, the easy access Cook Islanders enjoy to New Zealand has resulted in massive population movement to New Zealand, and language shift to English both in the diasporic community and increasingly in the home community. All the language varieties in the Cook Islands are regarded as threatened, and so there is also a strong language maintenance component to the implementation of vernacular education.

The challenges are most acute when it is found that in some schools, the majority of Cook Islands children are in fact English L1 (first language) speakers, with varying levels of ability in Māori as L2 (second language). This arose as a significant challenge for teachers in PLSLP schools on the island of Rarotonga and there were differing perceptions about how best to respond to this challenge at community, school, and Ministry level. The PLSLP team were mindful of the sensitivities of this issue, and the importance of engaging with teachers' and leaders' beliefs and values. Creating opportunities for dialogue amongst teachers about this issue became a key strategy within the programme, and one which teachers stated they valued. PLSLP contributed to creating a safe space for such discussion to take place, with a focus on the needs of students in classrooms and on developing strategies that would work best for them.

Previous assessment tools in the Cook Islands were originally designed in and for English, and then translated into Māori, but a more nuanced response to the language context led to the development of new formative assessment tools written directly in Māori. The development of these tools within PLSLP was a collaborative effort and professional learning opportunity that strengthened engagement by teachers, and incorporated

input from expert speakers and writers of the language. The tools were found to provide more valid information about students' performance in writing in Māori.

Tonga Language Context

In Tonga, traditional culture and language heritage have always been highly valued, along with learning and education, resulting in high rates of literacy being reported. The national language policy in education is for Tongan to be the medium of instruction until Y4 (year 4), with the introduction of oral English in Y3 and then a gradual move to English as the medium of instruction by Y6. Along with Tongan, the other indigenous language of Niuafo'ou, although spoken by just a small minority, is also recognised.

The official languages are Tongan and English, and project profiling in the schools revealed that English is increasingly perceived as having higher status than Tongan. There are signs of community language shift to English, and some community pressure for the teaching of English to be the key outcome of education.

Further, recent measures have been showing only a minority of children achieving literacy benchmarks and a particular challenge in managing the introduction of English as a second language from year 4, while continuing to build capability in the first language of Tongan. A core aspect of the programme's response to this particular language context was the development of dual-language resources with both Tongan and English text, and provision of professional development for teachers in how to strategise the use of these resources. This is discussed in detail in the section below.

Solomon Islands Language Context

In the Solomon Islands, as throughout Melanesia, the language setting is more complex, with multiple vernacular languages; Pijin (Melanesian Pidgin English) as the widespread language of interaction in almost every sphere of national life, and English as the official language and the language of formal education at all levels. As part of the profiling component of the project design, a study was conducted on the language profiles of the students and teachers in the project schools. Combined with classroom observation data, it was found that there are high levels of multilingualism among individuals and at school. Students were drawn from four language communities, but it was found that Pijin had displaced the vernacular as the first language for around 25% of students. Teachers were predominantly

working in their home areas, so usually knew the vernacular, and would use that widely in the classroom. Pijin is still somewhat stigmatised as a language in Solomon Islands, and its use for any purpose in education is contested. However, in practice it was found to be widely employed for all oral communication in the classroom. English was largely confined to its written form, either by the teacher on the blackboard or by students in their exercise books. The only time students were observed to verbalise English was when "reading" aloud as a class from a shared reader, which was largely a recitation exercise. In just a few locations, teachers had developed their own vernacular resources, but otherwise all classroom resources were in English, which of course is the only language of the official curriculum and its assessment regime.

Recent changes in national educational policy in the Solomon Islands now support the concept of vernacular education. The Education Strategic Framework (2016-2030) proposes mainstreaming the use of vernacular languages in education across the country. However, the large majority of teachers within PLSLP schools were unaware of this policy. When surveyed, the majority of teachers in PLSLP schools believed that they were not permitted, or at least not encouraged, to use the child's first language or Pijin. However, 85% of teachers surveyed indicated that they believed that the vernacular should be used in the classroom in some way.

Natqgu Vernacular Language Pilot

In response to the data collected through profiling, it was decided to explore the potential for a vernacular language pilot with the largest language community within PLSLP schools – the Natqgu language. The first step was to discuss the results of the language survey in meetings with the school communities. Awareness raising on the cultural, social, pedagogical, and other benefits of children learning in their first language was conducted, and there was found to be overwhelming support from parents for such an approach. Also, with a better understanding of the policy environment, teachers too became enthusiastic and engaged. Some resources from a previous church-based community literacy programme were revised, and new resources were developed, including an alphabet chart and a new alphabet song, and translations of the existing Nguzunguzu school readers. The literacy workshops provided for all teachers engaged with multilingual approaches, and inventories of bilingual strategies were developed.

Some of the key learnings from the vernacular pilot with regard to the language-literacy intersect are as follows:

• Some of the rationale behind multilanguage education goes against commonly held beliefs (e.g. that English-only from the start is best), and significant community and stakeholder (including teacher) awareness is necessary on an ongoing basis.

• Disconnect between national policy and local teacher perception and practice needs to be overcome, and national policy supportive of vernacular education must be followed up with appropriate advances in curriculum and provision of suitable resources.

• Vernacular literacy programmes must be built on knowledge from language experts and the importance of language factors in literacy education.

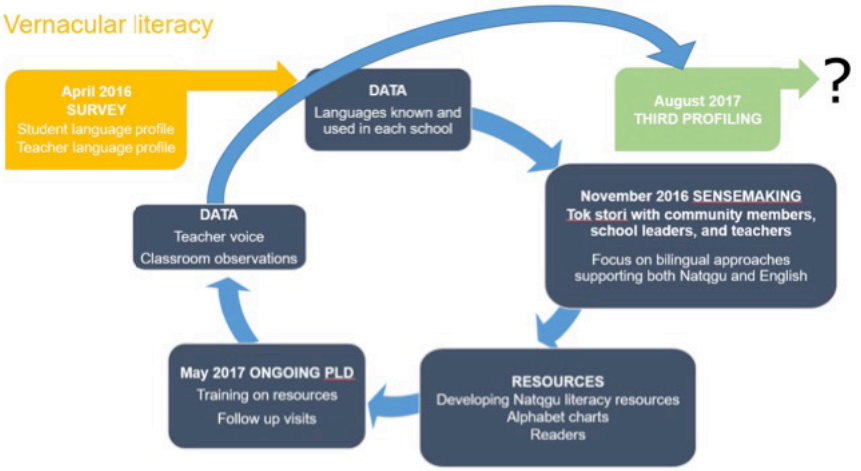
• Teacher development must include an understanding of first and second language learning, and provide skills and strategies for bilingual teaching.

• There is a huge scope for locally-prepared resources and teaching and learning materials to be developed and used.

• Incorporating vernacular into the classroom can provide a powerful opportunity for enhancing engagement with parents and communities, and bridging the boundary between home and school.

The chart below gives an overview of the cyclical process of the design-based research as it applied to incorporating aspects on vernacular literacy into the Solomon Islands component of PLSLP. The question mark at the end leaves open the prospect for further cycles of development for the language that was targeted in the pilot activities, or for expansion to other language communities and their schools.

Figure 2. Application of a DBR for design of vernacular pilot in Solomon Islands



Conceptualising Text to Support Biliteracy

The development of text resources specifically tailored to the identified student learning needs in each country was a core component of PLSLP. This section describes the development of text resources in the Tonga context, where three kinds of texts were developed: fiction readers in Tongan language in big book form for years 1-3; textless books in big book form for years 1-3; and dual language (Tongan and English) non-fiction books for years 4-6. The main purpose of developing new text resources in the LALI programme was to inspire in children a passion and love for reading and to instill in them foundational literature skills that can be built on and sustained throughout their school years and lives. To achieve this goal, the LALI resources were developed in accordance with certain key principles, based on research evidence from the literature.

The needs of Tongan children were paramount in the considerations and processes of resource development – their prior knowledge, their values and beliefs, their language competence, their world views, and of course, the contexts in which they are situated – educational, social, cultural, economic, and political. The resources were deliberately linked to the Tongan Ministry of Education's language policy and curriculum, to ensure that LALI would not subvert the work already done by teachers in Tongan classrooms but would bring additional value to classroom practices. The themes, contents, concepts, sentence structures, and vocabulary must also

be appropriate for each year level, as guided by the curriculum. The texts were designed to assist in enabling children to make the natural progression from thinking, talking, reading to writing.

The resources also had to be environmentally and culturally appropriate. An illustration of a pig in the story must be recognised by the children as looking like the pigs they see around them in Tonga. A story about a bear and a lion, for example, would not be appropriate in the Tongan context. Images are considered just as important as the texts in extending meaning and adding meaning to the story. The LALI resources were designed to be visually appealing in order to excite the child's imagination and promote love of reading. Overall, the process of development depended very much on the close collaboration between author, illustrator, photographers, editors, designers, reviewers, teachers, students, schools, communities, education systems, and the Ministry of Education.

The resource development process within LALI was not just evidenced-based, but also has the potential to contribute to the existing literature on effective resources for bilingual classrooms. In the case of the LALI, dual language readers were developed for years 4-6, in English and Tongan. These were designed in three different formats. The Level 4 books were printed as flip-books. One side is in Tongan; the book is flipped over, and the text is in English. The Level 5 books were printed in a successive format, meaning, that Tongan and English were printed on the same page, with Tongan first, followed by English. The Level 6 books were printed as progressive books; that is, the story in the first half of the book is in Tongan and from the middle of the book to the end, it is in English. The reason for using these three different structures is the fact that very little has been written in the literature on the most effective structure for printing dual readers for use in bilingual classrooms. At the end of LALI, a survey was conducted with teachers to find out which of these three structures of dual readers was found to be the most useful and effective. The results of the survey are being written up to contribute to the literature on the subject.

The first resources to be introduced into the schools were a series of textless books for years 1 to 3, with the objective of teaching the basic literacy skills, such as reading from front to back, from left to right, from top to bottom. The books have no text or words, but the story is told only in pictures and images, which proved quite exciting for both teachers and children and encouraged the development of the children's thinking and imaginations. The children are able to create their own stories, which they can tell the teacher or each other, write them in their own words, and

illustrate them. Teachers are able to use the books to link teaching to other subject areas of the curriculum and to use them for other levels, not just the early years. Such books allowed the children to make connections from the books to their environment and activate their prior knowledge, and expand their thinking and vocabulary.

The second set of resources were big books for years 1 to 3 and several factors came into play in the development of these. The books were in Tongan language only. This is in line with the evidence-based knowledge which supports a strong mother-tongue foundation as the basis on which to build second-language acquisition, in this case, English. It was also in accordance with Tonga's national language policy, which stipulates a Tongan-only medium of instruction from years 1 to 3. English is introduced orally through rhymes, songs, poetry, and play etcetera. in year 3, and introduced fully in year 4. Year 4 of primary education can be considered a transition year, from a monolingual medium of instruction to a bilingual approach. The big books were re-worked versions of existing Tongan readers, which were already in classrooms but only in small format. This was a deliberate attempt to add value to existing resources.

The big books were developed with the intention of encouraging shared reading in a safe environment, where children can share their ideas about the illustrations, make connections between the images and the texts, and use the images to expand on what is missing from the texts. In such an environment, all children are encouraged to read with confidence. Teachers use different levels and types of questions to deepen children's understanding of the texts, make connections with their environments and prior knowledge, visualise what they read, determine the important ideas in the text, draw inferences, synthetise information, ask their own questions, monitor their comprehension and repair their own understanding, and achieve, ultimately, metacognition.

As already stated, the development process for the big books was firmly based on research into effective resource design. For example, the size of the book had to be taken into account to ensure that a teacher can hold it comfortably in her hands, and to make sure that all the children in the class can read the text and see the pictures clearly. The font and size used had to be suitable for the level, and, similarly, the length of sentences and lines on a page, and the level of difficulty of the words used. They must be words which the children have encountered in their environments. Through improvements of skills levels, vocabulary and grammatical knowledge can be extended as well as reading for deeper levels of meanings.

The third and final set of resources developed under PLSLP in Tonga were dual readers for years 4 to 6 in both languages, Tongan and English. The main purpose of these books was to facilitate the transition of the children and teachers in Tongan classrooms from Tongan to English. In addition, these books supported the teaching of non-fiction text features and responded to the finding in profiling that most texts available in Tongan classrooms were non-fiction. The focus on non-fiction also aligns with research evidence that indicates if children are made familiar with non-fiction text features from an early age, they will be comfortable with such reading matters as they progress through the education system.

Alongside all the text resources developed for LALI were Teachers' Guides, in both in Tongan and English. These were printed separately for each year level and also for each language. These guides are not prescriptive; that is, they do not tell the teachers what to do. Rather they are offered as additional resources from which teachers can select activities and strategies that they think would be useful for their own students and would add to their existing repertoire. In line with the collaborative approach promoted by LALI, the guides also encourage teachers to share ideas for teaching and learning strategies with other colleagues and to adapt them to suit their own student's needs.

Concluding Reflection

This paper has explored aspects of the Pacific Literacy and School Leadership Programme, illustrating a design-based research approach to designing and implementing interventions to improve student literacy outcomes, building from within and for Pacific Island educational contexts. Originally presented as part of the Ako strand at the Vaka Pasifiki Conference, the weaving of the voices of different team members involved in PLSLP coheres with Pacific learning practices, often embedded within oral dialogue. Many of us involved in PLSLP began as novice weavers, happy to watch and observe the expert weavers. As the weaving grew and the mat advanced, novice weavers realized they had to step up because they, too, had something to contribute to the weaving. This particular mat is completed and the weavers have now stood up from the weaving and are admiring their handiwork, at the same time remarking on where they could have woven better or tighter. This mat is ready to be presented for our children to work and play on. And the weavers look now to the next mat, knowing full well they take the lessons learnt from this weaving to the next one.

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