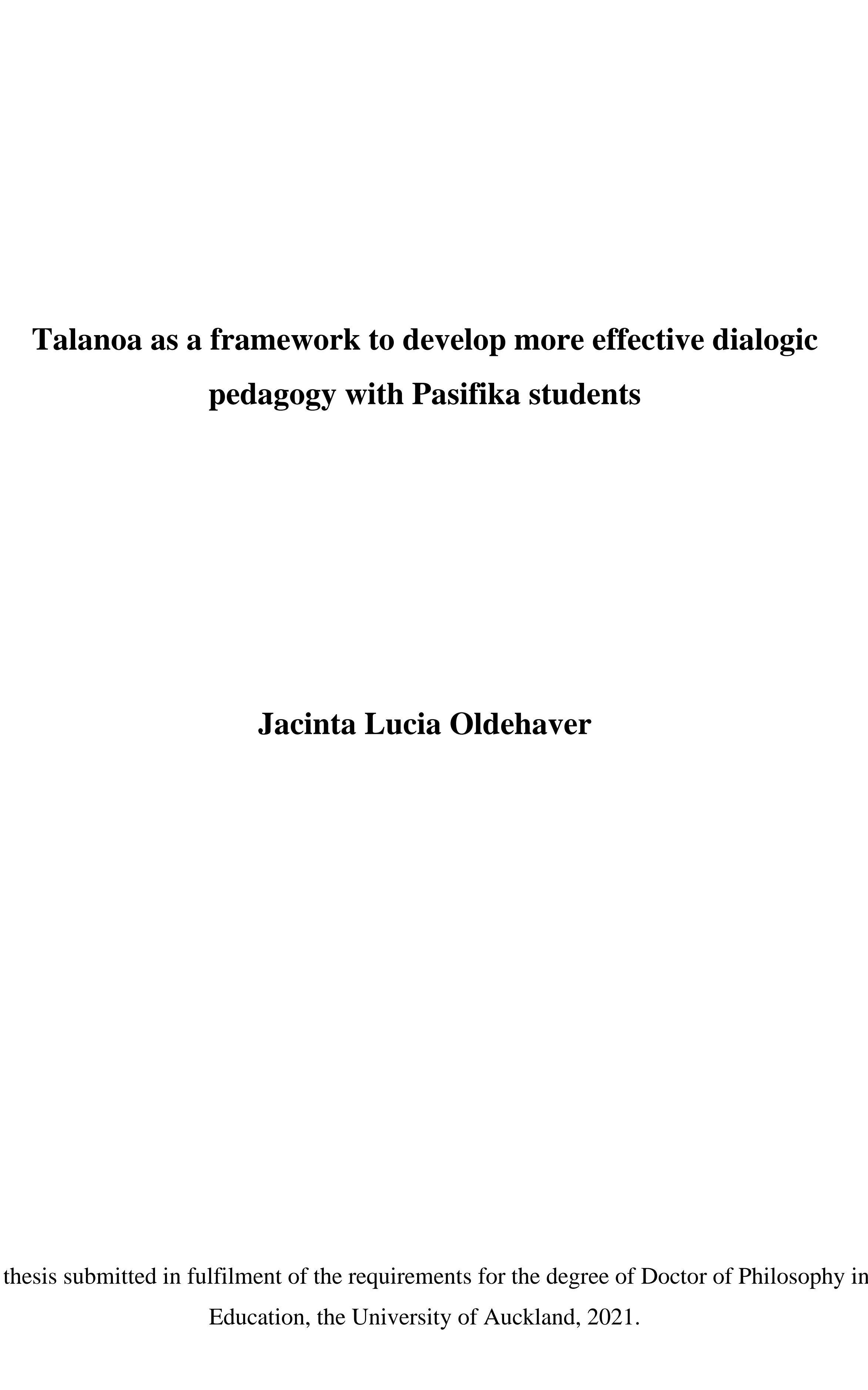

Talanoa as a framework to develop more effective dialogic pedagogy with Pasifika students

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ABSTRACT

There is an urgent need to provide more effective approaches to teaching and learning for Pasifika learners in English medium contexts that are deliberate and enable active and culturally sustained engagement. A dialogic approach to teaching might add to those practices that are effective.

Dialogic approaches to pedagogy entail change components specific to both teachers and learners. They draw on communicative, social, and cultural foundations. Long-standing research in New Zealand (Chu et al., 2013; Coxon et al., 2002) identifies numerous factors at both micro (e.g. classroom) and macro (e.g. policy) levels that can impact positively and negatively on Pasifika student's learning and achievement but there is little research about dialogic pedagogy specifically for our growing Pasifika student population.

It is argued that dialogic approaches provide opportunities for students to engage with learning; build on and sustain individual and collective identities; and advance their thinking and understanding in ways that support enhanced achievement. Understanding what the discourse patterns in classrooms look like is therefore significant. This study provides an in-depth analysis of the interactive experiences of six teachers ranging from New Entrant to Year 8 in 2 Auckland primary schools following dialogic approaches to literacy instruction being adopted for Pasifika students.

Shifting practice toward dialogic pedagogy has been found to be particularly challenging (Alexander, 2006; Cazden, 2001; Mercer, 2003). Several factors provide constraints and enablers for the pedagogical practice. This study proposes that classroom discussion in literacy, combined with a pedagogic approach to lesson design that is dialogic, can provide improved learning conditions. However, this shift requires a level of reconciliation between the nature of dialogic pedagogy and a Pasifika worldview. Identifying the place and value of dialogue for Pasifika students and where and how this is situated in the formal school space by all the participants is the focus of the study.

Talanoa (Vaioleti, 2006, 2016) has been used to conceptualise the design of an analytic framework used primarily to code discourse features between teachers and their Pasifika leaners. Talanoa is an Oceanic principle that is generally defined as talk, both formal and informal. Core values of respect and reciprocity underpin Talanoa. A phased approach over one school year was used to amplify then refine teaching practices and culminated in a directory of effective dialogic instruction using a design-based research approach. A focus on

valuing Pasifika students' understanding of their own and their teachers' discourse practices as a point of reference improved patterns of talk across all six classrooms involved, with greater frequency of higher order talk, and lower rates of teacher 'over-talk'.

The findings have important implications for how research for and with Pasifika is conducted in future. It has demonstrated the value of student contributions to solve localised issues, elevated teachers as researchers and woven the cultural underpinning of Talanoa into a classroom discourse framing that can better support a sustained move towards more dialogic pedagogy.

DEDICATION

This thesis is dedicated to my loving parents Emil & Clare Oldehaver.
I also dedicate this to my own little family, my partner in life and love, Christopher Toa and our amazing son Jacob Toa.

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To my family. As the youngest of 7 it was never difficult to find someone to reach out to, for support. I did this countless times whilst completing this PhD and every time my plea was met with love and reassurance that everything would be ok. I know for a fact that I would have never completed this thesis if you were not in my life and willing to step in at a moment's notice and lend a helping and loving hand with all manner of things. To mum and dad, thank you for your constant prayers, to my sisters and brother, my brothers-in-law, sister-in-law, nieces, nephews, great niece and great nephew, aunties, uncles, first, second, third and fourth cousins, I love you all so much and I thank each and every one of you for all that you have done for me.

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GLOSSARY

faka’eke’eke: relates to the notion of a questioning.

kau‘i-talanoa: to *join in* the discussion uninvited.

mālie, māfana: to invoke humour and impart feelings of warmth and joy.

ngā turu: cultural competency.

pō talanoa: late-night talks at one’s house in the village to discuss important matters of value to the family. Pō Talanoa are vital for establishing connections through *ownership*.

tālanga laukonga: deep interconnectedness by way of dialogue.

talanoa: talk/open informal or formal conversation.

talanoa’i: talanoa’i is understood as a verb. Talanoa’i requires one to be *active* in the discussion processes and in defining and redefining meanings.

talatalanoa: talk some more

vave: quick talk.

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CHAPTER ONE – INTRODUCTION

My Journey, My Story, My Purpose

Wednesday 30 November 2016, is a date I will not soon forget. The Vakatele Pacific Research Network (Auckland University of Technology) hosted Tongan academic Professor Konai Helu Thaman who spoke to an audience of both young and emerging and well-established Pacific scholars from various faculty and institutes across the greater Auckland region. I was privileged to be in the audience that day. I listened carefully, I took notes and soaked in the knowledge, the wisdom, the gems that she gifted to us all on that day. After 3 years already as a researcher at the University of Auckland it was only on that day did, I begin to understand how my own cultural identity could fit within the often-confusing, often confronting academic world.

The challenge laid down by Professor Konai Helu Thaman on this day was pivotal. She graciously tasked each and every one of us to be more, to do more for our Pacific communities, to be innovators, to build and create and to draw on the rich tapestry of Pacific landscapes and knowledges already before us and bridge our own research and teaching.

A pragmatic approach for me, was the key to addressing the challenge. I was a classroom teacher for over 15 years. I then moved into years of research and teaching and study at the university where I have been blessed to hold positions that have allowed me to serve a diverse community of learners. I, like Professor Konai, believe that culture matters in teaching and learning. So, the questions I needed to ask of myself were; *how will my own research positively impact Pasifika learners in Aotearoa? What is my point of difference? How do I work to build and strengthen the multiple learning pathways, in classrooms ensuring these spaces do indeed provide our Pasifika learners opportunities to flourish and thrive and engage using culture as a foundation for learning?* As I reflected on these critical questions, I felt more confident about what I was to embark on and along with the gift of poetry penned by none other than Professor Konai Thaman, to support and nourish and nudge and strengthen me, my journey began in earnest!

THINKING

you say that you think
therefore you are
but thinking belongs

in the depths of the earth
we simply borrow
what we need to know
these islands the sky
the surrounding sea
the trees the birds
and all that are free
the misty rain
the surging river
pools by the blowholes
a hidden flower
have their own thinking
they are different frames
of mind that cannot fit
in a small selfish world

(Thaman, 1999, p. 15)

This poem encapsulated thinking as a concept that opens worlds, that privileges multiple perspectives that can be drawn from rich and varied sources, social, cultural, historical, physical and spiritual. It speaks to the unbounding of classroom walls so that we might let 'thinking' take centre stage and relish in the creativity and innovation it can offer, if we dare. 'Thinking' in this way is required, not only to allow how and what we think as Pasifika to shine through in the often foreign setting of the classroom/academic space, but to unapologetically emerge into the world beyond the walls of the classroom, standing strong in the clarity of understanding who we are, humbled by the fact that we have so much to offer.

Chapter Organisation

This thesis is made up of eight chapters. In this Chapter 1, I began with my story, my journey, my purpose. In Chapter 2 and in direct response to my own personal purpose I briefly review the relevant literature pertaining to the current status of Pacific education in a New Zealand context.

In Chapter 3 I introduce the sociocultural theoretical framework used in this study. The main research question, that asks, whether dialogic processes are appropriate and effective discourse forms for Pasifika learners in English medium contexts will be critically explored

through a close review on dialogic theory and dialogic pedagogy. I will then begin to weave this theory together with a Pacific world view.

In Chapter 4 I present the methodology and methods used in this study. There is a full and detailed description of the year-long design-based research process, that took place in two communities in Auckland. The newly conceptualised Pacific Dialogic Indicator Tool (PDIT) that draws on the concept of Talanoa is introduced and explained in detail. This tool was central to the analysis of classroom-based discourse though complemented with a mix of methods to provide support for interpretation of data collected in this study. Ethical considerations are addressed also.

The overall study employed a phased approach to address the research questions. In Chapter 5 I report on the *Phase 1* the study's baseline findings that examined current classroom discourse patterns for teachers and their Pasifika students.

In Chapter 6 I report findings of *Phase 2*, the intervention with the invited teachers. This chapter is presented in two parts. In the first part I report the design components of the intervention itself. In the second part I examine closely how the intervention components contribute to the teachers designs processes that provide for effective forms of discourse for and with Pasifika learners.

In Chapter 7 I report the findings of *Phase 3* the final results section. This chapter aims to examine and then report on shifts that occurred in the classroom discourse, post-intervention.

In the final chapter, Chapter 8, I bring together the key implications reported in *Phase 1, 2 and 3* and discuss these through the theoretical lens the study employed, linked also to the literature reviewed, both Pacific and Eurocentric. This chapter discusses the key contributions of the study for improved discourse-based pedagogy drawing on the cultural underpinning of Talanoa. I present the study's limitations and the recommendations for future research directions.

CHAPTER TWO – REVIEW OF PASIFIKA EDUCATION IN NEW ZEALAND

The Current Status

This chapter presents a brief overview of the current literacy situation for Pasifika[1] children in New Zealand and indicates the links between their achievement status and the premise of this research which is the effective use of dialogue for literacy learning. The section serves as a background to the study, providing the impetus for the research, and identifying key principles upon which to build the research approach.

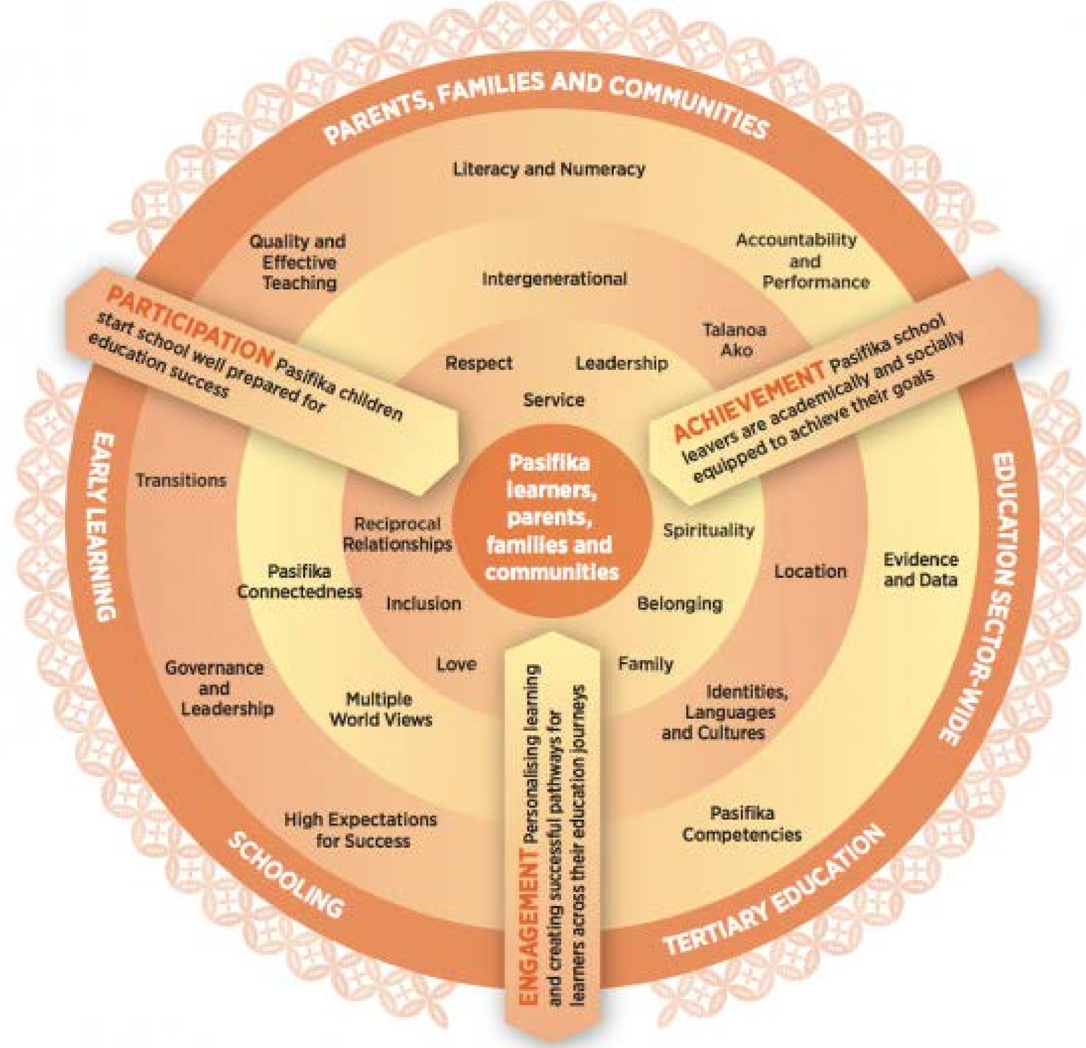
It has been well documented that the overall academic achievement of Pasifika students is in a less than favourable position compared to education outcomes for non-Pasifika students in New Zealand (Dickie, 2008; Ministry of Education [MOE], 2010, 2012a, 2016; McNaughton, 2011; McNaughton & Lai, 2009). Literacy levels for Pasifika students in the New Zealand context are a concern from early pre-school education right through to secondary education sectors. Also well documented are the varied intervention and research approaches intended to lessen the "achievement gap" between Pasifika learners and New Zealand European learners. (Airini et al., 2010; Amituanai-Toloa & McNaughton, 2008; McNaughton & Lai, 2009; Parkhill et al., 2005).

The current policy response to the identified inequities has been to promote cultural competency for teachers. Figure 1 is found in the most recent key policy document, *Tapasā* (MOE, 2018), a cultural competencies framework for teachers of Pasifika learners in New Zealand. "The Pasifika Success Compass captures the essence of the PEP [Pacific Education Plan]. All activities, domains, principles and values seen in Figure 1, are oriented around the Pasifika learner, parents, families and communities who are at the centre" (MOE, 2018, p.4). This most recent policy framework is the result of many years' attempts to support teachers to engage in ways that change the outcomes for Pasifika learners.

[1] The terms *Pasifika* or *Pasifika peoples* are umbrella terms used to categorise trans-culturally diverse peoples from the Pacific region who now live in New Zealand but continue to have family and cultural connections to Pacific Island nations. Pasifika identify themselves with the islands and cultures of Samoa, Tonga, Cook Islands, Fiji, Niue, Tokelau, Tuvalu and other Pasifika heritages.

Figure 1

The Pasifika Success Compass (MOE, 2018, p. 4)



Prior to Tapasā, the Ministry of Education (New Zealand) had published successive PEP [Pacific Education Plan] reports which were based on “a commitment to reducing disparities and improving the achievement of pacific students in New Zealand” (p. 4). The PEP draws attention to generic Pacific principles and values. As Pasifika are a diverse group, a critique is that these principles are not specifically aligned to sub-Pacific groups, making it more difficult to disentangle specific solutions, and that only generalisations are offered. However, the principles were intended to encourage school communities to develop culturally responsive pedagogies and therefore better determine appropriate and effective teaching approaches with which to support learners from a wide variety of Pacific backgrounds.

In addressing responsive pedagogies, the PEP reports aligned with core principles in the Pasifika Success Compass (see Figure 1) which centres on the learner, parents, families and communities, further branching outward to highlight and encompass three broad categories of import which are: "*Pasifika Presence,"* (reworded as Pasifika Participation, in Tapasā, MOE, 2018), *"Pasifika Achievement"* and "*Pasifika Engagement"* which are interwoven at both micro- and macro-level structures within the New Zealand education system. Within the framing of the compass lie a set of expanded levers for change that interface with core Pasifika values and identity, for example, the acknowledgement of key notions of reciprocity, belonging, multiple world views, and respect. Each of the parts of the compass, which acknowledges a Pasifika view for success in a New Zealand educational context, must work in tandem to operationalise the values-based systems of the whole Pasifika learner, their family-values-based systems, across the diverse communities of Pacific peoples. Theoretically, the negotiation within and across the core components of the compass presents a pathway that could encourage teachers of Pasifika learners to draw on the strengths of Pasifika culture, identity and language present in the classroom space.

A more formal view of achievement status for Pasifika has been provided, since 2001, by the Education Review Office (ERO), an independent government department that reviews the performance of New Zealand's schools and early childhood services and has reported on the PEP plan. An ERO (2012) report suggests that more than half the evaluated schools with Pasifika populations were not aware of such plans nor was there evidence in these schools to show that the PEP was being used to inform an approach to improving academic outcomes. This means that there are likely to be significant gaps in the understanding of how to provide learning opportunities for Pasifika students, potentially increasing inequality for these marginalised groups.

Whilst ERO's evidence highlighted some failings in making such documents visible in school settings and communities, the key policy document, Tapasā (MOE, 2018), has been developed to serve our diverse Pasifika populations. Tapasā (MOE, 2018), whilst still in its infancy and yet to be fully implemented nationally, points to the fact that like PEP, it will take time to embed in classrooms with high Pasifika populations in New Zealand. The document is organised around three Ngā Turu [competencies that form the basis of the framework] and include *identities, language and culture* (Turu 1) *collaboration and respectful relationships* (Turu 2) and *effective pedagogies* (Turu 3), "Each turu need to be considered together in order to demonstrate change in thinking and practice" (MOE, 2018, p. 8). This latest key policy

document holds promise given it brings together previous PEP plans, references key developments in the education sector for and with Pasifika, uses case studies to support a more comprehensive integration of key turu and operates across sectors (early childhood, primary and secondary).

Achievement Status for Pasifika

National Standards were introduced into New Zealand schools in 2010 and were intended to "provide a nationally consistent means for considering, explaining, and responding to students' progress and achievement in years 1-8" (MOE, 2009, p. 8). Whilst the standards are no longer in use, during their life span there were efforts to increase the dependability of these standards developed through the Ministry of Education (2010) in the form of support for teachers making a judgement for National Standards (NS) reporting purposes. Using a variety of evidence, teachers made overall teacher judgements (OTJ) about students, including Pasifika student performance against these standards. The categories used as measures, were: Well Below, Below, At and Above, and sit against expected achievement levels. So, for example, if a child was achieving "well below the standard" at Year 4, they were achieving at a level that places them 2 years behind their expected level.

In 2016, the Ministry of Education *Pasifika Education Plan Monitoring Report* highlighted that 66% of Pasifika students in Year 1–8 were at or above the expected level for reading, and 60.5% were at or above the expected level for writing. By contrast, non-Pasifika students' results in NS showed that 76.8% of Year 1 to Year 8 were at or above the NS for writing and 85% were at or above in reading. These data were used to set targets for 2017 to have "85% of all Pasifika Years 1–8 students achieving at or above in National Standards" (p. 21). The report further concluded that, "significant action needs to be taken to ensure Pasifika students meet this target in 2017" (p. 21). The argument related to closing the achievement gap presented here links to how we can conceive of what can be improved and what to target and is further considered next.

Improving Outcomes for Pasifika

Given the attention at both national, regional and international levels to the current achievement issues for Pasifika students, and school responses to these, this section examines approaches to improving Pasifika student outcomes. However, on exploring issues relating to

Pasifika achievement, it is noted that there are wider implications which highlight systemic and policy-based concerns.

The previously implemented NS (MOE, 2010) gave an indication of expectations for learners across year levels and provided indicators of "how well" (or not well in the case of Pasifika results) groups were progressing. This development was highly controversial given that it "represented such a sharp break from longstanding approaches to primary-school assessment in New Zealand" (Thrupp & Easter, 2013, p. 95). For Pasifika, as shown, data collected during the lifespan of NS in New Zealand, painted a less that desirable situation in terms of achievement by contrast with non-Pasifika.

The intention of reporting these findings here was not to portray a deficit view of Pasifika students, or to imply that all Pasifika students fall behind in literacy achievement in English medium contexts. I do this with the clear intention of seeking an understanding of what prior recommendations have been recorded in the literature that cumulatively work towards solving the achievement challenge and support success for learners. This is consistent with what Airini et al. (2010) advises,

> The cumulative approach to research focusses on the need to "learn from past research." That is to say, the need for researchers not to reinvent to the wheel but to extend that nature and extent of our knowledge base by identifying problems in existing research, for example and, indeed, to create new research foci/projects/knowledges in order to advance research and policy knowledge and understanding and positive educational outcomes for Pasifika education research stakeholders. (p. 26)

Table 1 provides an abbreviated overview (see Appendix A for full version) of varied documents related to improved learning outcomes in New Zealand schools for and with Pasifika students. I focus on the raft of recommendations or next steps that are apparent as a result of these studies, and which revealed five major themes: (1) effective use and analysis of data about Pasifika learners; (2) awareness and increased teacher knowledge of Pasifika learners; (3) an understanding of how to strengthen Pasifika values in the school; (4) the need to strengthen teacher planning; and (5) the importance of community links. Given the breadth of recommendations in the following documents, it begs the question: why are Pasifika learners still falling behind in terms of achievement considering such research exists that addresses the issue of under-achievement in varied settings and across multiple grade levels?

Clear reporting on NS for Pasifika by the MOE recommended "specific action" and whilst the document analyses that follows searches for such specificity of solutions, Table 1 shows that the wide-ranging reported approaches that have attempted to address outcomes in education have not yet had the desired impact for which they were recommended in the first instance.

Whilst the obscurity around combining categories of sub-Pacific groups into the collective term Pasifika is clearly an issue, one can still infer practices and strategies from this body of research. Increasingly, it seems that appropriate applications and pedagogies for diverse populations, which enact the identified cultural principles within English medium classrooms, are required, though evidence of this, at the school level, is inconsistent.

As the current study has been carried out by a Pacific researcher with Pacific peoples, the responsibility is about being able to recognize "better" in the first instance (McNaughton, 2011). This study aims to focus on better enactment of the principles identified in the document analyses and review of the status of Pasifika education, to develop effective instruction with teachers of Pasifika learners. Ideally this is achieved through a dialogic approach that draws on and connects both Pacific and Eurocentric dialogic epistemologies.

Such innovation in approach is vital, considering that Pacific peoples make up 7.4% of the total population with the highest growth rate of any ethnic group, and 35.7% of the 2013 Pacific population under the age of 15 years (MOE, 2016), suggesting that increasing numbers of students in future New Zealand school settings will be of Pacific descent.

Table 1

An Overview of Identified Better Practice Themes Towards Improved Outcomes for Pasifika

Reference summary	Method/design	"Next steps" themes				
		Acknowledges effective use and analysis of data about Pasifika learners	Acknowledges need to increase teacher knowledge of Pasifika learners	Acknowledges need to strengthen & incorporate Pasifika values into the school	Acknowledges need to strengthen teacher planning for and with Pasifika	Acknowledges need to strengthen community links
Literature Review on Pacific Education Issues (Coxon et al., 2002)	A review of a decade of existing literature on Pacific education in the regions and for Pacific migrant communities in New Zealand.	*	*	*	*	*
Quality Teaching for Diverse Students in Schooling: Best Evidence Synthesis (Alton-Lee, 2003)	Produced ten research-based characteristics of quality teaching across Primary, Intermediate & Secondary	*+	*+	*+	*+	*
Promoting Pacific Student Achievement Schools' Progress (Ministry of Education, 2010)	A total of 243 schools were included in this evaluation: 70 secondary and composite schools, and 173 primary schools.	*+	*+	*	*+	*
Samoan Students "Documenting Their Out-of-School Literacies" (Dickie, 2011)	Ethnographic approach with 14 Year 7 & 8 Samoan students.	n/a	*+	*+	*+	*+

Reference summary	Method/design	"Next steps" themes				
		Acknowledges effective use and analysis of data about Pasifika learners	Acknowledges need to increase teacher knowledge of Pasifika learners	Acknowledges need to strengthen & incorporate Pasifika values into the school	Acknowledges need to strengthen teacher planning for and with Pasifika	Acknowledges need to strengthen community links
Improving Education Outcomes for Pacific Learners (ERO, 2012)	Data collected on 302 schools from a range of deciles, roll sizes and locations across the country	*	*+	*	*	*+
Accelerating the Progress of Priority Learners Primary Schools (ERO, 2013a)	Data collected on 176 primary schools	*+	*+	*+	*+	*
Making Connections for Pasifika Learners' Success (ERO, 2013b)	ERO analysed the most recent ERO review reports and file notes for 25 secondary schools with large Pacific populations against the five factors	*+	*	*	*+	*+
An Analysis of Recent Pasifika Education Research Literature to Inform Improved Outcomes for Pasifika Learners (Chu et al., 2013)	A critical analysis of the evidence for five "areas for investigation"	*+	*+	*+	*+	*+

*Key: *present; *+ present more than once*

The 2013 report authored by Chu et al. (2013) in Table 1 extends the review by Coxon et al. (2002) and essentially spans 10 years of work towards overall improved outcomes for Pasifika. Final recommendations by these authors, in particular their review on improving literacy outcomes for Pasifika, highlighted alignment with factors already identified but more specifically promoted for addressing factors of first language use, prioritising evaluation of approaches to planning for increased achievement and the need for more research around effective interventions that would strengthen home and community involvement. Effective teaching recommendations also called for home–school partnerships and greater understanding of culturally responsive practices and more formal evaluations of short- and long-term initiatives for improved practice towards enhanced outcomes. Each of these recommendations do make explicit the core principles that acknowledge a Pacific world view in educational settings. Moreover, these align both with the "specific action" (MOE, 2016) required to more positively address achievement through overall improved enactment at multiple levels.

The accumulated evidence summarised in Table 1 supports the argument made here regarding the current status of education outcomes in New Zealand for and with Pasifika students. In short, Pasifika learners continue to be underserved in schools even though much has been reported on in terms of the directions we should take.

McNaughton (2011) suggests that the preoccupation with test scores and end-of-year outcomes in education should not detract from the processes involved in effective teaching and learning. Understanding these processes, and how to better enact these for the benefit of Pasifika learners, is the major aim of this study. That is, to acknowledge guidance from those who have gone before but also from the extant literature on dialogic approaches.

The key premise of this study is that a dialogic approach to pedagogy can extend the opportunities for students to engage in meaningful, productive talk, that acknowledges students' own knowledges and where teachers value a reciprocal teaching and learning process that recognises shared learning roles as opposed to transmission teaching. For Pasifika, this approach might also contribute to engaging in talk that maintains and sustains cultural ways of being and knowing and could plausibly represent a shift in power from traditional classroom "chalk and talk" to the privileging of Pasifika students' own funds of knowledge (Moll et al., 2006; Rodriguez, 2013) valued in the discourse, thus improving outcomes for all.

Whilst the study seeks to understand teacher and student dialogic interactions, it is also crucial to consider fully how the study connects with the recommendations already covered. These allow this thesis to acknowledge, use and apply key factors already reported, towards more dialogic teaching and learning. The literature reviewed to this point provides a basis for the core question of the study, establishing whether a dialogic approach could conceivably provide a promising vehicle with which to address the current achievement challenges for and with Pasifika. For example, I pay attention to the recommendations of data use, particularly where a dialogic contribution to strengthening the impact of teachers' judgements that use empirical evidence for improved outcomes. I pay close attention to factors of quality teaching for and with Pasifika as a means of leveraging what is already known with a more dialogic contribution that increases teacher and student facility with such. I pay attention to the recommendation of strengthening Pasifika community voice perspectives on valued talk from the home and how this could potentially contribute to the discourse experiences in the classroom. Finally, I pay attention to what this thesis can contribute, for culturally valued, acknowledged and sustained pedagogical strengthening that will support teacher knowledge of theirs and their Pasifika students' dialogic interactions and highlight the significant features that are required to do just that.

The next chapter reviews dialogic theory and introduces the theoretical framework this study employs. The summary of Chapter 3 considers the relevant components reviewed in this chapter related to Pasifika education outcomes and the extent to which these cohere with dialogic theory.

CHAPTER THREE – LITERATURE REVIEW

Introduction

This chapter examines dialogic theory with a clear focus on the pedagogical decisions and discourse of teachers. Understanding how dialogic aspects are operationalised in real-world settings allows a deeper understanding of key dialogic characteristics that are most likely to be effective with Pasifika learners. The following sections a) outline the theoretical lens the study employs, b) examine learning theory and the role of culture in learning, c) explore the ways in which dialogic pedagogy has been defined, d) investigate how dialogic teaching develops and how teachers can encourage and build a dialogic repertoire, e) identify dialogic constraints, and f) review the impacts of dialogic approaches to literacy and learning in a Pacific context.

Theoretical Framework

Dialogic approaches to teaching emerge from both sociocultural and social-constructivist theories. The social-constructivist perspective provides a lens that acknowledges the social interaction and social participation within instructional settings. Social constructivism includes the idea that there is no objective basis for knowledge claims, because knowledge is always a human construction. "The emphasis is on the process of knowledge construction by the social group and the intersubjectivity established through the interactions of the group" (Au, 1998, p. 299). Similarly, Reznitskaya (2012) explains, "These theories view students as active meaning makers who can progress to higher levels of cognitive development through their interaction with the environment" (p. 448). Thus, the lens emphasises the importance of "social interaction in the development of individual mental processes" (Michaels et al., 2008, p. 4).

From the foundations of social constructivist thinking, a sociocultural perspective is advanced, which further considers language as "one of the principal tools for construction of knowledge" (Littleton & Mercer, 2010, p. 272). Building on the work provided by Vygotsky (1978), sociocultural theory is prevalent across the dialogic literature due to foundational definitions that promote the significance of social, cultural and historical connections. From this, "knowledge is not considered to be only possessed individually, but also created by and shared among members of communities and the ways in which knowledge is created are seen to be shaped by cultural and historical factors" (Littleton & Mercer, 2010, p. 271). This does

not mean, however, that achievement is solely socially determined, but points to the significance of acts of thinking, learning and development through socially mediated activity. Similarly, Wertsch (1998) explains, "The task of a sociocultural approach is to explicate the relationships between human *action,* on the one hand, and the cultural, institutional, and historical contexts in which this action occurs, on the other" (p. 24). In line with this thinking, Mercer (2007) suggests the central notion of those within the field of sociocultural theory "treat communication, thinking and learning as related processes shape by culture" (p. 138).

Recognising a sociocultural theoretical perspective as the foundation for the study allows the widened lens on the classroom interactions with which to investigate interaction at multiple year group levels.

This socially expanded view can generate clarity on how knowledge and cognition are created socially and how thinking is manifested and represented in the recursive exchanges between all participants in a classroom setting. In line with this thinking is the pioneering work of Vygotsky (1991) who states,

> We might formulate the general genetic law of cultural development as follows: any function in the child's cultural development appears on the stage twice, on two planes, first on the social plane and then on the psychological, first among people as an intermental category and then within the child as an intramental category. (p. 40)

Communicative events that take place in an educational setting are well-placed sites to consider a child or teacher's cultural and historical influences given that classroom life is intrinsically social and communicative (Mercer, 1995, 2000, 2007). Interlocutors in such settings have developed thinking and knowing capacities through such social language practices across learning domains and amongst varied groupings that extend beyond the school community. Classroom life for the learner can potentially be described as a dialogic process whereby interactional opportunities reflect what is valued by the educational institutions with which they take place. On the other hand, it is the shape of each of the community groups that play a part in the lives of learners within the school system and each group's shared language/s and way of doing, being and knowing that strengthen the social, cultural historical practice that can act as "tools for getting things done" (Mercer, 2007, p. 139).

Whilst the endorsements of a dialogic approach are powerful given the sociocultural perspective, problems may arise when the values of the "institution" differ to those of the

groups who partake in it. This is in part what this study will critically explore through an investigation into the shared, social language and literacy practices in the classroom.

Theory of Learning

Theories of learning operate at two levels in a study involving collaboration between researcher and teachers. A learning theory approach added to the sociocultural lens enables deeper exploration of why changing discourse patterns might work in the classroom. Two areas which add power are: 1) conditions for children's learning in the classroom; and 2) teachers' pedagogical content knowledge which includes their own theories, understanding and beliefs about learning. "We develop a system of beliefs as we amass a lifetime of experiences. This system of belief informs our teaching practice and is a way of theorising about our work" (Klenner & Sandretto, 2011, p. 8). From the perspective of this study, an important question to explore will be what theories are held by teachers and the wider teaching community on instructional practices, specifically dialogic aspects known to be effective for increasing literacy outcomes in the primary setting. It will also be important to examine teachers' theories about their learners, and the way they learn best. Examination of teachers' theories is a key component of reflective practice. Klenner and Sandretto (2011) further clarify, "theory gives us alternative angles from which to look at our teaching practice and reflect on it" (p. 9). Reflective practice thus has the means to serve the theoretical purpose of the study overall and allow theory to drive and to challenge, to critique, to support and view education differently within a theoretical framework that highlights the pedagogical potential of dialogue.

This framing illuminates' teachers' cognitive processes and can firmly position classroom-based literacy discussion as a key vehicle for learning. From a research perspective, the level and frequency of engaged classroom-based talk with Pasifika learners is vital to understand, more so where the level of engagement does not provide these learners with fundamental opportunities to learn through talk. The opportunity to amplify cognitive and socially engaged theories on learning through talk for this group of learners is promising.

How Do Children Learn?

A foundational question for the study is how children learn and whether learning is different for Pasifika students. Most contemporary approaches to learning take the position that children learn through their experiences. A National Research Council report authored by Bransford et al. (2000) state "the process of making sense of the world begins at a very early

age" (p.20). The powerful preconceptions that children bring with them to learning are shaped by the experiences in meaning making that they have already encountered in their young lives both informally at home, church, at play and formally in school. From a social-cultural perspective, these experiences may position the learner in ways that convey, construct and carry cultural meaning.

Understanding the processes connected to learners and learning and on teachers and teachings are fundamental for effective pedagogical enactment. For children and learners, in order to develop competence, Bransford et al. (2000) state, "students must: (a) have a deep foundation of factual knowledge, (b) understand facts and ideas in the context of a conceptual framework, and (c) organize knowledge in ways that facilitate retrieval and application" (p. 16).

To develop a conceptual framework and organise for retrieval, learning that is contextualised and which promotes conceptual understanding far exceeds learning that is laden with fact recall and filling in of missing labels. Such deeper understanding involved in this process is a necessary condition for transfer of learning to new contexts (Bransford et al., 1999).

For students to take greater control of their own learning, another key principle involved in learning how to learn is that which is metacognitive. If the goal in an educational setting is active learning, this requires self-monitoring and regulation by the learner. According to Niemi (2002), metacognitive skills are the key to this. Metacognition is actively thinking about thinking; Flavel (1979), who first coined the phrase "metacognition" discusses the pedagogical importance of this "thinking about thinking" particularly the role it plays in "oral communication of information, oral persuasion, oral comprehension, reading comprehension, writing, language acquisition, attention, memory, problem solving, social cognition, and various types of self-control and self-instruction" (p. 906). For students to learn to self-monitor and regulate their knowledge and to be able to transfer and apply this to other learning, metacognitive activities must be contextualised in the subject matter for wider learning to occur.

In addition to the core processes of learning are the motivation and engagement of the learner. The Pacific educational community, based on research in a New Zealand context, have concluded that engagement and motivational factors are crucial for and with Pasifika populations, if there is to be enhanced and then sustained academic achievement (Alton-Lee, 2003; Chu et al., 2013; Coxon et al., 2002).

Finally, this study intends to acknowledge the nature of cultural variation in learning. Dewey (1986) prefaces the position adopted here by stating, “There are sources outside an individual which gives rise to experience” (p. 68). Attention to the role of culture in how children learn, allows close attention to the cultural tool kit that a child brings to the classroom that may assist them in using their known, in order progress to the unknown. Where culture presents itself in classrooms, the impetus is to understand and identify with learners: the at-home factors and the influences of culture and background, language and knowledge, preferences and prior learning experiences, combined. Such a mindset acknowledges that culture in and through learning can make a difference.

Instructional Processes: Zone of Proximal Development (ZPD)

Just as we need to consider the basic mechanisms of child learning, we need to consider the basic mechanism of teaching and address the difference. A core generic principle widely applicable is that teachers support learning by taking students from what they can do alone and offering support. The range of what a child can do with the support of a more competent “other” is termed the zone of proximal development (ZPD) (Vygotsky, 1978). This conception acknowledges the role of a more experienced “other” within a social context,

> The Zone of Proximal development defines those functions that have not yet matured but are in the process of maturation, functions that will mature tomorrow but are currently in an embryonic state. These functions could be termed the ‘buds’ or ‘flowers’ of development. The actual development level characterises mental development retrospectively, while the ZPD characterises mental development prospectively. (Vygotsky, 1978, p. 33)

The development of these buds occurs through joint participation and dialogue, before flowering into achievements by the child alone.

Teaching based on a conception of ZPD has elements of providing appropriate learning experiences and next steps for a learner. This is because a teacher may know already what students know and will aim to focus the new learning on what is not known, which again is in line with Vygotsky (1978) who states “the only ‘good learning’ is that which is in advance of development” (p. 34). In this study, learning through communication is the focus arising from a theoretical lens which portrays the significance of learning mediated through socialisation.

An important extension to the ZPD is the concept of IDZ (intermental development zone) (Mercer, 2000, p. 141). According to Mercer (2000), interthinking between student interlocutors can also promote learning. Acknowledgement of the role of peers relieves, to a

degree, the teacher or more knowledgeable other and elevates learners in part to a role of equal participant. This egalitarian belief underpins dialogic theory and provides a promising notion to consider in the overall design of the study. That is how children become the authors of their own thinking process in learning.

Learning Through Talk

Talk is central to learning and key to the processes involved in ZPD and IDZ. Wells (1999) argues,

> learning is the taking over and mastering of cultural artefacts and practices in the course of engaging in joint activities, in which the functional significance of these artefacts and practices is modelled, and the learner receives assistance in their use. Talk almost always play a part in this process, as participants discuss what they are doing and why. (p. 155)

For Pasifika students, learning through talk means learning through the dominant or mainstream classroom language that may or may not align with their personal or cultural perspectives. Interactions in classrooms have required rules for entry and specific limits on content or information, largely determined by the content that is to be evaluated. Classroom communicative competencies are therefore foundational to learning through talk at school. In the present study, it will be important to understand the diversity in communicative competence that students have and how that diversity may contribute to more and less effective patterns of talk.

In classrooms for younger learners, talk enables students to articulate their thinking, hear their own thoughts and the thoughts of others aloud. Potentially, talk is a vehicle for making explicit what is known as an impetus for better understanding. But this progression is restricted by the competencies at play in the social settings of classrooms that include rules of engagement and diversity in communication competence. This is in line with Barnes (2008), who suggests that, “Only pupils can work on understanding: teachers can encourage and support but cannot do it for them” (p. 3).

To sum up, the theoretical proposition is that learning to learn and communicate is a social practice that draws on the affective as well as cognitive factors (Cazden, 2001). Optimal learning relies upon understanding the social conditions, for example, trusting relationships and the cognitive demands that include theories of learning and the role of culture and point towards specified classroom instructional processes required to be firmly in place for teaching and learning engagement overall. Effective discussion then requires a commitment to

knowing about the whole learner, a commitment to questioning typical classroom norms and forms of discussion, a commitment to valuing the unique resources of a child's home and world view. Such commitment seeks synergy with school knowledges to create a space where jointly constructed protocols and propositions are used to promote and enhance critical dialogues. Arguably, the ability of teachers in this study, to "anchor" talk "in" student contributions is where the challenge lies.

The next section explores the ways in which these theoretical foundations on learning principles generally, sit within an approach to dialogic pedagogy.

Introduction to Dialogic Pedagogy

Concerns for effective pedagogical approaches to raise academic achievement are clearly visible within national policy statements and teacher support materials, such as the *New Zealand Curriculum* (MOE, 2007), and *Effective Literacy Practice* (MOE, 2003). According to Resnick and Klopfer (1989), however, there is a sizeable gap between what the literature and policy guidance is for teachers and the actuality of practice.

Moreover, many researchers have claimed that even though much research suggests the clear academic benefits and pedagogical significance of the dialogic approach, often classrooms are left void of such teaching due to the challenge of such an approach (Cazden, 2001; Mercer, 2003; Michaels et al., 2008; O'Connor & Michaels, 2007; Reznitskaya, 2012).

The constituents of dialogic pedagogy are both historical (Bakhtin, 1981; Freire, 1972; Oakeshott, 1959) and more contemporary (Alexander, 2006; Mercer, 2000; Wegerif, 2013). Central is the long-established notion of talk as a mediator for meaning making. "To call anything dialogic means that it cannot be reduced to just one point of view but that it requires holding several different points of view together in tension at once" (Phillipson & Wegerif, 2016, p. 1). The helpful contrast to a dialogic definition is that of monologic interactions which, "assumes there is one correct version of reality and one correct method of thinking" (p. 3). Both imply language as the mediator or tool which are found in the teaching and learning process. The latter produces more of a singular thinking perspective, the former engages multiple and critical perspectives in classroom talk (Phillipson & Wegerif, 2016, p. 76).

The monologic approach, characterised as recitation sequences during which teachers use an IRE (initiate-respond-evaluate) language structure that emphasises "known information questions" (Mehan, 1998, p. 249) seeks to largely "control key aspects of communication"

(Reznitskaya, 2012, p. 446). The IRE patten is the dominant form of talk in classrooms and is considered the default mode of teachers and students. There are, however, authors (Alexander, 2006, 2018; Mercer 2000) who emphasise the value of all types of talk in the classroom. The caution being, however, that a monologic approach, as the predominant form, makes it more difficult to master conceptual understanding or illustrate transformative, metacognitive aspects in classroom discussion (Phillipson & Wegerif, 2016). "When recitation starts," notes Martin Nystrand (1997), "remembering and guessing supplant thinking" (p. 6).

A dialogic approach to classroom teaching allows interlocutors to see and hear thoughts of others with which they may begin to make meaning, building from their own conceptions. Hearing another person's conception of knowledge may plausibly emerge as a powerful social interaction that could entertain counter perspectives to individual thought. "So, people who are better at dialogue are likely to be better at understanding new ideas" (Wegerif, 2013, p. 3).

This study focuses on how teachers and their Pasifika students, by being socially active in classroom talk, might get better at discourse-based pedagogy. For Wegerif (2013), who theorises being dialogic in the internet age, emerging dialogic theories of education weave the historical accounts of dialogue with more contemporary, 21st-century purposes of dialogic education. Wegerif's (2013) emerging contemporary propositions are significant and combine Bakhtinian notions of a "dialogue of humanity carried both through culture and through individual thought, with more contemporary roles of citizenship and digital engagement, including "empowering voices" and the "opening and widening and deepening dialogic space(s)" (p. 34). Broadly speaking, these theories that contribute to education and dialogue in the 21st century are consistent with the argument for considering multiple perspectives and experiences in classrooms. They are, therefore, consistent with calls for inclusion of a Pacific world view in schooling. Dialogic theories strengthen the argument that not only do we need to get "better at dialogues," we need to know how to do that by understanding what these theories offer and how they can be reconciled with established cultural, social and historical world views to meet the needs of our teachers and their Pasifika learners.

Overarching Principles of Dialogic Pedagogy – What Is It?

There are numerous studies that are dialogic in nature and thus can add to our understanding of the pedagogical approach overall. These dialogic approaches include, "dialogic teaching," (Alexander, 2006); "dialogic instruction," Nystrand (1997); "dialogic pedagogy," (Skidmore, 2000); "dialogic inquiry," (Wells, 1999) and "dialogic education" (Wegerif, 2013). Each is

accompanied by its own procedures and tenets. The sheer magnitude of detail about what each approach entails could possibly detract from a comprehensive and sustained understanding and uptake by teachers and their students in practice. Irrespective of these variously named approaches, Alexander (2017) points out, "that although student talk must be our ultimate preoccupation because of its role in the shaping and thinking, learning and understanding, it is largely through the teacher's talk that the student's talk is facilitated, mediated, probed and extended – or, too often, inhibited" (p. 3). Alexander prioritises the reciprocity and relational nature of dialogic pedagogy which affirms the need to maintain student identity and culture while attending equally to teacher instructional practices. Equivalent attention to all interlocutors in the classroom space can further elucidate how talk is communicated and received and what barriers may be present.

Another definition by Reznitskaya and Wilkinson (2015) suggests the dialogic approach is*:*

> a general pedagogy that capitalizes on the power of talk to foster students' thinking, understanding, and learning. Central to this pedagogy, we believe, is the teachers' capacity to draw from a repertoire of communicative approaches that further students' development, while privileging the use of inquiry dialogue to promote rational thinking and deep understanding of a subject. (p. 280)

The notion of repertoire noted by these authors, further theorised by Alexander (2017), positions the pedagogy as one that is likely to offer teachers a more flexible means of uptake that may strengthen enactment.

Defining dialogic pedagogy has been further explored by Kim and Wilkinson (2019) who do in fact ask the same question: What is dialogic teaching? Their article is extensive and, whilst not wanting to simply repeat their key points, I do point to a further refinement of the notion of dialogic teaching as a general pedagogy which these authors claim should be coupled with "strategic use of different talk types ranging from rote, repetition to discussion, to achieve certain pedagogical goals" (p. 83). Moreover, Kim and Wilkinson (2019) attempt to provide conceptual clarity around the construct and signal agreement with the introductory claim that multiple interpretations and differences across researchers in this emerging filed prove to be the challenge for researchers and research participants to fully comprehend.

What is clear at this point is that effort is needed toward reconciliation with a Pacific world view, essentially seeking a level of alignment with any named convention or framing conception that includes a dialogic approach to teaching. Bringing such principles together,

that centre on discourse, may provide much greater support to enact better learning and teaching opportunities that draw on the core properties of a dialogic approach whilst valuing cultural capital.

The next section first introduces the work of Robin Alexander (2001, 2004, 2006, 2013, 2017) to further define the construct and importantly begins to acknowledge the visible threads from Alexander's work that are aligned with Pasifika values. Whilst specific notions of being dialogic in a Pacific context are also addressed in the final section of this review, alignment in the following approaches is acknowledged.

Conceptions of Dialogic Teaching for the Classroom

The first specified conception of a dialogic approach is by Alexander (2017) who provides the following five principles as key indicators to what characteristics are included. Alexander considers not only the how but who, the teachers and students, and for him dialogic teaching entails five core principles:

> *collective:* teachers and children address learning tasks together, whether as a group or as a class rather than in isolation;
>
> *reciprocal:* teachers and children listen to each other, share ideas and consider alternate viewpoints;
>
> *supportive:* children articulate their ideas freely, without fear of embarrassment over "wrong" answers; and they help each other to reach common understandings;
>
> *cumulative:* teachers and children build their own and each other's ideas and chain them into coherent lines of thinking and enquiry;
>
> *purposeful:* teachers plan and facilitate dialogic teaching with particular educational goals in view. (p. 28)

Alexander's (2017) principles can be reconciled with Pasifika values and concepts represented in Tapasā and in the long-standing Pasifika Success Compass (MOE, 2018, p. 4). As shown in Table 2, Alexander's dialogic principles (Column 1) maintain an emphasis on collective socialisation and reciprocity. Like values-based references represented in Column 2 and Column 3 of Table 2, the visible (in bold) notions of *respect, connectedness, engagement, collaborative, relational and identity* resonate. These values can be seen to provide levers of support and cumulative factors that can act as structures that enhance the dialogic approach

and are underpinned by the three domains of Pasifika Participation, Pasifika Achievement and Pasifika Engagement.

Alexander's (2017) final "purposeful" principle implies the need to identify the deliberate planning of instruction, particularly where such planning does indeed facilitate dialogic instruction that is authentic and open ended. In Table 2, the bolded principles promote similar elements, *"engage and collaborate in different and meaningful ways that empower*" *"effective teaching"* and *"high expectations"* illustrating synergy across indicators, reconciling a set of Eurocentric principles with known indicators for Pasifika success in mainstream contexts.

Table 2

Alexander's Dialogic Principles Aligned With the Domains, Principles and Values Within Pasifika Success Compass and Ngā Turu Competencies (Tapasā, MOE, 2018)

Alexander's Dialogic Teaching principles (p. 28)	**Pasifika Success Compass Indicators (MOE, 2018, p. 4) (see also Figure 1)**		**Ngā Turu – Competencies Framework Compass (MOE, 2018, pp. 8–9)**
collective: **teachers and children address learning tasks** together, **whether as** a group or as a class **rather than in isolation;**	*Level 1:* **Respect, leadership**, service, **reciprocal relationships, inclusion**, love, spirituality, **belonging,** family	**Pasifika Participation, Achievement, Engagement**	**Turu 1: Identities, languages and cultures** In practice, Turu 1 is about **relational and united** approaches in building a future for learners that is respectful of their past and background**.** (p. 8)
reciprocal: **teachers and children** listen **to each other,** share ideas **and consider** alternate viewpoints	*Level 2:* Intergenerational, **Talanoa ako**, **location, language identities, multiple world views, Pasifika connectedness**		**Turu 2: Collaborative and respectful relationships and professional behaviours** In practice, the teacher needs to utilise Pacific constructs to **engage and collaborate** in different and meaningful ways that empower Pacific learners, parents, families and communities (p. 8)
supportive: children articulate their ideas freely**, without fear of embarrassment over "wrong" answers; and** **they** help each other **to** reach common understandings	*Level 3:* Transitions, **quality and effective teaching, literacy** and numeracy, accountability and performance, **evidence and data**, Pasifika competencies,		**Turu 3: Effective pedagogies for Pacific learners**

cumulative: **teachers and children** build their own and each other's ideas **and chain them** into coherent lines of thinking **and enquiry;** ***purposeful:*** **teachers** plan and facilitate dialogic teaching **with particular educational goals in view.**	**high expectations for success,** governance and leadership,	In practice, teachers need to understand that Pacific learners **inhabit different realities**, **learn and engage in multiple ways** and come into early learning settings and classrooms **with unique skills, talents and knowledge** (p. 9)

Alexander's (2017) dialogic principles arose from a comparative study across five countries: England, France, India, Russia and the United States, gathering and analysing classroom talk analysed from 166 lessons in over 100 schools. These analyses provided a typology of talk which can be used to support how to recognise dialogic repertoire in the classroom and between interlocutors. Alexander's framing is centred on repertoire that includes "organising instruction," "teaching talk" and "learning talk." His "teaching talk" typology ranges from rote, recitation and instruction/exposition types of talk to the less visible: discussion and dialogue. The latter two talk types align to his cumulative principle which is defined as "achieving common understanding through structured and cumulative questioning and discussion which guide and prompt, reduce choices, minimise risk and error, and expediate 'handover' of concepts and principles" (p. 3).

The framework of repertoires provided by Alexander (2018) covers: (1) Interactive settings (2) Everyday talk (3) Learning talk (4) Teaching talk (5) Questioning (6) Extending (p. 7). So, talk, according to Alexander, is not just of one type, rather as his framework acknowledges there are various types of talk. This author has further advanced these repertories with 61 specific talk indicators, "that specify in practical terms how dialogic teaching looks and sounds" (p. 8). The repertoires which arose across nations, provide deep cultural underpinnings for teachers and their Pasifika learners. Through these contextualised descriptions of talk repertoire in the classroom, Alexander promotes, "the need for every teacher to develop a broad repertoire of talk-based pedagogical skills and strategies and to

draw on these to expand and refine the talk repertories and capacities of their students" (p.3). This study is uniquely positioned to capture both what the teacher is saying and what their students are saying and, like the broad talk repertoire categories provided by Alexander (2017), takes account of the idiosyncratic classroom dynamics and the shared responsibility toward the developing talk repertories for all.

The visible synergy across Alexander's dialogic conception and Pacific values and principles (Table 2) that emphasise reciprocity, collaboration, engagement and explore expanded talk repertoire, echoes Bransford et al.'s (2000) argument that,

> There is no universal best teaching practice. If, instead the point of departure is a core set of learning principles, then the selection of teaching strategies (mediated of course, by subject matter, grade level, and desired outcome) can be purposeful. The many possibilities then become a rich set of opportunities from which a teacher constructs an instructional program rather than a chaos of competing alternatives. (p. 19)

Distinct Verbal Behaviours in the Dialogic Classroom

Further links can be drawn from the cultural competencies in Table 2 and an overview from Reznitskaya (2012) that explores talk behaviours in reading and begins to consider the varied discourse spaces that students and teachers occupy. This author proposed six "key verbal behaviours that characterize dialogic teaching" (p. 447) and which are complementary to Alexander's principles (summarised in Table 3). These verbal behaviours identify what dialogic teaching might look and sound like for both students and teachers and provides a guide to how one might use it to serve curriculum goals in literacy and in a broader sense.

Looking closely at Table 3, there are again visible links to acknowledgement of a Pacific world view of teaching and learning, in particular the bolded characteristics provided by Reznitskaya and the principles found within the levels for Pasifika success in Table 2.

Table 3

Verbal Behaviours and Characteristics of Dialogic Teaching [2]

Power relations are flexible and, authority over the content and form of discourse is shared
Relies on fundamentally **open or divergent questioning**, not meant to test, rather to serve as inspiration towards co-inquirers, **collaborative engagement towards new interpretations**
Provision of **meaningful and specific feedback** where students use this **to negotiate and construct new meanings**
Engagement in **meta-level** reflection which assists students to pay **attention to the process** and **quality of their reasoning, seeking clarification, connecting ideas across contexts**
Students provide lengthy, **elaborate explanations**. Position themselves in an argument and support their position with reasons, **examples and evidence continually addressing the questions**
High student **engagement in the collaborative construction of knowledge**

Exploratory Talk and Thinking Together

A second conception which is more of a specific classroom-based dialogic approach is Barnes's (1976) "Exploratory Talk," explained as, "A classroom dialogue in which sharing predominates over presenting, in which the teacher replies rather than assesses, encourages pupils when they talk and write to bring out existing knowledge to be reshaped by the new points of view being presented to them" (p. 111). This genre of talk is characteristically mobilised as peer activity and engages learners in thinking together to solve problems traditionally set in maths and science and reasoning disciplines.

The Thinking Together approach (Littleton et al 2005; Mercer, 2000; Phillipson & Wegerif, 2016, 2019), derived from exploratory talk, includes a significant and distinct difference from Alexander's conception of dialogic teaching, which specifically relies on ground rules for talk. This is the process by which rules for talk are established and are the notable precursor to teaching the genre of exploratory talk explicitly. Thinking Together draws on social participation between peers whilst maintaining specific standards of talk that develop higher

[2] Summarised Key Verbal Behaviours and practices that characterise dialogic teaching (Reznitskaya, 2012. pp. 447–448)

order thinking and thus are aligned to activities, principles and values already identified in the cultural competencies' framework for teachers of Pasifika learners. Moreover, Thinking Together is concerned with helping children build and develop their knowledge and understanding together, through enabling them to practise and develop ways of reasoning *with* language.

Argumentation

The final conception, a specified approach to instruction which employs quintessential dialogic features, is argumentation, and its focus on identifying, weighing and supporting claims with evidence. Many leading authors in the field (Berland & Reiser, 2009; Cheuk, 2016; D. Kuhn, 1991; L. Kuhn & Reiser, 2006; Newell et al., 2011; Rapanta & Macagno, 2015) define argumentation with reference to the relationship between claims and evidence. In its most broad sense, D. Kuhn (1991) defines it as "an assertion with accompanying justification" (p. 12); D. Kuhn and Crowell (2011) "as a high order intellectual skill linked to critical thinking" (p. 363); Cheuk (2016) reports the process is about students "generating claims with supporting evidence that allows others to generate counter claims and where critique of claims support refinements" (p. 98). The addition of argumentation as a construct plausibly strengthens a dialogic approach using reading and writing.

Nussbaum (2008) concludes that as a term, argumentation has multiple meanings and dual perspectives. This author provides a modifier to the term "argumentation," that of "collaborative argumentation" and defines the latter "as a social process in which individuals work together to construct and critique arguments" (p. 348). Whilst its definition is comparable to those already provided and to the theoretical lens this study employs, its process is set apart by the emphasis on being "less adversarial" where argumentation is not about winning or losing, rather its strength is found in the collaborative exploratory nature where evidence is argued in such a manner that evaluative concession is encouraged. Argumentation is not solely a persuasive device but one of mutual exchange and counterargument which can be enhanced through social activity in the classroom.

This study also adopts the position of argumentation as collective rather than combative. This is important to qualify, as the term *argumentation* in isolation (i.e., without modifiers, collaborative and dialogic) often invokes negative connotations. Cheuk (2016) suggests "everyday" argumentation follows this same line, where perceptions of the process, "can be defined as disputes or disagreements that can be perceived as confrontational" (p. 101). For Pasifika, engagement in argumentation may result in feelings of hostility or even increase the

risk of participation resulting in adverse outcomes, particularly when it may not be clear about how to engage and where there has been little attention to developing a shared concept of its practice. A review of studies conducted by Nussbaum (2008) provides some evidence why this is so. For collaborative argumentation to "enhance conceptual understanding of content," Nussbaum argues that there are certain requirements that need attention, specifically "sociocognitive conflict" resolution and instruction that provides time and opportunities to develop shared "norms" to participation in the collaborative discourse. In line with these, L. Kuhn and Reiser (2006) and Newell et al. (2011) present similar cognitive and social factors that teachers must consider, particularly when there is a level of apprehension that such dialogic activity "may evolve into conflict and one-upmanship" or that the discourse presents "competitive, combative debate" (p. 274) which may lead to social conflict and even more so greater complexity and challenge for its use in the classroom. So, whilst argumentation offers the promise of deep engagement and thinking, strengthening student claims and counterclaims, it is not without its challenges. This points to the need for exploring the right balance of social and cognitive factors that will both promote and strengthen the discourse.

Activating prior knowledge as part of argumentation discourse, according to Rapanta and Macagno (2015), provides a platform for students and teachers to become critically aware of an array of thinking during these talk-based interactions and activity. These authors suggest that active participation in argumentation opportunities means that by default these "activities" become "essentially bound" to the dialogic practice. For students, the process of argumentation allows for support in "unveiling and addressing background knowledge and misconception" (p. 2). Furthermore, these conceptions can become the basis of additional argumentation and if made visible for students may provide the basis of a two-pronged interchange, whereby learners may socially participate in discourse, engaging first in prior knowledge then linking to building in critical and quality reasoning, agreements and disagreement to further progress their new argument (Rapanta & Macagno, 2015). Extending this line of thinking, Venville and Dawson (2010) suggest that what a student knows and understands about a given topic will impact on the arguments they construct and that taking part in the process of argumentation, influences understanding of the topic. The relationship then, between argumentation and learning with understanding, is one that needs attention given the academic promise such activity promotes.

L. Kuhn and Reiser (2006) point to the fact that engagement in argumentation discourse is inhibited in the classroom due to students' and teachers' epistemological and social stances

with the construct itself. When certain criteria within argumentation discourse are present, such as those that present as enabling argumentation, “evaluating knowledge claims presented,” “integrating reliable evidence,” “defending own claims,” and “opportunities to engage with the social aspects of argumentation,” then students and teachers are addressing their epistemological and social stance in argumentation (L.Kuhn & Reiser, 2006, p. 5). Newell et al. (2011) suggest student facility with argumentation is still only in its infancy, no doubt due to the challenges already mentioned. Thus, for a shift toward dialogic pedagogy to occur, conscious effort to focus on the construct within the inherently complex structures of the classroom space is paramount.

Where literacy aspects such as reading and writing are concerned, Sáez (2002) suggests three key elements that need attention in relation to learning through argumentation. These are; “cooperative learning,” “generative topics” and “critical thinking” (p. 113). These combined elements indicate the opportunities to extend the focus of the conversation beyond the topic or text used as a medium for any such discussion. Consistent with this, Crowell and D. Kuhn (2014) contend that “the most promising means of developing dialogic argumentation skill is sustained and intense practice in rich environments that require this skill” (p. 365).

From the perspective of science education, Berland and Reiser (2009) identify the many challenges that argumentation and explanation engender within instruction. The authors argue that argumentation is an essential element of learning science, promoting the use of data to explain and engage in “scientific discourse, arguing and proposing ideas” (p. 27). Similarly, Lehrer and Schauble (2006) extend this by suggesting that these discourse notions may suggest that if we narrow the argumentation construct to one curriculum area it is not typically able to be transferred nor nurtured across and beyond, rather it is confined to one learning area. If a general literacy aim in New Zealand is to be able to access the wider curriculum then it would stand to reason that we address how the use of argumentation might be strategically implemented through daily literacy instruction that demands high-level cognitive thought. For effective and productive talk that would propel a deeper understanding of complex literacy activities, employing multiple opportunities to engage in argumentation, reasoning and explanation affects overall outcomes of the practices students are engaged in (Reznitskaya & Wilkinson, 2015).

Lee (2001) offers further valuable insight, albeit for older students:

> The challenge of managing multiparty, overlapping talk is not necessarily an issue in most classrooms. However, in my years of experience working with African American students, especially adolescents, who are also speakers of African American English, multiparty, overlapping, loud talk is a routine indice of engagement. (p. 130)

Acknowledgement of this characteristic for groups of minority students signals for teachers how such practice *could* be embraced in classroom discourses and taken as valued over unruly discourse behaviours and further considers why argumentation might be considered as an appropriate discourse approach for and with Pasifika.

Discussion-Based Approaches in Literacy

This next section is focused on specific literacy-based discourse approaches given this study is interested specifically in talk during literacy learning. With the reader in mind, a brief, but useful, definition that explains what "literacy is" may be useful, given it is the vehicle with which talk is being examined. In the context of this study, literacy is defined as both "learning to read/write" and "reading/writing to learn" and where language is central to communicating, conveying, constructing and interpreting meaning (Wagner, 2011). It also cannot be seen as separated from the social and cultural context that practices of literacy are set (Street, 1984) and this includes the multiple modes found in the English learning area in the *New Zealand Curriculum* (MOE, 2007). Given the complexity of what literacy may be defined as requires a more expansive view, and is considered by Jesson (2020) who articulates,

> Literacy is social. Literacy is language in action. Literacy is the way a society constructs truths, shares messages, learns, and disputes. Literacy is also high-level cognitive activity, as readers and writers mentally weigh, consider, challenge powerful ideas wielding the powerful tools of language, symbols and texts. (p. 77)

Relevant to this section, then, are some specified approaches with known dialogic approaches that may serve to produce effective change and that work towards being more dialogic in literacy-based discourse.

Organisation of the Literacy Lesson

Typical literacy lessons tend to be organised in ways that follow the pattern of: pupils reading, followed by responding to mostly literal and recall type questions from either peer or teacher (Barnes, 1976; Lefstein, 2008). A number of precursors to this organisational structure have a bearing on the complexities underlying literacy lessons. Such precursors include teacher planning and decision making, such as identifying outcomes, selection of text, grouping of

students, identifying learning intentions, planning questions, preparing tasks and assessments. Lefstein and Snell (2013) expand on these challenges and consider "teaching is not merely complex because teachers must simultaneously attend to multiple signals, but also because those signals beckon them to move the lesson in different directions, all legitimate and desirable" (p. 6). Initial aims of a lesson may shift due to a need to attend to group dynamics or interests or concerns, which points towards a need for greater recognition for teachers to be able to choose from a wide teaching repertoire as the situation requires (Alexander, 2017) over single techniques, skills or strategies (Lefstein & Snell, 2013).

Approaches to Talk in Literacy Lessons

A study of various approaches to talk in the literacy lessons conducted by Soter et al. (2008) sought to identify "features of classroom discourse that might serve as proximal indices of students' learning and comprehension" (p. 372). Transcript evidence of nine small group literacy discussion approaches, were analysed for their properties of dialogical elements. A series of ratings were applied by these researchers that credited a particular stance towards text, for example, Paideia Seminar (Billings & Fitzgerald, 2002 cited in Soter et al 2008) rated as having a critical-analytic stance towards text, which is characterised as interlocutors giving "prominence to querying or interrogating the text in search of the underlying arguments, assumptions, worldviews, or beliefs that can be inferred from the text" (p. 374). By contrast an efferent stance to text described as prominence towards "acquiring information from the text" (p. 374) and found in the approach, questioning the author (Beck et al cited in Soter et al 2008). Finally, an expressive stance, "gives prominence to the reader's affective response to the text" (p. 374) as seen in grand conversations (Eeds & Wells, 1989 cited in Soter et al 2008).

Whilst Soter et al (2008) reported that each approach was shown to "help students develop high-level thinking and comprehension about text"(p.374) it was also clear that certain types of stance produced varied contributions by teachers' and by students' to the overall discussions, according the stance engaged in and through the discussion. If in fact stance is heavily featured, then the notion of repertoire (Alexander, 2017) aligns here and marks a pedagogical change approach, required to meet diverse needs and where "literacy talk" is concerned. The processes for dialogic transformation comes not only in which stance is employed but which stance is employed as the fit-for-purpose approach that would culminate in effective discourse production outputs but could support longevity if engaged expansively rather than as pure prescription.

Across each stance approach, Soter et al. (2008) established further key criteria as indicators of quality discussion, matched to student learning and comprehension as found in the transcripts of each type of approach. They conclude that for most productive literacy discussions to occur, the particular discourse features, which are ultimately features of required change, were when, “students hold the floor for extended periods of time, where students are prompted to discuss texts through open-ended or authentic questions, and when discussion incorporates a high degree of uptake” (p. 389).

In sum, for optimised impact in a literacy-based discussion, shown to reconcile with a Pacific world view, and informed by the international comparative studies, the following point by Alexander (2001) would apply,

> Classroom talk is nested within, depends upon, and speaks to teachers’ handling of learning tasks, activities, time, space, relationships, pupil groupings, planning, assessment lesson structure, the curriculum, and the unspoken routines, rules and rituals that bind students and teachers together in a more or less conscious endeavour. (p. 325)

This view marks the various and complex challenges in trying to enact the pedagogy whilst highlighting the range of enabling factors that need consideration during a discourse-based approach to instruction.

Additional Enabling Conditions for Dialogic Teaching in the Classroom

Given what is known about what typically happens in classrooms, applying principles of “dialogic pedagogy” is essentially a change process that highlights specific roles that can either enable or constrain enactment. Whilst noted that a dialogic approach is consistent with Pasifika values and principles, application of the pedagogy, given a typical default to IRE patterning and monologic discourse patterns, can be problematic. That is, whilst knowing what dialogic teaching is, can be helpful, it is insufficient for transformative change. As stated previously, many in the field point towards the significant benefits of a dialogic approach (Alexander, 2006; Kim & Wilkinson, 2019; Mercer, 2003; Reznitskaya, 2012; Reznitskaya & Wilkinson, 2015; Wegerif, 2013). At the same time, these authors suggest the move towards dialogic teaching is extremely difficult to achieve and even more challenging to sustain. The next section explores additional key components that would constitute how best to move towards more dialogic teaching in the classroom, which are largely concentrated on the teacher but infer a specific proximity to the learner through a clear set of enabling conditions.

The Role of Community Membership

An effective way to enable greater and equal contribution of both teachers' and students' role in the talk is through the development of a classroom culture of talk. Dialogic community membership, for this study, will be of great interest given the idiosyncratic nature of teaching spaces and contexts. Establishment of talk protocols within learning communities is pivotal and can potentially increase productive dialogic interactions for and with Pasifika students. Samu (2015) advocates the importance of considering the extent to which "the learning experiences and environments that teachers plan, match (as opposed to mismatch) the specific cultural ways of being of their Pasifika learners" (p. 132). For dialogic pedagogy, therefore, membership requires finding out more about learners and privileging their contribution to deliberately open authentic, safe spaces to engage.

This line of thinking is encompassed in Bridges' (1979) conception of discussion; in Cazden's (2001) "speaking rights and responsibilities; in Mercer and Dawes (2010) "striking the balance"; in Phillipson and Wegerif's (2016) practical guide to introducing the 4Cs, framework (caring, collaborative, critical and creative), "helping to develop a culture of dialogue in the classroom and making accessible all the benefits of dialogic learning" (p. 23); and in Reznitskaya and Wilkinson's (2015) "argument house," all of which suggest building environments that serve specific types of dialogue through attention to elements such as shared agreement amongst participants that to listen, respect, think, critically, talk openly, reason, argue, justify and evaluate are paramount to ensuing and critical discussion. The establishment of such protocols as a precondition of an effective dialogic learning community will be critically explored in this study.

Understanding dialogic community membership in the classroom then is important for two more crucial reasons. The first is that research already points to several factors that impede on "speakers' rights" within the classroom setting. Secondly it is the protocols for participation and accountability for all that could potentially foster more learner engagement.

To further address the former point above, Cazden (2001) provides the following important note "teachers have the role-given right to speak at any time and to any person; they can fill any silence or interrupt any speaker; they can speak to a student anywhere in the room and in any volume or tone of voice. No one has the right to object" (p. 82). Herein lies the issue. For any student, the power relations in the classroom may seem an insurmountable reality. Dialogic pedagogy features a promising "egalitarian nature" (Reznitskaya et al., 2009; Sandretto & Klenner 2011). Where participation is reconfigured to advance meaning making

and knowledge creation, norms for participation are established and there are greater opportunities for students to become, "active initiators in collective discussions who negotiate, challenge, reason, justify and provide feedback to the ideas presented by other members of the learning community" (Kumpulainen & Lipponen, 2010, p. 60). This does not discount the authority of the teacher but relies upon it (Sandretto & Klenner 2011). The roles within a classroom community must be clearly established. This will help those who come to the discussion to know and understand their responsibility to the discourse and may work towards increased student initiation, participation and more active contribution to knowledge building.

Finally, in order to mobilise the co-construction of valued talk norms in the classroom community, seeking norms and values from those who are most familiar with talk patterns outside of the school might be considered. "The strategy of using familiar forms of discourse needs to be seen in the context of the whole classroom system built up by teachers and students" (McNaughton, 2011, p. 69). If we exclude these key insights into the development of talk protocols, which student themselves and by extension their families can provide us, we become disingenuous in the co-construction of classroom protocols and thus community membership for productive talk.

The Role of Texts

Promoting productive talk takes more than simply engaging in talk itself. Once a culture of talk has been established, teachers need to provide rich material to talk about. As many of the challenges point towards efficacy on the part of the teacher, it is significant then to look to their proficiency in planning and resourcing discussions that may build knowledge, Alexander (2017) refers to this as his purposeful principle which teachers undertake in order to be able to enact dialogic teaching. Exploring the deliberateness in the resourcing of talk contributes to the overall processes of change, as teachers build their content knowledge of what selected texts may offer, such as alternative perspectives or cross-cutting themes.

A teacher's selection of resource material, text or artefact needs careful consideration as well as clear conceptual map of where to begin and how to grow a discussion. This selection component is fundamental for teachers in embedding dialogic approaches within literacy instruction. Texts selected to be used in the discussion impact quality of the discussion itself. Lee (2001) suggests a pre-requisite for productive discourse is that "the students have consequential prior knowledge that enhances the quality of interpretations they offer and their level of engagement with the text" (p. 101). Whilst prior knowledge is important, the process

by which texts allow an entry point for students, for more dialogic discussion, is notable. Aligned with this thinking, Wilson and Oldehaver (2017), in a 2-year "talk about text" pilot study in two low-decile New Zealand secondary schools, further promoted that texts themselves would have a voice and be an active participant in the discussion. Potentially, the benefits of viewing texts in such a way could elevate both the social and cognitive aspects of those who engage texts to better able position themselves as key contributors to the discourse itself which embodies transformational potential.

Similarly, Wells (1999) also reports the complementary nature of talk and text and provides a reciprocal way of looking at this relationship:

> When participants move back and forth between text and talk, using each mode to contextualise the other, and both modes as tools to make sense of the activity in which they are engaged, that we see the most important form of complementary between them. And it is here, that, I want to suggest, students are best able to understand what I have called the semiotic apprenticeship into the various ways of knowing (p. 146).

Text then, as an artefact or additional voice, has an additive notion and essentially provides members in the discourse with an extra set of tools (Vygotsky, 1978). For teachers of Pasifika, providing tools that link to their own home experiences could very well contribute to increased uptake during instruction which is a feature in productive dialogues. Reznitskaya (2012) promotes specific types of stories in her research on classroom dialogue and suggests that text selected should be "comparable in terms of their focus on complex, thought provoking issues that are central to human experience and relevant to students' lives" (p. 44). The deliberate intention of text selection then is highly important for productive talk.

Relevant texts, in and of themselves, do not guarantee productive talk. Barnes (1976) recalls an observation of a lesson that involved the use of a photograph as a learning artefact to engage learners in discussion. The visual text used was congruent to the pupils' background, thereby acknowledging their view of the world given the connection to the photograph which resembled home or their occupied place and spaces. The ensuing discussion, whilst by all accounts destined to use language in an exploratory manner, unfortunately privileged the teacher's goal, that served a specific educational purpose and thus there was a disconnect in this discussion to the point of silence. Barnes (1976) eloquently describes this sequence as "asking them [students] to arrive without having travelled" (p. 118). So, the initial task, whilst using familiar visual text, promoted and elevated the knowledge in the teacher's head; it did

not eventuate for the students through the discussion. The issue is likened to a Freirean (1972) concept of "banking" which, even with best intentions of planning to be dialogic through text and developing a culture of talk, was shown to function as depositing knowledge into the minds of the learner, by which the teacher serves curriculum goals only. Teachers are in the position in most classrooms to have complete control over school knowledge and this is problematic during discourse-based pedagogy which, in the above case, reduced the potential connections to the learners' world literally to silence. For students, a maxim about knowledge explained by Wong (2006) links knowing with social practice, meaning, "Knowledge is not 'in one's head' but is revealed through social practice or activity" (p. 201). This notion further links to the role of community membership and for this study is vital to understand how each of the roles connect in order to reach dialogic heights.

The Role and Facility With Questions

Teachers who employ questioning as a strategy to propel literacy discussions about texts forward can be problematic according to Dillon (1984). He suggests that, "A single, well formulated question is sufficient for an hour's discussion" (p. 55). However, the overuse of known-answer questions and the underrepresentation of genuine student-generated inquiry questions about text, text theme and perspectives are worrisome. Similarly, Cazden (2001) advises that questions that assist the learner in gaining "some conceptual understanding" through "optimal placement" are those that do not simply mask the teacher's intent to evaluate, but that increase the mental work required of respondents to answer.

Nystrand et al. (2003) promote in their study the "question event," rather than the sole focus and facility being on posing the individual question in the discourse. These authors pointed out that

> To judge the authenticity of a question, for example, we took cues not only from how students responded to the questions, but also how the teacher evaluated or followed up the students' responses. … In all cases, we coded not just listed questions but rather the character of social interaction elicited and valorized by the questions themselves. (p. 144)

This suggests an uptake function through discussion that may be seen to extend the facility of such for practice and for better enactment with questioning as strategy.

Aligned with the argument for a more holistic view of questioning through the event, Michaels and O'Connor (2012) promote critical "framing" of questions, generated prior to discussion, which they further describe as the "launching question" to fuel interest,

engagement and perspective. These authors also advocate for further pre-prepared questions that can act as a mediator to redirect through the discussion allowing students to make critical connections to support meaning. The notion of uptake is further strengthened here as a pivotal condition where the role and facility with questions are concerned and will be explored in this study.

The Role of the Small Group or Whole Class Configuration

One of the precursor decisions is the grouping of students, and the size of that group. The debate over small group or whole class is a valid one. However, given all that is known about dialogic teaching, the debate might not be about group size, but rather about which configuration leads towards more dialogic pedagogy, based on goals, purpose, dialogic features. This is where repertoire counts. Alexander's (2017) five principles (*collective, reciprocal, supportive, cumulative, purposeful*) present a frame for thinking through the best approach to dialogic teaching. Moreover, Alexander's organisational repertoire presents multiple configurations, from one to one or in groups through to whole-class teaching, and he insists that it is the quality of the interaction over the organisation that matters. One advantage of small group discussions, however, is that more airtime is allowable for individuals as opposed to larger configurations where many students proportionately would have fewer turns each. However, if a dynamic, dialogic goal is not part of the stance of the teaching and learning in the first place then group size becomes redundant.

In sum, for teachers to be able to promote key dialogic opportunities in classrooms, clearly the configuration of group size needs consideration. This may be especially important where argumentation and reasoning constructs emerge, as it is the balance of these practices that requires a level of commitment for enactment and acceptance of such practices within the learning community, both teachers and students.

Next, we explore the constraints that may be present in the classroom and where achieving dialogic teaching is to overcome barriers.

Mitigating Constraints – Overcoming Barriers to a Dialogic Approach.

The classroom components explored to this point suggest the shift toward a more dialogic approach is not without constraints. There is no doubt that multiple pressures draw on a teacher's instructional time and focus, potentially impacting discourse. Merritt (1982) refers to these situational demands as a constraint for teachers given the often-hectic life of the teacher which means that teachers' demands are constantly in tension. He argues that, in an ideal situation, the classroom teacher would not need to divert attention away from the "main

vector of activity" the "outside" demands on their attention. Being able to do that is no easy feat. Teacher professional responsibility in the classroom, as Mercer (2003) informs, can be subject to great variability and vast differences in priority, due to curriculum demands and enactment. As Sedova et al. (2014) conclude in their study, the overarching constraint may actually come from within the dialogic literature itself, particularly the "idealised" ways in which the pedagogy, with principles and specifications for enactment, is far removed from the reality of classroom life.

These curriculum and situational demands are but a few of a variety of constraints that indicate why dialogic pedagogy is infrequently observed across studies, and extremely challenging to sustain beyond initial implementation.

Teacher Resistance to Innovations

As a teacher who has been through my fair share of professional learning and development, I can relate to the writings of Sedova et al. (2014) who caution about the challenges of changing teacher practices towards more dialogic pedagogy. They suggest that where there is incongruent messaging from what are firmly held beliefs by the teacher, shift, and furthermore sustaining shift, is destined to be ineffective.

Similarly, Rojas-Drummond et al. (2020) caution that although the evaluation of their Learning Together programme documented favourable results for students via dialogic interactions, namely on their oracy and literacy outcomes, the challenge for teachers was found in the variability with which they both sustained the efforts of the programme and were able to do so effectively within the traditional setup of their classrooms. This caution is heeded given the relatively novel ground this study seeks to explore with teachers and their Pasifika learners.

Further complexities that contribute to teacher resistance are outlined by Lefstein and Snell (2013) who suggest that teachers are not meant to get better and provide the best practice on their own. However, where guidance and support in the form of teacher professional learning and development exist only via a course of imitating a predetermined package of tools, techniques and strategies, the opportunity cost is high given the one-size-fits-all approach is unlikely to yield favourable outcomes for those who may need it the most. Lefstein and Snell (2013) caution that best practice for all is so complex and challenging because of the unpredictability in the classrooms amongst all learners, school factors, and outside influences impacting on practice. Whilst the best intentions come with professional development it would be remiss to think outside providers would be able to account for the myriad of

complexities within school communities and as such should not be surprised when faced with resistance to change or mere fleeting change, unlikely to be sustained beyond the life of the professional development programme. The sheer volume of "remedies," as Alexander (2018) explains, are likely a prohibiting factor, and at the discourse level, what is often the case is the persistence of the IRE exchange structure, which in "many schools remains the pedagogical default, resists change despite abundant evidence that it wastes much of talk's discursive, cognitive and educational potential" (p. 2).

Authority in the Classroom

A constraint linked explicitly to power and authority in the classroom is manifest in studies which identify teachers in the role of "talker" rather than "listener" (Mehan, 1979; Nystrand & Gamoran, 1991). Additionally, when that talk by the teacher is lengthy and dominates airtime, students have limited entry points, further reducing *their* power and authority, in the discussion. Addressing this imbalance is an aim of this study.

The power issues and challenges inherent in the classroom space, referred to as "blockages" (Sandretto & Klenner 2011), require teachers to critically reflect and identify ways to overcome these blockages by identifying both the "productive" and "repressive" roles of power in the classroom. Given that the authority figure in any given classroom is the teacher, Sandretto and Klenner (2011) argue that "we can momentarily shift power relations to create more mutual and authentic dialogic spaces that support the development of students' critical literacy" (p. 50). Identifying the impact of doing so for students' and teachers' dialogic repertoire is also part of the endeavour of this study.

Expectations

Teacher expectations have been extensively researched by Rubie-Davies (2010) whose work, given the sites of interest, inform this study. She reports a phenomenon she has termed the "halo effect" which suggests differing levels of teacher expectations that correlate to teachers' perceptions about student learning and behavioural characteristics. Babad (1993) asserts similar notions and adds that while teachers may have different expectations for learners, either high or low, affective and cognitive, interestingly, this treatment is not lost on the students themselves. Furthermore, a powerful conceptual analysis on teacher expectations suggests,

> low achievers receive more instruction and more learning support than high achievers, but that instruction is of lower quality. Teachers are motivated to compensate disadvantaged students for their deficiencies, and they invest extra effort and vigilance

> in trying to teach them more. However, because their expectations are low, they keep this extra teaching on a lower level. High-expectancy students receive less attention and less learning support, but the teaching is of a higher quality. Most, if not all, of the programs for improving instruction in integrated classrooms are based on the assumption that low achievers must be compensated by specially designed extra instruction. (p. 350)

The "teaching more" notion alongside "lowered" expectations of learners negates the notion of being dialogic. In order to resist all of the "extra instruction" teachers' expectations should be called into direct focus that considers not only expectations of the learners but the expectations manifested in resources selected for discussion and in the ways in which there is a shared and agreed accountability and responsibility for building knowledge from within the learning community.

Navigating Silences

Within dialogic sequences, what is commonly known as "wait time" can produce profound and varied student response and can plausibly offer ways to positively position silence. This navigation, however, is one that is in large part negotiated and promoted in the discourse by the teacher. As explained by Michaels and O'Connor (2012), wait time proposes two key functions. The first is allowing time for participants to respond to a question posed and before signalling to a "particular student." The second function places value on the contribution of the student's thinking in a way that signals that the child's thinking and dialogic offering is of greater importance than simply answering correctly. Problematic in these sequences, also, is the abbreviated response by students which results from talk that aims for a predetermined answer. The providing of ideas, rather than seeking for ideas, may be linked to such constraints where silence is prevalent.

As stated, employing wait time in the discourse does in fact promote silence. To both contrast and complement this notion of silence, it is important to include a Pasifika perspective on how silence is perceived. Tuafuti (2010) reports, "Pasifika peoples' silence has volume; it speaks meaning" (p. 4). This assessment can support how best to unlock the potential benefits that promote the practice so that is a more accepted and thus valued in the discourse itself. Like the wait time strategy benefits, acknowledging the cultural significance of "silence" and the function it promotes between interlocutors situated in Eurocentric education systems may work to overcome silence as constraint.

To sum up, it seems that to overcome the identified dialogic barriers, where teacher resistance, teacher authority and silence markers as patterns emerge, will require thoughtful and deliberate consideration. The notion of sustainability is noted here to more positively reveal longer term solutions beyond this study whilst, more immediately, resolving discourse interactions that may constrain practice of teachers and their Pasifika learners.

Positioning Dialogic Pedagogy in a Pasifika Context

Given the relative scarcity of specific literature about *dialogic pedagogy* specifically with a Pacific population, the question arises as to whether or not what constitutes dialogic teaching from within this emerging field can be fully applied, in predominantly Pasifika contexts, in New Zealand. Considering much of what has been reviewed has taken place with populations in other countries, this final section considers those essential elements reported in Table 1 (Chapter 2) and how these components relate to the application of dialogic approaches in the classroom for Pasifika learners that are aligned with the following signature elements of cultural importance: *responsiveness, diversity* and *contemporary identity.*

Culture and Responsive Approaches for Pasifika in New Zealand

In discourse processes, culture can be seen to exert influence across teacher repertoires outlined by Alexander (2017). In classroom settings that are predominantly "diverse" the repertoire of the teacher must therefore be further expanded as Cazden (2001) reports, "Classrooms are the ultimate site for learning, and classroom talk constitutes a critical part, and the most exposed edge of the enacted curriculum" (p. 145). The ability of the teacher to facilitate dialogic learning for and with Pasifika students must then require a deeper look at the discourse resources these children bring with them as a non-negotiable precursor to talking, arguing and reasoning to learn. Acknowledging and understanding cultural resources may considerably reduce "unintended" teacher consequences, whilst increasing teacher beliefs and expectations of the learner based on this unique insider knowledge (Rubie-Davies, 2010)

The level of responsiveness identified within instructional settings married with significant cultural variations in the features of conversation is vital to understand. These factors are amplified by Allen and Robertson (2009) who stress that teaching our diverse population of learners, which include Pasifika students, "includes having an understanding of the social and cultural contexts that shape our students' prior learning, social interactions, and ability to achieve in our New Zealand education system" (p. 1). These views are functionally equivalent

with the sociocultural perspective the study employs which suggests a synergy between a dialogic underpinning and the valued ways of knowing and being in a Pacific context.

Responsiveness is particularly required because culture is not static. As Coxon et al. (2002) point out, social-economic circumstances and social structures change over time, and for Pasifika in a New Zealand context, " the habitus of individual members of successive generations will develop in different ways" (p. 6) This implies the need to refine our perspectives and labels for our young Pasifika learners currently in the schooling system. Generational changes in terms of culture, diversity and identity must be reflected in the teaching and learning approaches. Samu (2015) states that for teachers of Pasifika in a New Zealand context, "diversity and difference" must be and remain "at the very centre of the meaning of the notion "quality teaching'" (p. 131).

Similarly, Lee (2001) supports the growing body of research on culturally responsive pedagogies that acknowledge the positive impact culture adds to the classroom space and presents ways to engage the unique world view learners bring to the learning space "as a force that can meaningfully enhance the quality of learning experiences for students" (p. 136).

As outlined earlier in this review, both learning theory and key components of dialogic teaching have the potential to bridge culture (see Table 2) and dialogue. Kim and Wilkinson (2019) consider an inclusive view of the role of culture that allows for a higher status in the overall pedagogical approach and state,"It is culture that gives talk the power that it has and, *at the same time* it is talk that constitutes the culture" (p. 83).

Diversity

Teachers are often faced with students from diverse cultures with diverse learning needs. Accounting for diversity, it seems, has met with a significant constraint on student learning due to confusing diversity with learning styles or incorporating stylistic pedagogy to match the diversity of the student body. The issue with treating diversity in this way is potentially limiting as, "such a matching strategy does not account for change – in the individual, the activity setting, or the community – and it assumes one style per person according to the individual's group categorization" (Gutiérrez & Rogoff, 2003, p. 19). Understanding diversity acknowledges difference and similarity, which responds to changing need. Such a mindset accepts that culture in and through learning can make a difference when diversity aims for inclusion as the goal.

Contemporary Pacific Identity

Considering the participants in this study could very well be characteristically "contemporary Pacific" adds another layer of challenge to discourse-based pedagogy. Samu (2015) further elaborates the notion of the unique Pasifika identities that have been steadily increasing in New Zealand and have blended both the traditional aspects alongside the "urban and the contemporary." She states that this blended culture exists,

> within the migrant communities of Pasifika in New Zealand, Hawaii in the west coast of USA and Australia. It, as an identity platform, is attractive because it is safe; a person can be Pasifika in ways that he or she wants to be. That also means that these communities of Pasifika in New Zealand don't have to speak fluently in their mother tongue, nor is there need to be 'expert' in traditional art or protocols" (p. 134).

What is needed, therefore, are approaches to teaching and learning than encompass the ever-changing Pasifika student populations in Aotearoa, New Zealand. For Pasifika, this may present the opportunity to deliberately and systematically personalise dialogic aspects within current cultural spaces in school communities, of both linguistically diverse (Lee, 2001) and culturally diverse students (Samu, 2015). Such attention may result in increased connection to the richness of resource that Pasifika learners may bring to the classroom and subsequently to the discussion.

The combined discourse spaces of Pasifika children are therefore vital bases for learning and educators must consider all the resources and funds of knowledge (Moll et al., 2006; Rodriguez, 2013) a child may already have. Knowing how these resources fit *within* the school space invites a lens into the wider principles of learning for children. This study acknowledges the importance of both the teacher's and the child's world view within effective interactional, discussion-based practices in the classroom space.

Finally, it seems clear from the review to this point that dialogic pedagogy is not inconsistent with a Pacific world view. It would thus seem plausible, given the widespread significance of dialogic teaching that this pedagogy could work towards solving some of the identified issues related to improving outcomes for Pasifika, outlined right at the start of this review. For a truly dialogic space to be created and firmly embedded in the classroom, the weaving together of responsive practices that support the establishment of clear "protocols" of discourse, that allow multiple opportunities to engage in critical reasoning and argumentation, with multiple opportunities to practice these skills, engaging in varied modes of language and text, will bring about more effective student to teacher discursive interactions where the central notion

of optimised social, cultural and academic norms are made highly visible, valued and critically understood by all and for all.

Summary

This review of literature began with an overview in Chapter 2 of the current status of Pasifika Education in Aotearoa, New Zealand. In doing so it deliberately positioned the remaining review to be able to build and expand on the relatively new and emerging talk-based pedagogies responsively. This chapter considered the theoretical lens this study employs and outlined key and specific dialogic constructs, approaches as enablers and change constraints that are distinct to the dialogic field. This area of study is likely to be a challenge to navigate, particularly as one part of the study is designed to test the positive claim of a dialogic approach in service of literacy and learning for and with Pasifika.

The next chapter will address in detail the design phases of the research that seeks to address the main research question: How can teachers *design and employ* dialogic processes that are appropriate and effective discourse forms for Pasifika learners in English medium literacy contexts?

CHAPTER FOUR – METHODOLOGY

Chapter Overview

This chapter situates the research methodology in context. As a result of the review of the literature and the identified gaps, specifically in the area of Pasifika dialogic education, the study built on a broad theoretical understanding of dialogic teaching and learning, for and with Pasifika learners.

This chapter will firstly outline the approach employed for this study, design-based research (DBR) and argue the significance of the decision to do so. The next sections outline the research context and analysis procedures. The final section reports the development process of a newly conceptualised Pacific Dialogic Indicator Tool (PDIT), which recognises a specific culturally sustained communicative practice of Talanoa and is used as a key method of analysis in this study.

Research Aims and Questions

The aim of the study was to understand the processes involved in the promotion of effective dialogic interactions in the classroom. This was achieved through an exploration of what *currently existed,* an inquiry into the *space in between,* and finally what *could exist*. Furthermore, the study employed a phased approach linking three design phases, which combined to identify interactional processes in classrooms with Pasifika learners, that provide effective dialogic approaches to teaching and learning.

More specifically, this research seeks to understand how to be better able to enhance and enact dialogic pedagogy for and with Pasifika. The study sought to strengthen and promote "more effective" kinds of talk in the classroom *known* to enhance academic outcomes for learners, which potentially increased student facility through strengthened dialogic *instruction* that reflects sociocultural theory from both Eurocentric and Pacific world views.

The research questions addressed in this study were:

1. How can teachers *design and employ* dialogic processes that are appropriate and effective discourse forms for Pasifika learners in English medium literacy contexts?

Several sub-questions supported the main question and were:

2. Can a tool that codes classroom talk be developed, that has distinct culturally meaningful underpinnings to enable responsive teacher and student talk patterns in the classroom?
3. What are the current patterns of talk in classrooms with high Pasifika populations?
4. What culturally appropriate protocols for talk can be established in classrooms with high Pasifika populations?
5. What resources can be used to support dialogue in classrooms with high Pasifika populations?

Theoretical Intent

Whilst concerned with investigating current patterns of teacher talk in the classroom, this study ultimately seeks to understand new forms or approaches to discourse-based pedagogy that might improve outcomes for Pasifika learners at the classroom level and beyond. The proposal, that effective teachers of Pasifika students will be those that enable specific dialogic opportunities to learn and that present the least number of barriers where productive talk is concerned during instructional group literacy activities and is the imperative line of inquiry to test and develop and build theory.

Additionally, for Pasifika students, increased facility in dialogue leading to higher order levels of thinking and understanding requires specific positioning in the discourse itself. The barriers and enablers, specific to the participants, were understood by emphasising the development of theory *through* the undertaking of DBR.

A proposition that, for effective dialogic interactions to take place in the classroom, teachers of Pasifika would have to have some positive level of agreement on the efficacy dialogic approaches, inclusive of the cultural framing of Talanoa (explained in detail later on) might provide for this group of learners. The theoretical intention leveraging this proposition was to develop an inquiry method approach that acknowledged culturally sustaining talk orientations and provided a critical framework of multi-layered dimensions, for teachers to draw on as a scaffold. Such frameworks were able to be tested across diverse settings of classrooms aimed at further amplification and variation in deliberate talk interactions between teachers and students, that would positively improve both practice response and research response outcomes.

Research Design

This study profiled existing patterns of discourse found in classrooms. These data collected across a range of levels, new entrants to Year 8 classrooms aimed to identify the dominant interaction patterns within instructional literacy learning; and identify features of pedagogy that support dialogue before, during and after instruction. This approach was adopted to be able to understand an area in a New Zealand educational context that is not well understood, in particular the discourse practices of teachers working with Pasifika students in the classroom. Where key cognitive constructs of high-level reasoning, collaboration, argumentation, and critical thinking through talk were identified, the researcher was able to explore the process by which these constructs were specifically supported for and with Pasifika learners. These designs had the potential for enhanced discourse and plausibly improved achievement outcomes for this group.

Design-Based Research

This study employed a design-based research methodological stance in order to develop and implement a contextually appropriate intervention. Whilst not a conventional mirror image of the DBR approach in its entirety, this study drew on the fundamental elements required to be able to call it such. Ultimately, the selection of a DBR approach seeks to uncover talk sequence patterns, understand how talk is resourced and reveal student and teacher perspectives that account for greater opportunities for effective dialogic pedagogy and may be related to enhanced achievement outcomes within English medium primary contexts. This is in line with what Barab and Squire (2004) distinguish, "Design-based research in not so much *an* approach as it is a series of approaches, with the intent of producing new theories, artefacts, and practices that account for and potentially impact learning and teaching in naturalistic settings" (p. 2). This is further characterised by how the series of design approaches that was context specific and invited genuine research partnerships therefore highlighted what might already be known in order to problem solve less known issues on discourse.

Principles of DBR (Anderson & Shattuck, 2012; Barab & Squire, 2004; Brown, 1992; Cobb et al., 2003; Collins, 1992) also known as *design experiments* (Cobb et al., 2003) have roots in the work of Ann Brown (1992) and Alan Collins (1992). This study builds particularly on the central notion of collaborative research inquiry efforts, intended to solve localised problems via an intervention, that acknowledge context as significant. The latter is a challenge of DBR because context matters, particularly when success is claimed as an outcome of the design

research. Questions arise as to whether research design impacts positively on learning and more importantly how context is considered at the varied levels of a schooling system. This challenge is further addressed by The Design-Based Research Collective (2003) which puts forward a more holistic notion, arguing that "the intervention is the outcome (or at least an outcome) in an important sense" (p. 5). This increases the likelihood of being able to critically interpret findings and receive data from any design research project and suggests how inextricably linked to the context these data are, making the application of such unique to each context and not necessarily ready-made for others. It can be argued then that the starting point for teachers in this study began as early as the invitation to participate. Moreover, the designs accounted for in Phase 2 were context specific and explored critically by those who are required to be the closest to the data, the teachers, not just the researcher.

Theory and practice emerge in a combined and deliberate effort in this study to reveal how one impacts and reacts to the other through the iterative design processes. To support the emergence of such a relationship, Barab and Squire (2004) report that, "design-based research that advances theory but does not demonstrate the value of the design in creating an impact on learning in the local context of study has not adequately justified the value of the theory" (p. 6). In this study, it is through the multiple sources of information gathered that allow a rich picture of the discourse interactions and perspectives of participants in situ. These data were central to the approach and enabled the research participants to build theory as they engaged in their own data.

Many have begun to differentiate the key properties of DBR and other methodological approaches (Barab & Squire, 2004; Cobb et al., 2003). Common features include "that they result in the production of theories on learning and teaching, are interventionist (involving some sort of design), take place in naturalistic contexts, and are iterative" (Cobb et al., 2003, cited in Barab & Squire, 2004, pp. 2–3). Of great importance to this research is, as Anderson and Shattuck (2012) claim, "DBR is a methodology designed by and for educators that seeks to increase the impact, transfer, and translation of education research into improved practice" (p. 16). The latter is a key argument for the selection of the approach given the study is situated within varied classroom settings.

Ecology of Design-Based Research

A powerful framing that offered an expanded view about DBR is presented by Cobb et al. (2003) who endorsed, "the metaphor of an ecology to emphasize that designed contexts are conceptualized as interacting systems rather than as either a collection of activities or a list of

separate factors that influence learning" (p. 9). Through this ecology framing we begin to advance our understanding of how this present study's design research (see Table 4) makes visible the interacting systems that would propel the study beyond the design itself and generate theory through enactment, problematising activity and refining instruction.

The ecology metaphor further speaks to the complexity of the learning systems involved that move beyond the four walls of the classroom, where this study is situated, or that broadens the scope of the design or the sphere of influence and "explains why designs work and suggests how they may be adapted to new circumstances" (Cobb et al., 2003, p. 9).

Table 4 situates the categories that define a quality design-based research drawing on multiple authors to explore and present the critical features of the methodology overall. Table 4 further aligns the present study with the key features of DBR

Table 4

Design-Based Research Definitions that Aligned to this Study[3]

Category	Design-based research characteristics	My design-based research characteristics
Situated in real educational contexts	"Occurs in the buzzing, blooming confusion of real-life settings where most learning actually occurs" (Barab & Squire, 2004, p. 4 adapted from Collins (1999) "Being situated in a real educational context provides a sense of validity to the research and ensures that the results can be effectively used to assess, inform and improve practice in current context and likely others" (Anderson & Shattuck, 2012, p. 16) "Focuses on understanding the messiness of real-world practice with context being a core part of the story and not an extraneous variable to be trivialised" (Barab & Squire, 2004. p. 3)	The study aims to investigate closely the real-life classroom discourse practices of early learners (5–6-year-olds) through to intermediate aged learners (11–12-year-olds) during typical literacy instruction.
Focusing on design and testing of a significant intervention	"The selection and the creation of the intervention is a collaborative task of both researchers and practitioners. The creation begins with an accurate assessment of the local context; is informed by relevant literature, theory, and practice form other contexts; and is designed specifically to overcome some problem or create an	Phase 2 of the study is a co-design, co-plan intervention phase. Teachers used their own transcript data and student voice analyses to design a final lesson which sought to test the significance of impact of their

[3] Adapted from Anderson and Shattuck (2012), Barab and Squire (2004) and Cobb et al. (2003)

Category	Design-based research characteristics	My design-based research characteristics
	improvement in local practice" (Anderson & Shattuck, 2012, p. 16)	new designs in the final phase of the study.
Using mixed methods	"DBR interventions are assesses on a wide variety of indices using multiple methodologies. DBR is largely agnostic when it comes to epistemological challenges to the choice of methodologies used and typically involves mixed methods using a variety of tools and techniques" (Anderson & Shattuck, 2012, p. 17)	A mixed-method philosophy is applied to the analysis of data. Layers of analysis will be used to analyse the multiple sources of data collected in order to make sense of the patterns that are emerging as highly significant.
Involving multiple iterations	"Design-based interventions are rarely if ever designed and implemented perfectly; thus, there is always room for improvements in the design and subsequent evaluation" (Anderson & Shattuck, 2012, p. 17) "Involves flexible design revision in which there is a tentative initial set that are revised depending on their success in practice" (Barab & Squire, 2004, p. 4 adapted from Collins, 1999)	Iterations in this study are founded on a three-phase approach and includes: baseline profiling (pre-intervention) Phase 1; innovative intervention (Phase 2); post-intervention (Phase 3)
Involving a collaborative partnership between researchers and practitioners	"The brining together of teachers and researchers to form a partnership is a vital factor of design-based research. Thus, the partnership is developed that negotiates the study from the initial problem identification, through literature review, to intervention design and construction, implementation, and to the creation and publication of theoretical and design principles" (Anderson & Shattuck, 2012, p. 17)	Teachers in the study were positioned as researchers during the innovative intervention workshop and provided the study with practical insight which is not a usual affordance with pure observational studies. These collaborations lead to the identification of impactful planning and design that was used as a model for all to consider in the development of a practical design for the final phase.
Developing theory	"Design-based research requires more than simply showing a particular design works but demands that the researcher (move beyond a particular design exemplar to) generate evidence-based claims about learning that address contemporary theoretical issued and further the theoretical knowledge of the field" (Barab & Squire, 2004, p. 6)	Theory building in this study is linked closely to the design principles of the Pacific Dialogic Indicator Tool, the design of the innovative intervention and informed by deliberately weaving together Eurocentric and Pacific world views of language and communicative practices that positively target the discourse

Category	Design-based research characteristics	My design-based research characteristics
		repertoire of all within classroom settings.
Pragmatic stance	"Maximising both generalisation and insight with the production of practical applications. Theories developed during the process of experiment are humble not merely in the sense that they are concerned with domain-specific learning processes, but also because they are accountable to the activity of design. The theory must do the work" (Cobb et al., 2003, p. 10) "In contrast to most research methodologies, the theoretical products of design experiments have the potential for rapid pay-off because they are filtered in advance for instrumental effect. They also speak directly to the types of problems that practitioners address in the course of their work" (Cobb et al., 2003, p. 11) "requirement that inquiry involves producing demonstrable change at the local level" (Barab & Squire, 2004, p. 6)	Phase 1 pre-intervention transcripts and student interview data and analyses, were used as a valued insight that supported teachers in the co-design of the post-intervention and final phase of data collection. The pragmatic approach, whilst generalised to the context of this study placed teachers and their Pasifika learners up front and relied on their expertise in the design as they are ultimately the experts of their own contexts. This in turn becomes the very notion of pragmatism as it leverages teachers as adaptive experts willingly contributing to the real-life world of their own space.

Whilst the researcher could have employed case study methodology (Creswell, 1998; Yin, 1994) or similarly engaged an Indigenous research methodology (IRM) as an approach, for example, Kakala (Thaman, 2003), Faafaletui (Tamasese et al., 1997) and Tivaevae (Maua-Hodges, 2001), the need to support teacher practice beyond an in-depth understanding of real-world phenomena and where DBR envisions such, was arguably attractive.

Limitations of Design-Based Research

Despite the appeal of a design-based approach, that it is grounded in natural settings and is designed to be pragmatic, there are limitations that need to be signalled to ensure the researcher is aware of this up front. The first, as alluded to, links to context and, given its prominence in the approach, it is important to understand. The system beyond the classroom context, in which this study was captured, is not overly considered in the research. This is problematic, particularly if it is the systemic issues that are cause for concern. That is, if teachers perceive leadership or ministry factors including key policy documents as

influencing daily instruction or preventing effective discourse-based pedagogy that would sit outside the focus of the study.

The close involvement and relationship of the researcher and the teacher participants due to the year-long involvement with them was both a limitation and strength. Anderson and Shattuck (2012) argue, "that this inside knowledge adds as much as it detracts from the research validity" (p. 18). Moreover, "DBR requires comradeship, enthusiasm, and a willingness to actively support the intervention" (p. 18). Even though there are macro structures at play, for example educational policy, this study is intrinsically bound by is essentially "fencing in" the focus studied: teachers of Pasifika learners and their discourse practice in early, middle and upper primary classroom settings. These well-known limitations were carefully considered during the three phases of this study which are detailed next.

Research within Pacific communities must not only involve rigorous scientific standards but must also realise, explain and advance the rich tapestry of the broader cultural contexts. The responsibility, for me as a Pacific researcher researching a Pacific context, is to consider Pasifika values, which are significant, from the onset through to the development of my research question, to the design, participant selection, interview process, to valuing and respecting participants, implications of findings and "all aspects of the '*va*' informed by the research process" (Anae, 2010, p. 3).

Overview of the Phases of Research

The study employed a phased approach in line with principles of the methodological stance. The three phases, initial profiling, intervention and post-intervention, as seen in Figure 2, are a clear indication of how the study progressed and with whom.

Figure 2

Overview of the Design Phase Timeline and Data Sources of the Study

At present, research seeking to understand the impacts of dialogic pedagogy for and with Pasifika students is limited. Thus, the design research methodology made it possible to look at current teacher instructional patterns of talk and then post-intervention patterns of talk, across learners aged 5–12 years (new entrant to Year 8) during literacy learning. *Phase 1* captured a baseline profile of students' and teachers' perceptions of talk and their perceived enablers and barriers where ground rules, resourcing and planning and repertoire are concerned. These three components are highly relevant given the review of literature that endorsed such.

The end-to-end focus of inquiry from initial planning through to enactment and reflection, which illuminate how socially mediated talk occurs for this group, will add significantly to the growing contributions in this field, with the specific reference to Pasifika learners and their teachers in New Zealand.

The theoretical framework that underpins the methodological approach that will act as a scaffold to frame the study draws on both sociocultural theory and dialogic theory to explain educative, interactional activities within the classroom setting. Furthermore, the study's theoretical intent, stated up front, acted as a guide for the development of tools for the upcoming analysis, undertaken and explained in detail further on.

Research Context

Two schools participated in the research. School A was a Decile 1[4] contributing school (Years 1 to 6) and had a school roll of 163 students. This comprises 43% Pasifika (23% Tongan, 20% Samoan), 11% Māori and 46% Indian.

School B is a Decile 1 full primary, special character school (Years 1 to 8) and had a school roll of 327 students. This comprises 87% Pasifika (63% Samoan, 20% Tongan; 4% Cook Islands Māori), with Māori making up 5% and smaller groups of children from other ethnic backgrounds making up the rest.

Research Sites

The classrooms of the teacher participants (N=6) in the study became the "site" of instruction where data were collected. More specifically, the units of analysis were the small and/or large group discourse interactions (teacher and students) within these sites.

Participants

Seven teachers originally consented to take part in the year-long study; however, one teacher's data was fully removed after they decided that they could not continue after the initial Phase 1. Therefore, a total of six teachers and their students, voluntarily took part in all three phases of the study. Table 5 presents an overview of each teacher participant with general information including gender, number of years teaching experience, ethnicity and year level taught for the study. Of the six teachers, five were female and one male, which is reflective of the gender make up in New Zealand schools generally. Two teachers were from School A and four teachers were from School B. The years of experience ranged between 4 years to 25+ years and the corpus of year levels spans from new entrant classrooms (5–6-year-olds) through to Year 7 and 8 (11–12-year olds). The ethnic mix of teachers were, Pacific (n3), Indian (n1) and European (n2). This is the only information that is shared about the teacher participants. Each were randomly assigned numbers from 1 to 6 when reporting findings in later chapters, for the express purpose of maintaining anonymity as agreed to in the consent process.

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[4] Deciles are ratings used by the Ministry of Education to work out some of the funding for schools. A school's decile measures how many of its students live in low socioeconomic or poorer communities, but it does not measure school performance or the quality of education. The lower the school's decile rating (1–10), the more funding it gets. https://www.govt.nz/browse/education/school-and-college/school-zones-reviews-and-decile-ratings/

Table 5

Overview of Teacher Participant Information

Teacher	School	Gender	Years of experience	Ethnicity grouping	Year level taught
1	B	M	17 years	Pacific	7 & 8
2	A	F	6 years	Pacific	4 & 5
3	B	F	10+ years	European	5 & 6
4	A	F	15 years	Indian	new entrant
5	B	F	4 years	Pacific	5 & 6
6	B	F	25+ years	European	3 & 4

Ethical Considerations for This Study

It was not expected at any time during data collection that the process would cause distress, harm or anxiety to any of the participants in the study. However, if such issues were to arise for any reason then it was expected that the existing expertise of the supervision team and school leadership would be called upon to assist with this process to achieve a positive outcome for all.

All data collected, whether by audio or interview or direct observation, were stored securely for the required period as directed by the university human ethics committee.

Information collected were kept confidential and stored safely. At no time was any teacher participant's identity, school names nor family or student names revealed, as each was replaced with appropriate codes upon receiving any data containing such information. All data were stored separately from consent forms and kept, secured for the required 6 years, after which they will be deleted (if electronic) or destroyed.

This study was voluntary, and participants were under no obligation to take part. Where audio recording of any data collection is concerned, participants were able to signal at any time to the researcher a request to stop recording without having to give reason. Participants were invited to ask questions at any time during the study and were able to withdraw from the study and withdraw all data without giving reason. At all times, the researcher ensured the project adhered to the UAHPEC (University of Auckland Human Participant Ethic Committee) guidelines agreed and approved on 12 December 2016.

The researcher gave assurance that all participants' names including school names, will only be known to the researcher and supervisors and that at no time will names be used in any reporting or publications.

The first part of the consent process invited the participation of schools' boards of trustees and principal (see Appendix B) then extended this invitation to the teachers (see Appendix C) followed by an invitation to parents (see Appendix D) for their consent and finally inviting students (assent) to take part (see Appendix E).

Data Sources and Data Collection Overview

Data collected in this study were: audio classroom observations of small/large group discussions during literacy instruction, interviews with students, interviews with teachers and collection of teacher's resources used in the classroom discussions.

All audio data captured were collected in accordance with the UAHPEC guidelines. Each teacher and their students volunteered and signed consent to participate fully and were informed via the participant information sheet and consent forms signed, collected and stored as per the UAHPEC guidelines.

All audio data recordings were transcribed by the researcher/transcriber, where the latter was engaged this proceeded according to UAHPEC guidelines that required a signed a confidentiality agreement (see Appendix F). Once audio recordings were transcribed, all data was then reviewed again for full analysis, detailed further on in this chapter.

Phase 1: Profiling Pre-Intervention (Time 1)

Phase 1 was a profiling pre-intervention phase. It involved all six volunteer teachers undertaking audio-taped classroom discussions held during literacy instruction time. This phase provided an up-close look at talk patterns that were currently employed in classrooms which allowed an intensive inquiry into the spaces between the actual and the ideal, with a specific emphasis and identification of Pasifika learners' socially mediated and interactional dialogic experiences and that supported the next two phases.

Classroom Audio Data Collection – Phase 1

As there were up to three *Phase 1* audio lessons to choose from, the criterion for the selection of *one* lesson only, for in-depth analysis, was based on i) multiple close readings of each to identify ii) which lesson would enable enough data to use with teachers when considering the collaborative redesign in the *Phase 2* intervention. Given the layers of analysis each single audio transcribed lesson underwent, selection of just one (both pre- and post-intervention) was deemed appropriate.

After all *Phase 1* classroom audio data were collected, field notes and a themes summary sheet were completed before in-depth analysis began. These field notes were used as part of the teacher interviews also. All transcribing of classroom audio data followed the same guidelines as outlined above. The following Table 6 outlines the classroom audio observation data collected, length of lesson audio, as well as the research question these data addressed overall

Table 6

Overview of Classroom Audio Observation Data in Literacy Collected in Phase 1

Teacher	Measure and medium	Lesson audio detail (number and mins/secs)	Research question/s addressed
TCH1	Classroom audio-recorded literacy discussions	3 audio-recorded literacy lessons within one school week Lesson 1 30.32 *Lesson 2 30.32 Lesson 3 41.58	RQ 1, 3, 4 & 5
TCH2	Classroom audio-recorded literacy discussions	Lesson 1 17.31 *Lesson 2 17.31 Lesson 3 17.56	RQ 1, 3, 4 & 5
TCH3	Classroom audio-recorded literacy discussions	*Lesson 1 18.53 Lesson 2 28.80 Lesson 3 23.52	RQ 1, 3, 4 & 5
TCH4	Classroom audio-recorded literacy discussions	*Lesson 1 09.26 Lesson 2 09.57	RQ 1, 3, 4 & 5
TCH5	Classroom audio-recorded literacy discussions	Lesson 1 08.31 *Lesson 2 26.32 Lesson 3 10.34	RQ 1, 3, 4 & 5
TCH6	Classroom audio-recorded literacy discussions	Lesson 1 24.55 *Lesson 2 32.9 Lesson 3 33.54	RQ 1, 3, 4 & 5

Note: *The selected pre-intervention Phase 1 lesson used for full analysis by the researcher and then with the teachers as researcher (Phase 2 Intervention)

Student Interview Data Collection Overview – Phase 1

In interviewing children in this study, a “draw, talk” technique was employed, for two main reasons. The first was to establish trust with the students in a very short period by allowing each participant to draw a few things as they talked about “talk in their classroom.” Secondly,

given the age of some of the participants (5–7 years), allowed the researcher, as best as possible, to conduct an open-ended, semi-structured interview whilst ensuring no particular testing for right or wrong answers was perceived, which in essence allowed the researcher to gauge student voice on what “talk” means for them in their classrooms which ultimately served the goals of the interview.

Questions used in the design served as the deductive analysis frame for this data set. What was essential to determining the validity and usefulness of the questions used for the interview schedule was largely informed by the review of literature in the area of effective teaching, dialogic pedagogy, and cultural research. Moreover, the final version of the semi-structured student interview schedule developed, further informed by the theoretical framework and literature review, can be found in Appendix G. Transcribing of these audio data followed the same guidelines as outlined above.

Student interviews in *Phase 1* (pre-intervention) lasted between 7–19 minutes.

The following Table 7 outlines the student audio interview data collected, details of the length of each interview as well as the research question the data collected addressed. Capturing student voice in this way had the potential to address multiple research questions given the breadth of the schedule itself.

Table 7

Overview of Student Semi-Structured Interview Data Collected in Phase 1

Teacher	Measure and medium	Length (mins/secs) of audio interview details (students)	Research question addressed
TCH1	Semi-structured student interviews audio recorded with x 2 groups of pairs	Interview 1 19.24 Interview 2 14.49	RQ 1, 4 & 5
TCH2	Semi-structured student interviews audio recorded with x 2 groups of pairs	Interview 1 17.3 Interview 2 17.4	RQ 1, 4 & 5
TCH3	Semi-structured student interviews audio recorded with x 2 groups of pairs	Interview 1 11.5 Interview 2 15	RQ 1, 4 & 5
TCH4	Semi-structured student interviews audio recorded with x 1 pair	Interview 1 11.38	RQ 1, 4 & 5

TCH5	Semi-structured student interviews audio recorded with x 2 groups of pairs	Interview 1 7.8 Interview 2 7.56	RQ 1, 4 & 5
TCH6	Semi-structured student interviews audio recorded with x 2 groups of pairs	Interview 1 11.2 Interview 2 18.11	RQ 1, 4 & 5

Teacher Interview Data Collection – Phase 1

A semi-structured teacher interview schedule was developed, informed by the theoretical framework and literature review (see Appendix H). The teachers' interviews conducted in *Phase 1* (N=6) aimed to provide insight into and clarify what teachers perceived to be vital characteristics of the nature of effective literacy instruction and their understanding of dialogic teaching overall.

Moreover, in order to capture clear voice on their perspective of how classroom talk might enhance learning opportunities and/or facility with cognitive constructs such as reasoning and argumentation, the actual interview itself, conducted after all three classroom audio-data were collected, used initial field notes on these observations to further provide an opportunity to talk through specific excerpts with teachers and record thoughts and comments on these critical interactions and moments. Thus, this approach to teachers' interviews provided a depth of rich information to consider for the workshop intervention in *Phase 2*.

Teacher interviews in *Phase 1* (pre-intervention) were from 38 minutes to 66 minutes in duration.

The following Table 8 outlines the teacher audio interview data collected, details of the length of each interview as well as the research question these data collected addressed.

Table 8

Overview of Teacher Semi-Structure Interview Data Collected in Phase 1

Teacher	Measure and medium	Length (mins/secs) of audio interview details (teachers)	Research question addressed
TCH1	Semi-structured interview one to one audio recorded	TCH1 interview 41.23	RQ 1 & 3,4,5
TCH2	Semi-structured interview one to one audio recorded	TCH2 interview 66.3	RQ 1 & 3,4,5
TCH3	Semi-structured interview one to one audio recorded	TCH 3 interview 40.55	RQ 1 & 3,4,5

TCH4	Semi-structured interview one to one audio recorded	TCH 4 interview 38.57	RQ 1 & 3,4,5
TCH5	Semi-structured interview one to one audio recorded	TCH 5 interview 40	RQ 1 & 3,4,5
TCH6	Semi-structured interview one to one audio recorded	TCH 6 interview 52.3	RQ 1 & 3,4,5

Teacher Planning Artefacts Data Collection – Phase 1

Teacher resource plans and all texts used which were linked directly to the one specific audio lesson data captured were collected. The research questions addressed with the collection of these data were 1 and 5.

Phase 2: Intervention

This part of the study was informed largely by the outcomes of *Phase 1* which is testament to the pragmatic features of DBR. This notable strength of the DBR approach allowed the participating teachers to actively contribute to a 6-hour workshop and assume the role of co-researcher and co-designer positioned to actively address the research questions and used a dialogic approach to achieve this.

Sharing practices that amplify effective strategies used by teachers builds an effective community of learners which becomes a more nuanced approach to understanding multiple discourse interactions from an insider perspective in real-life classroom settings (Herbel-Eisenmann et al., 2009).

Phase 3: Post-Intervention (Time 2)

Each of the data sources collected in *Phase 3* followed the same protocols as outlined already. *Phase 3* post-intervention was the final iteration of the design research. The following three tables provide detail about what were collected in *Phase 3* and the research questions the data sources addressed.

Classroom Audio Data Collection – Phase 3 Post-Intervention

Two final audio lessons were collected post-intervention. The first was a specifically planned audio-recorded lesson each teacher co-planned, that drew on the sense-making session during the intervention and that elevated what student voice revealed linked to the rules for discussion. Following the rules discussion, the second and final literacy discussion was planned but as an independent task after the intervention workshop concluded. These lessons

were audio recorded and collected for analysis. Table 9 provides the necessary details for these sources and collection of data.

Table 9

Overview of Classroom Audio Observation Data in Literacy Collected in Phase 3

Teacher	Measure and medium	Literacy lesson audio detail (mins/secs)	Research question addressed
TCH1	1) Rules discussion 2) Literacy discussion	1) Lesson 1 rules 30.24 2) *Lesson 2 20.26	RQ 1 & 2, 4 & 5
TCH2	1) Rules discussion 2) Literacy discussion	1) Lesson 1 rules 20.26 2) *Lesson 2 27.5	RQ 1 & 2, 4 & 5
TCH3	1) Rules discussion 2) Literacy discussion	1) Lesson 1 rules 26.33 2) *Lesson 2 21.32	RQ 1 & 2, 4 & 5
TCH4	1) Rules discussion 2) Literacy discussion	1) Lesson 1 rules 12.43 2) *Lesson 2 8.43	RQ 1 & 2, 4 & 5
TCH5	1) Rules discussion 2) Literacy discussion both	1) Lesson 1 rules 6.44 2) *Lesson 2 8.42	RQ 1 & 2, 4 & 5
TCH6	1) Rules discussion 2) Literacy discussion	1) Lesson 1 rules 20.56 2) *Lesson 2 22.4	RQ 1 & 2, 4 & 5

Note: * The selected post-intervention Phase 3 lesson used for full analysis by the researcher

Student Interview Data Collection – Phase 3 Post-Intervention

The final *Phase 3* post-intervention student interviews followed the same talk/draw strategy used in *Phase 1* and used the same interview schedule (see Appendix G) as *Phase 1*. After interview data was collected, field notes and themes summary sheet were completed before in-depth analysis began. All transcribing of these data follows the same guidelines as outlined previously.

Phase 3 student interviews were from 11–19 minutes in duration.

Table 10 outlines the student audio interview data collected, details the length of each interview as well as the research questions the data collected addressed.

Table 10

Overview of Student Semi-Structure Interview Data Collected in Phase 3

Teacher	Measure and medium	Length (mins/secs) of audio interview (students)	Research question addressed
TCH1	Semi-structured student interviews audio recorded with x 2 groups of pairs	Interview 1 19.1 Interview 2 15.36	RQ 1, 4 & 5
TCH2	Semi-structured student interviews audio recorded with x 2 groups of pairs	Interview 1 17.23 Interview 2 18.27	RQ 1, 4 & 5
TCH3	Semi-structured student interview audio recorded with x 1 groups pair	Interview 1 11.24	RQ 1, 4 & 5
TCH4	Semi-structured student interviews audio recorded with x a group of 4 students	Interview 1 18.24	RQ 1, 4 & 5
TCH5	Semi-structured student interviews audio recorded with x 2 groups: one pair and one group of three	Interview 1 15.15 Interview 2 11.5	RQ 1, 4 & 5
TCH6	Semi-structured student interviews audio recorded with x 2 groups of pairs	Interview 1 14.7 Interview 2 11.4	RQ 1, 4 & 5

Teacher Interview Data Collection – Phase 3 Post-Intervention

The teacher semi-structured interview schedule was modified from *Phase 1* to *Phase 3* to include teacher interview questions on the intervention process and the newly developed PDIT (see Appendix I).

Phase 3 teacher semi-structured interviews were from 22–56 minutes in duration. Table 11 outlines the teacher audio interview data collected, details the length of each interview as well as the research questions these data collected addressed.

Table 11

Overview of Teacher Semi-Structure Interview Data Collected in Phase 3

Teacher	Measure and medium	Length (mins/secs) of audio interview (teachers)	Research question addressed
TCH1	Semi-structured interview one to one audio recorded	TCH1 interview 33.18	RQ 1, 2, 4 & 5
TCH2	Semi-structured interview one to one audio recorded	TCH2 interview 40.12	RQ 1, 2, 4 & 5
TCH3	Semi-structured interview one to one audio recorded	TCH 3 interview 31.35	RQ 1, 2, 4 & 5
TCH4	Semi-structured interview one to one audio recorded	TCH 4 interview 35.41	RQ 1, 2, 4 & 5
TCH5	Semi-structured interview one to one audio recorded	TCH 5 interview 22.37	RQ 1, 2, 4 & 5
TCH6	Semi-structured interview one to one audio recorded	TCH 6 interview 56.29	RQ 1, 2, 4 & 5

Teacher Planning Artefacts Data Collection – Phase 3 Post-Intervention

Teacher texts and planning post-intervention, linked explicitly to the final audio-recorded lesson, were collected. The research question addressed with the collection of these data sources are RQ 1, 2, 4 & 5.

Data Analysis

As this study included the collection of multiple data sources, the following section outlines the process of analysis conducted. In the first instance, it must be noted that whilst all data sources were analysed separately it was the coordinated weaving together of the key elements that best addressed the research questions. With all data collected, a sociocultural lens, along with the previously outlined theoretical propositions and literature reviewed in the study, provided an overall evaluative frame with which to critically conduct these analyses.

The mixed-method paradigm fits well with the plan of this study in that the defining characteristics of this approach provided a more accurate picture for both the research and research participants by "combining information from complementary kinds of data or

sources" (Denscombe, 2008, p. 272). The sources of data and the approach to analyses provide quantifiable components, alongside qualitative analysis which used the newly developed Pacific Dialogic Indicator Tool (PDIT) that is presented in full later in the chapter.

Quantitative analysis, as an example, was applied to audio recordings of classroom talk that quantified the number of turns, counts of words or questions that were asked. Combined with qualitative analysis, these offered a descriptive narrative that conveyed and described, in detail, the specific discourse events of the groups that were involved in the study.

Preparing Data for Analysis

Audio Data Preparation

All audio data collected, classroom discussions, student interviews and teachers' interviews were prepared for analysis through the following processes.

As soon as the audio was collected it was listened to in its entirety to check for sound quality by the researcher before logging details onto a School A and School B audio transcription tracking spreadsheet. The form required key details to be recorded in preparation for transcribing to be able to track and trace the specific data source when required. On this tracking form, teachers and students interviewed or heard on audio file were assigned a code to ensure deidentification as per the UAHPEC guidelines. Other details such as audio-file name, teachers' room number and year level, date of audio collection, and finally file length in minutes and seconds were recoded.

Similar logging protocols applied each time an audio-data source was transcribed in full. That was to ensure accuracy between the audio and the final transcript, which the researcher listened to and read along with simultaneously to the audio, cross-checking accuracy. Once the transcripts were deemed accurate representations of the audio data, multiple readings of the transcripts of each classroom discussion, student and teacher interview took place.

All planning artefacts collected from the teachers linked directly to the observed lessons were logged on a database that combined both planning highlights of the lesson observed, and details of any text sources used linked explicitly to the lesson observed, recorded and logged. The full log details for these data sources included the teacher code, text/resources/title, author, reading level, lesson in brief, and learning intention recorded.

Whilst these preparation processes are quite linear, the volume of sources warranted this level of clarity and visibility in order to be able to accurately retrieve and analyse them. The full procedure of analysis for each measure collected follows next.

Analysis of Student and Teacher Interviews Data

An inductive approach (Denzin & Lincoln, 2008) combined with a deductive frame (Patton, 2005; Yin, 1994) was used to analyse all student and teacher interviews. The first sweep of analyses thus allowed for notes, patterns and themes to be highlighted on each transcript in order to establish a general understanding of what was being reported. The next step of the process of analysis was to extract each of the responses to the interview questions and enter them into a database using each question posed as a heading. Once all responses were recorded under each teacher and student interview, pattern matching across the interviews was undertaken.

This process involved linking these initial groupings of patterns to specific theoretical propositions stated earlier on in preparation for matching these findings to dialogic theory. This involved a reduction of data for each interview that subsequently supported, to an extent, the theory generated against the analysis of the following classroom audio data. This data-reduction process also allowed student voice to become highly visible through specific focus on smaller numbers of questions linked directly to big theories stated and the aims and goals of the study that provided the direction for progressing specific aspects of student learning, specifically co-construction of ground rules for productive discourse and grouping preference.

Preparing the Classroom Discussion Transcripts – Segmenting in Preparation for Coding

Each discussion transcript (N=12) selected for analysis was entered into an Excel database at the level of each individual teacher. It was clear after the multiple read through of each of the classroom transcripts that there was need for a process of segmenting what was being said, particularly by teachers in the classroom discussions. Therefore, the most *inclusive unit of analysis* is the "speech act or utterance" (Searle, 1969). To further clarify, a speech act is defined as a stretch of talk in which the content, function and turn (by interlocutor) remain the same (Wells & Arauz, 2006). Another reason to delineate the *speech act*/*utterance*, is to ensure that the data were segmented into manageable divisions for coding both quantitatively (e.g., frequency of turns) but more specifically to code using the unique Talanoa (PDIT) framework, which is detailed in full later. These divisions were also necessary, as early reading in preparation of the coding illustrated that there were some speech acts, particularly by teachers, that totalled up to 300 words at a time and before a new interlocutor entered the discussion. Wells and Arauz (2006) report the complexities of analyses of classroom dialogue and the ambiguity that surrounds the approach, stating,

> in use, words do not convey a fixed meaning but, rather, are imbued with the speaker's meaning, which is based on his or her perspective on the topic under discussion. Thus, even when attending to the same object, individual participants interpret and speak of it from different perspectives as a result of their previous experience and current concerns. (p. 382)

Therefore, the segmenting of speech acts that require such allowed the researcher to more critically consider the "meanings" and "perspectives" within each interlocutor speech act, allowable through such disaggregation of a speaker's turn.

Three criteria form the basis for segmenting speech acts that require this action, in this study: communicative content/function criterion, tur n criterion and question criterion.

***Conten**t* criteria (what is being taught, lesson aims, goals etc.) to support signalling where a speech act/utterance (within the transcripts) should be segmented, is carried out "where there is a change in content by the speaker" (Shewan, 1998., pp. 188 cited in Crookes, 1990). Thus, the speech acts up to the point that indicates change in content, similar to a *T-Unit,* meaning each single idea, regardless of whether there remains more of the speech act, will be segmented to be coded independently.

Segmenting speech acts using *content* as a key criterion will divide the speech act at the exact point in the utterance where there is distinctly different content which is illustrative of the inextricable link to the overall intentions of the speaker. A further distinction to support accuracy of segmenting considers a close look at the impact of the resulting sequential structures that follow, particularly if there are multiple *content ideas* uttered by one interlocutor that potentially do "different interactional work, depending on the semantic content of utterances" (Orsolini & Pontecorvo, 1992, p. 115).

Further strengthening the reason for segmenting speech acts in the classroom events in this way, Bakhtin (1986) writes, "to understand a text/utterance is to begin to respond to it from the receiver's perspective" (cited in Wells & Arauz, 2006, p. 385), which, given the situated activity of the discourse interactions that this study is concerned with is appropriate. So, to be clear, speech acts/utterances are used interchangeably in this study and have the same meaning. These terms both mark talk where there is a functional response and/or a distinct change in content by the same interlocutor, and are segmented in the database, at that point. In line with this segmenting criterion, and to ensure accuracy in this process where there is ambiguity, analysis of the interlocutor receipt of the utterance, in the immediate turn, can also

be considered. Given the nature of this study, the language practices in classrooms where there are possibly learners for whom English is not their first language means function and content are particularly important to consider. If you can imagine, a second language learner in the discourse may very well already be contending with a range of challenges where language practices occur, and if content and function and multiple questions are directed in a *single turn* this adds to the navigation challenge. Becoming aware of such language practices is vital to understand, and again bears on receivers' perspectives and interpretation of the speech act.

Turn criterion further signals where to segment speech acts/utterances for coding. The definition of turn is best described by Crookes (1990) as "one or more streams of speech bounded by speech of another, usually an interlocutor" (p. 185). Thus, when there is a distinct change in *speaker,* this is indicated by either T (teacher) S (student) S1, S2, S3 (different student voice markers).

A further problem to overcome using this basic unit of analysis to segment, and where *turn* is involved, is when the turn itself has been segmented out over multiple lines in the database, which might be interpreted as speech acts that reflect the back-and-forth interaction between interlocutors. To ensure this is not misinterpreted, if the turn by one interlocutor has been segmented multiple times this will appear in the database as TOT (teacher over talk) or for students, SOS (student over speak). The phenomena of TOT and SOS is further detailed using transcript examples later in the chapter. If the entire speech act remains unchanged, i.e., no changes in content or function, it is represented as T for the teacher or as S1, S2, S3 and so on for the different students who enter the discussion.

Question criterion. The final criterion was required after reflecting on and initially coding the first few early transcripts. Each question posed by any interlocutor, teacher or student, within a speech act was segmented at the end of each question wherever it fell in the speech act and coded independently. Given the status of this technique and strategy in the classroom and the potential for questions as a dialogic initiation, it was important to be able to understand each question for its dialogic or monologic essence and to do that required segmenting each to analyse closely. This notion aligns with Wells and Arauz (2006) who add strength to this decision that isolates and explores the lines of questions asked in the dialogue, stating, "Not only do children almost cease to ask real questions at school, but also teachers rarely ask them to express and explain their beliefs and opinions—at least with respect to the official curriculum" (p. 387). Understanding the type and strength of all questions posed and, where

there are multiple found in one turn that again illustrate a change in content, is important to illuminate and can be achieved through this level of segmenting.

Although segmenting speech acts in this way makes the coding of such quite granular, Hennessy et al. (2016) suggest a similar "fine-grained" segmenting of speech acts they call "communicative acts." These acts are part of a very large hierarchal set of criteria, with communicative events and communicative situation forming the full coding scheme. The communicative acts and their nested levels for analysis, do, however, allow "systematic analyses of what participants actually do and say in practice during dialogic interactions, permitting their operationalisation" (p. 19). These fine-grained approaches to analyses then become a platform to begin the sense-making process which means I will be better able to address what is "spoken at a granular level," how this is received, responders' treatment and how this might be refined for more effective dialogic interactions for and with Pasifika.

Wells and Arauz (2006) are aligned in this thinking, foregrounding the notion of symmetry in the reciprocity of discussion-based pedagogy, that can only really be achieved when the speakers "take their listeners expectations sufficiently into account and then in a reciprocal manner the listener is then able to adopt the speakers perspective which is in fact the state of intersubjectivity" (p. 383).

According to Gee (1986, 2004, 2011), the above-mentioned rationale to segment speech acts in this study makes this approach "critical discourse analysis" as this type of segmenting pays close attention to the grammatical structures of the speech act, which will be further analysed and enhanced using analyses with the PDIT.

Segmenting Examples

For clarification where there has been segmenting of "speech acts" in the main database, for more accurate and manageable coding, these will be represented as TOT or SOS. This means that these speech acts have been separated out according to *content*, *communicative function*, *turn* and *by questions within turns* also. Once segmented, transcripts were checked again for accuracy, to allow further multiple layers of analysis to be conducted, which are explained in the upcoming sections.

The following examples, however, used early transcript data from the study to illustrate how speech acts were segmented by the researcher. The first shows how the final segments appear once the content/function, turn, and question criteria have been applied. In each database, the final segmented acts are recorded as separate TOT even though it is the same interlocutor. If a

child were to also over talk, the code SOS was created for such speech acts, though the latter were not as common.

As already alluded to, the TOT phenomenon, where for example a speaker uttered over 300 words in one turn, resulted in the inevitable multiple operational functions in the act signalling the importance of segmenting the speech act at the point that indicated the distinct change.

In this example of a stretch of talk, I have demonstrated how I have segmented the teachers turn by criteria in preparation for further coding and analysis.

Example 1:

TOT: Yep, cool ok move over so your part of the group

TOT: Sally can you see the screen? (segmented – question criteria)

TOT: Right What I want you to do is to um go on to your digital modelling book please (segmented – content change)

Example 2:

The next example is one that is shown in its original form first then segmented to highlight how it would appear in preparation to further code in the database.

T: Shae how are you going? Yeah we'll do it again but we won't do it today. Eden down here please. Where's D1? Should be down here. Alright is D1 all here? Okay, so D3, if you're working around here, you need to be a little bit quiet cause we're doing something on the recorder. Alright looking this way D1, boys move up a little bit please so you can hear. Okay and it's good to hear that so many of you enjoyed doing oral paragraphs and we will do plenty of those but we'll do something, still be doing lots of talking and lots of thinking as well. We'll go back to pobble.

Line 1 T0T: Shae how are you going? (segment question)

Line 2 T0T: Yeah we'll do it again but we won't do it today (segmented – teacher not responding to a speech act of a child, rather at their continued attention to the screen activity)

Line 3 T0T: Eden down here please. (segmented directs a specific child to the mat, content change)

Line 4 T0T: Where's D1? Should be down here. (segmented asking where D1 kids are, question)

Line 5 TOT: Alright is [class] all here? (segmented – Confirming that D1 kids are all here, question)

Line 6 T0T: Okay so D3 if you're working around here you need to be a little bit quiet cause we're doing something today ok. (segmented – cross talk to others not in the group with teacher, function)

Line 7 T0T: Alright looking this way D1, boys move up a little bit please so you can hear. (segmented organising, function)

Line 8 T0T: Okay and it's good to hear that so many of you enjoyed doing oral paragraphs and we will do plenty of those (segmented – content change)

Line 9 TOT: *but* we'll do something, still be doing lots of talking and lots of thinking as well. We'll go back to pobble. (segmented but signals new content)

Again, the segmenting of speech acts was a time-consuming effort but one that was necessary for two reasons. First, where TOT is concerned, the segmenting of large speech acts allows identification within long stretches for any dialogic elements (coded via further counts and analysis using the PDIT tool) as well as more monologic streams and to provide both teachers and the researcher specific illustrations of such rather than an overall code that rates the entirety of long stretches as either dialogic or monologic. The second points towards the design principles that allowed teachers an opportunity to interpret and analyse these stretches of *over talk* with the aim to plan, to be more deliberate and to potentially maximise teacher "turns" for more positive interactions with students to occur. Without such fine-grained approach to analysis, the dialogic properties within the stretches of talk may have potentially been missed.

Methods of Analysis of Talk in the Classroom

Quantitative analysis of classroom discourse is explained by Mercer (2007) as an approach that, "is known as 'systematic observation' in which utterances are allocated to pre-defined categories but would also include any other methods which involve measuring the relative frequencies of occurrence of particular word patterns of language use" (p. 142).

Frequency counts for each transcribed audio entered (as instructed above) have been carried out to give the researcher an overarching view of variables such as number of words spoken overall, by student and by teacher, the frequency of turns by speaker, provide counts for the longest speech act (no. of words) in the transcript by speaker. The reasons for running quantifiable counts was to provide the researcher with as much information as possible to be

able to make sense of the qualitative analyses that would follow. These counts also pointed the researcher in the direction of the most profitable area of interest illustrated in the resulting patterns of the numbers and counts that would be easily translated into useable descriptive statistics. This allowed the approach to be more disciplined and resist and reduce the urge to cherry pick from both the series of data and analyses.

Although the approach is highly disaggregated, for example, reading transcripts then segmenting required speech acts into separate cells in the database for coding, counting turns and words by interlocutor does serve a vital purpose in the sense-making process and will allow for a more considered response by both the researcher and the teachers in the redesign phase that may positively impact on theirs and their Pasifika students' talk repertoire.

The argument is that the mixed approach to analysing classroom data has been prioritised to better, handle the dynamic nature of talk (Mercer, 2007). Once all data had been segmented and coded and checked, pivot tables were created for each individual transcript and used to generate graphs that represent each of the following analyses.

Analysis 1: Word Counts

Once each transcript was segmented, each cell was formulated to count all words spoken for every speech act. The purpose of this analysis was a starting point to check overall volume by interlocutor and what the total difference was between teachers and their Pasifika students.

Analysis 2: Ratios of Student One-Word Responses Calculated

Again, once all word count data was calculated, it was noticeable that there was a high number of single-word responses uttered by student turn. So, all cells that recorded a 1 as the total number of words spoken in a speech act were isolated in the database and then totalled. To calculate ratio, the total number of student turns was divided by the total number of one-word responses. The ratios were also converted into a percentage and both are reported. The purpose for these analyses was to understand how frequently students responded with one word and at what rate this might appear in the overall discussion.

Analysis 3: Turn Taking

The frequency of turns analysis was conducted in order to understand the pattern of turn taking and more specifically who was taking those turns. To calculate this, pivot tables were created that calculated the frequency of turns by students and by teacher. Where there are distinctly different voices heard and captured on the audio file this was transcribed as T, S1 then S2, etc. Two further categories were identified in the turn-taking analysis, "ALL" and S

READING ALOUD ALL, which were characteristically choral responses by interlocutors as either read aloud (in chorus) and/or where the student/s responded (in chorus) to a teacher prompt or question.

Analysis 4: TOT Utterance Averages

This analysis again involved the final segmented transcripts per teacher. From here, all TOT were isolated and copied into a separate tab in the database. The lines where TOT was recorded, e.g., Lines 3–5 (in the master database) followed by the total word count of the TOT combined, e.g., 158. This was followed by the immediate student utterance directly after TOT. Once all TOT per teacher and direct student responses were entered, teacher and student word counts were averaged using the Excel average tool. The purpose for this close TOT analysis was because the phenomenon required it to be explored in full to be able to establish an accurate interpretation of its impact. If one teacher or student speech act is segmented then recorded as TOT or SOS, each line it occupies in the database will count as an independent turn, although it is essentially one large turn. Given the mixed-method approach to analyses, these "turns" provide vital information and so are deemed appropriate.

Analysis 5: TOT Vignette Analysis

This is the final layer of analysis to support comprehension of TOT and draws specifically on Alexander's (2017) five repertoires of "talk for teaching", included in full below:

- *rote* (teacher-class): the drilling of facts, ideas and routines through repetition.
- *recitation* (teacher–class or teacher–group): the accumulation of knowledge and understanding through questions designed to test or stimulate recall of what had been previously encountered, or to cue pupils to work out the answer from clues provided in the question.
- *instruction/exposition* (teacher–class, teacher–group or teacher–individual): telling the pupil what to do, and/or imparting information, and/or explaining the facts, principles or procedures.
- *discussion* (teacher–class, teacher–group or pupil–pupil): the exchange of ideas with a view to sharing information and solving problems.
- *dialogue* (teacher–class, teacher–group, teacher–pupil, pupil–pupil): achieving common understanding through structured and cumulative questioning and discussion which guide and prompt, reduce choices, minimize risk and error, and expedite "handover" of concepts and principles. (pp. 38–39)

Making sense of the actual TOT using these five typologies of talk further promotes what Alexander claims, that, "All five have their place" but emphasises, "*dialogue*" has "far reaching implications for students, both in their learning now and later as adult members of society"(p. 39). Of importance are the additional indicators published by Alexander (2020) that introduce two additional repertoires, *deliberation* and *argumentation*. These new additions have not been used to understand vignettes of talk in this study but do serve as future markers for analysis post this research. Notably, the essence of Alexander's (2020) additions that sit in his typology framing between *discussion* and *dialogue* are found in the PDIT and explained in full detail next.

Developing the Pacific Dialogic Indicator Tool as an Analytic Framework

Introduction

The newly conceptualised PDIT that recognises a specific culturally sustained communicative practice of Talanoa is explained in detail next.

Much of the following explanation uses excerpts of a published article by the researcher (Oldehaver, 2018). The publisher's approval is found at the start of the thesis.

Very few studies have explicitly addressed the cultural language acts that might underpin a dialogic classroom approach. However, the well-known Oceanic[5] process of Talanoa captures to a large extent what my study was interested in exploring. The foundations for a Pacific model of analysing classroom talk can be found in the conceptualisation of Talanoa (Vaioleti, 2006, 2013, 2016).

Even though each nation in Oceania has its own distinct frame of Talanoa, there are many commonalities to be found. The literal definition is made up of two conceptual parts, "'tala' means to command, tell, relate, and inform, while 'noa' can mean common, of no value, or without exertion" (Vaioleti, 2016, p. 1). This literal definition suggests that Talanoa is informal small talk, therefore not significant, particularly in application within educational settings. However, such an interpretation would undervalue the substantial contribution of the conceptualisation of Talanoa as a culturally located discourse practice, wherein seemingly every day talk contributes to thinking, learning and knowledge building on multiple levels.

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[5] The terms "Pacific" or "Oceanic/Oceania" are used in New Zealand and the Pacific region to describe those island countries or states that fall within the general anthropologic categories of Polynesian, Melanesia and Micronesia, including Australia, New Zealand and Hawai'i

Key intersections between Talanoa and research on classroom discourse practices are apparent in many ways. Talanoa, like teaching, is an approach that is conducted face to face, that requires a high level of skill and recognises the power of talk to bring forth new knowledge. Talanoa, according to Vaioleti (2006), "Is an encounter that will almost always produce a rich mosaic of information. Skilled researchers and their participants can then pick relevant information in order to arrange and weave it into knowledge or solutions relevant to their particular need" (p. 26). Both researcher and participant are positioned as able, ready to take leadership at different stages of the discourse encounter to reach collective goals. This is because, "it is possible to use one or all of the dimensions of Talanoa concurrently depending on how the research develops" (Vaioleti, 2013, p. 204). It could be considered thus that the degree of skill and expertise involved in the Talanoa process, as Vaioleti (2013) proposed, particularly the attention to being able to weave in and out of dimensions for the purpose, goal and audience, is comparable with notions of the teacher as adaptive expert (Darling-Hammond & Baratz-Snowden, 2007). Drawing on a fluid, flexible, interchangeable notion of the Talanoa dimensions offers an understanding of the reciprocity in talk-based pedagogy which is a highly recognised value in a Pacific world view.

Expert Cultural Validation

The development of the reconceptualised analytic tool, I would argue, is necessary to provide a cultural perspective or a cultural lens to look at classroom discourse for and with Pacific students. This then extends the boundaries of established and more Eurocentric discourse traditions of analysis and in a sense is "looking towards the source" (Thaman, 1992, p.10) to offer a generative more culturally appropriate framework. Additionally, Suaalii-Sauni and Fulu-Aiolupotea (2014) suggest that the use of Pacific references and terminology that carry validated cultural value means that there is a prospect for greater relevance and utility that would enable its potential longevity.

The expert cultural validation for this study came from academics and colleagues both in New Zealand and in Tonga. The cultural validation process allowed refinement of the tool to ensure that the integrity of a mostly Tongan indigenous body of work was maintained. This validation process further demanded the researcher undertake the very challenging task of finding synergies, subtle relationships, links and complementary threads across both disciplines, that once woven together would reveal and identify their combined strength. Validation such as this resonates with what L. T Smith (2004) has long signalled as key to developing cultural research tools, that is, to establish communication with those who would

be willing mentors, in critical communities that would seek to share and inform and probe non-Eurocentric and Eurocentric epistemology alongside the novice researcher. In line with this thinking, a caution, noted by Sanga and Reynolds (2017) concerns a discipline required of the Pacific researcher that contends "we benefit from walking forward by looking back carefully" (p. 200). For these reasons, seeking cultural advice from those who have expert knowledge of the Talanoa process worked to contribute a depth of understanding and conceptual rigour as opposed to a mere swapping out of Pacific terms for Eurocentric.

Initial Validation Process

The first cultural validation took place in Tonga in March 2017, where I was given the privilege of informally presenting the developing tool to an audience of respected colleagues, PhD candidates and lecturers from the University of South Pacific, Tonga campus. In essence, the format of the initial validation was indeed a Talanoa and one where I was positioned as both the researcher and learner, as those who understand the Talanoa process as it appears in their world offered their expertise.

On completion of the first iteration of validation (March 2017), audience members reported agreement for the newly conceptualised Talanoa dimensions and shared insight and nuances into how the dimensions interrelate, which could only ever be made explicit during such a validation process. The highlights shared with me led to modifications to strengthen the framework. Additional layers were then added to the developing dimensions reconciling the "Eurocentric" and "Pacific" discourse traditions. Thaman (2014) supports this reworking notion by stating,

> If we were humble, we would see those aspects of our cultures that are "borrowings" from other cultures not as examples of domination but rather of adaptation; and we would see the new creations as examples of meaning making, rather than feeling guilty about our new creations. (p. 2251)

Further Validation

Two further opportunities to check with cultural experts provided an additional layer of validation. An invitation was extended to a small Auckland based, Pacific advisory group who conducted an interrater reliability coding exercise where we reached over 90% agreement. The second was a powerful personal communication with a key cultural expert Taufeʻulungaki (9 November 2017) during an overseas conference. A noteworthy challenge to a specific indicator, that which I had already modified, allowed further refinements to the framework and once again added particular strength where the argument of "cultural

validation" is not only a visible process in this study but cherished as highly valued contributions towards the overall profile of this emerging tool.

Defining the Pacific Dialogic Indicator Tool (PDIT)

Figure 3 provides a visual representation to introduce the dimensions of the newly developed PDIT that uses Talanoa as its foundation. Highlighted in blue are *newly modified* dimensions, arising from the cultural validation processes. All others are the original dimension as sourced from Vaioleti (2006, 2013).

This model has been further developed from the published article (Oldehaver, 2018, p. 29). The kava bowl used in Figure 3 is to acknowledge the cultural significance of *Talanoa fai kava*[6] an original dimension provided by Vaioleti (2006) but removed after the validation process, for the purpose of the coding framework used in this study. I present the six dimensions within the kava bowl itself, elevated and harmonious, ready for further deliberate connection in the Talanoa itself. Representations of the PDIT dimensions in Figure 3 below are shown to;

a) depict the relationships *between* the Talanoa dimensions,

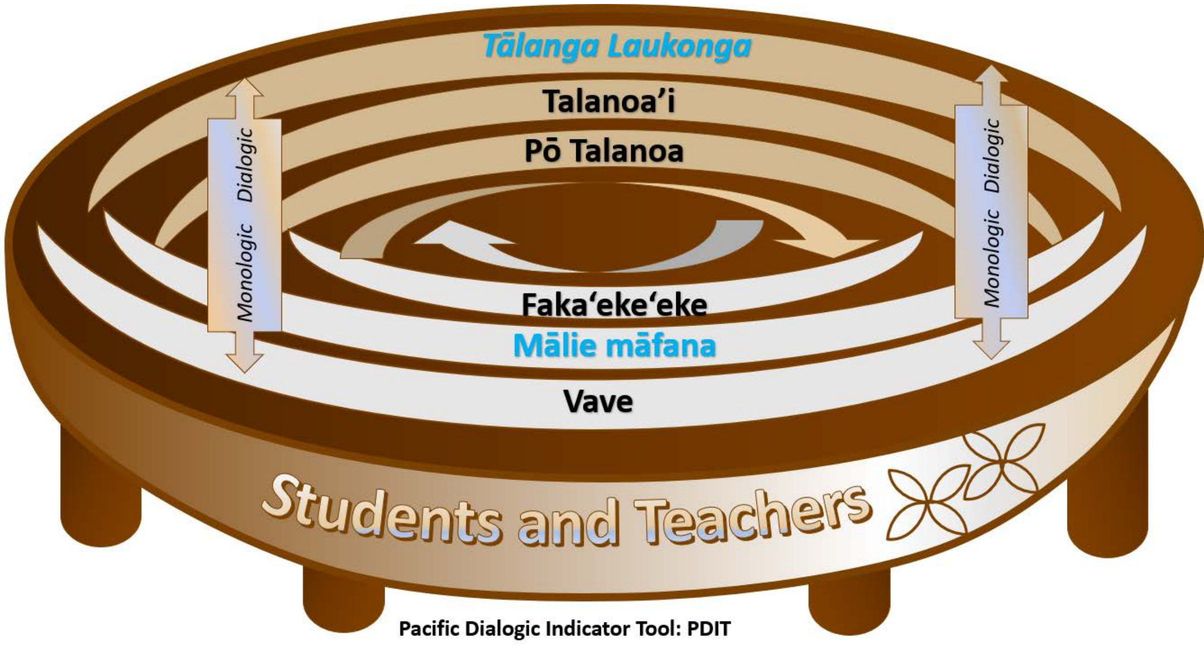
b) signify the service each dimension performs for each other, and

c) represent the reciprocating, recursive dynamic within the classroom and between students and teachers.

[6] A faikava can consist of two or more people in a circle, and the main ingredient shared are kava and talanoa. In faikava, the most senior person of the group monitors and directs the activities of the occasion including the talanoa to maintain a good vā and the group on any task at hand. The use of faikava is a metaphor for a group of shared characteristics; therefore, its use in talanoa is likened to a focus group. In faikava, it is common for one person to speak at a time, and while they speak, everyone actively engages and reflects until it is the next person's time to contribute

Figure 3

The Pacific Dialogic Indicator Tool: A Reconceptualised Framework of Talanoa Dimensions to Analyse and Code Classroom Talk



The dimensions in the model are presented next to a continuum addressing a variety of dialogic purposes along a scale (monologic to dialogic). The model emphasises a pathway mediated through talk by teachers and students, which becomes about the journey not just the final destination (Barnes, 1976). Various Eurocentric "dialogic studies" (Hennessy et al., 2016; Mercer, 2007; Reznitskaya, 2012; Soter et al., 2008; Wilkinson et al., 2017) report wide-ranging versions of analysis frames for coding classroom discourse, from which I have drawn to develop this reconceptualised model. The reconceptualised framework using Talanoa also draws on a similar dialogic indicator tool (DIT) developed by Reznitskaya (2012). This author suggests that use of such a tool with practising teachers allows a rich mosaic of information to be collected and, if followed by collaborative inquiry, "can encourage further reflection about knowledge, authority, language, and learning and, eventually, facilitate the transition to more dialogic instruction" (p. 455). This also speaks to the justification of the design research approach which this study employs.

The six dimensions from Figure 3 are defined and described in ways that provide for usability in the coding and analysis of classroom transcripts that have already been segmented. The notion of the model itself is premised on dimensions as moveable parts, not locked or static. Each of the six reconceptualised dimensions represents a type of talk and thus also draws on

varied Eurocentric coding frames to support how this might appear in discussions in the context of the classroom and explained next.

Vave

Vave, literally translated, means “quick or fast.”

Vave in Talanoa is typically in the greeting and introduction phase, marking the beginning of the discussion. “For researchers it is a way to remind, maintain connection or ensure a shared understanding and lay the foundation for more objectified talanoa, such as faka’eke’eke and talanoa’i at a later stage” (Vaioleti, 2013, p. 200).

Vave has been reconceptualised here then as a quick, recitation-type talk pattern. Mehan (1979) describes this as “initiation-response-evaluation” (IRE), the three-part exchange that is most similar in form and function to vave in the discussion. However, vave should not be considered unimportant and both Eurocentric and Pacific research affirms this notion. The form of the mostly monologic discourse pattern of vave is not necessarily problematic, rather it is the goals and purpose that sit behind these that need to be understood. For example, whilst checking for understanding in a discussion, the form is likely to be vave, the aim is to ensure *mis*understanding is clarified first to then be able to propel and advance the discussion to more dialogic heights. Wells and Arauz (2006) characterise this monologic form as being characteristically “authoritative, not open to question or alternative perspectives” (p. 385). For teachers, what will need to be carefully considered is whether there is prevalence of this dimension in the analysis of classroom transcripts. Close examination is required to disrupt any overuse of one dimension at the expense of utilising another more promising and effective one suited to the learning content and context.

Mālie, Māfana

The second dimension is mālie, māfana, that which can be collectively described to invoke humour and impart feelings of warmth and joy.

This dimension has been modified and replaced “usu” with two additional culturally validated constructs to the original frame proposed by Vaioleti (2013). *Usu* is defined by Vaioleti (2013) as the ability to relate to a particular audience through expertise in humour to relate elements of discussion. Mālie, māfana aligns somewhat with usu more specifically as terms that may invoke feelings of humour, additionally warmth, a sense of euphoria at the thought of entering into a space that enhances learning because of the connections which can be made or the affective engagement of the learner due to content being culturally familiar and

therefore agreeable. Examples of such spaces in classrooms might include storytelling, a song or dance, an event or even reference to movies or online digital artefacts.

Mālie, māfana are framed in the PDIT to capture overall "*connecting*" (and subsequent *disconnecting*) elements in the discussion between the discussants and their social, cultural, historical worlds. Through the process of validation, an addition to this dimension was offered by key experts, that would advance the understanding of the dimension, that of "talatalanoa," or "let's talk some more," which fits best in this part of the framing as it is essentially aligned to the socialisation features that characterise this dimension.

I again "look towards the source" (Thaman, 1992) of the well-established writing around the notion of mālie, māfana, from Manu'atu (2000) to further understand and justify my reason for modifying this Talanoa dimension from its original framing of usu. Manu'atu (2000) writes of mālie in the context of performing arts and more significantly how mālie transcends into learning science. Mālie, māfana are also considered to be "inseparable." Learning, in Manu'atu's (2000) view, "is mālie when it provides insights and challenges students to think clearly" (p. 78). Furthermore, "mālie is experienced when learning is an interaction between students, between students and teachers and among each other, and all that people bring into the learning environment" (p. 78).

This slightly modified dimension, I would argue, is a gap in the existing dialogic literature. Mālie, māfana, I believe, can go some way to reconciling a Pacific world view with the Eurocentric. Whilst dialogic theorists do mention "affective" (Cazden, 2001), the opening of a "dialogic space" and negotiated "ground rules for talk" (Phillipson & Wegerif, 2016), the argument according to the corpus of Pacific literature (Coxon et al., 2002; Fletcher et al., 2008; Hawk et al., 2002;) is that "*connecting*" to the student and their world, values, language practices and identities, and in an educational sense, is fundamental. This is even more necessary in discussion-based pedagogy as "talk" for both teacher and for students is the most exposed edge of enacting the curriculum (Cazden, 2001).

The mālie, māfana dimension highlights the need to *connect the learner* to the learning in the first place, allowing students' culture to not only come through the doors of the classroom but to genuinely transform discussion-based pedagogy, beyond any given discussion and potentially reach across the curriculum. Without such attention to this connecting function, provided in this dimension, there is a high probability of a perceived limited entry into the dialogic space by Pacific students that will therefore impact on the potential interaction.

Mālie, māfana helps to overcome the somewhat traditional, sometimes alien environment of the classroom space for learners. Manu'atu (2000) suggests that "transformation occurs when pedagogy, language, teachers and context are connected and where *mālie* is allowed to move within and across the learning experience towards greater understanding, curiosity and insight" (p. 78).

In line with this thinking, research in the established Eurocentric dialogic traditions suggests,

> any kind of anxiety or pressure before, during and after discussion, blocks the capacity for insight. To make the 'creative leap' students need to be able to relax and let go in order to be able to listen to the voice of the unconscious mind. (Phillipson & Wegerif, 2016, p. 4)

These features offer potential for a positive impact that the practice of mālie, māfana may have in classroom talk if expertly woven into discourse itself.

Faka'eke'eke

The literal translation of this dimension relates to the notion of a question. Vaioleti (2013) defines it in two parts, "Eke implies the act of asking direct questions. Faka means the 'way of' and eke'eke implies verbal searching or even relentless questioning" (p. 201). Faka'eke'eke therefore describes all questions posed by both the teacher and the student.

In a Eurocentric sense there is certainly no shortage of literature on questioning, the criticality of questioning, type, coded, either open-ended or closed in classroom-based discussions (Dillon, 1984; Nystrand et al., 2001, Wolf et al., 2006). Therefore, this dimension identifies all questions in the classroom talk transcripts as either open or closed and highlights the interlocutor who poses the questions. Further analysis considers which type of questions act as a scaffold that invites students to construct and deconstruct thinking and may potentially explain the subsequent shape of discussions overall. Given that faka'eke'eke is aligned to monologic on the continuum found on the PDIT model, does suggest the strategy can only be monologic. However, the surrounding dimensions will be able to capture if the initial invitation through the strategy of faka'eke'eke, either open or closed, allowed participants to respond in ways that could open up the discussion and lead to more dialogic acts; the dimensions of PDIT, thus, are not mutually exclusive.

Pō Talanoa

Pō Talanoa is often described as late-night talks at one's house in the village to discuss important matters of value to the family. "Pō implies night or evening" (Vaioleti, 2016, p. 7). These discussions are vital for establishing connections through *ownership.* Pō talanoa is also

considered in the dimension which allows both parties to be at ease. People come to know, question, find out, hear about, exchange and "become aware of their world and their relationships to it" (Manu'atu, 2002, cited in Vaioleti, 2016, p. 7).

In rethinking this dimension, I have considered that discussions that feature uptake, authority and shift the locus of control to the "student," as opposed to the teacher, exemplify this dimension. This is because pō talanoa links culturally to having a level of such familiarity with both social and cognitive content, allowing greater control over and through the discussion. Pō talanoa elevates and privileges sharing alongside resolution given the relational characteristics that define this dimension (Fa'avae et al., 2016; Manu'atu, 2000; Vaioleti, 2013). This is largely indicated in classroom talk that is led by the students, who hold expertise in content. Such talk invites collective home discourse ideas, interests, practices and language.

Eurocentric frameworks that consider this notion are visible. The way in which pō talanoa is reimagined is linked to what Reninger and Wilkinson (2010) suggest is where discussions in the context of the classroom, illustrate a pattern that includes markers of continuous student-to-student strings, such as, s-s-s-t-s-s-t-s-s-s-s-t-s and are more reflective of "a genuine discussion" (p. 61). This patterning suggests that students are holding the floor for longer uninterrupted periods of time relying on their peers and not solely on the teacher interjection in the discourse. However, notably, the pattern of talk by contrast and "lacking the qualities of discussion looks something like this, '-s-t-s-t-s-t-t-t-s-t-s-t-s-t-s' (p. 61) which is also otherwise known as recitation (Alexander, 2017; Cazden & Beck, 2003) and highlights the presence of the teacher as the lead facilitator of turns.

Talanoa'i

Literally, talanoa'i is understood as a verb. In this dimension, the researcher is not a distant observer but is *active* in the processes and in defining and redefining meanings (Vaioleti, 2013). Halapua (2000) further supports this, suggesting that the process "becomes the mediator between our own worldview and the other's worldview. It provides the opportunity to hear and learn and consider perspectives" (p. 2).

Eurocentric discourse traditions used to reconceptualise talanoa'i come from multiple authors (Alexander, 2006, 2017, 2018; Mercer & Dawes, 2010; Nystrand et al., 2001, Reznitskaya, 2012; Wegerif, 2011, 2013) who similarly argue that talk can be responsive to the voices in the discourse. Talk that is talanoa'i supports elaborated responses, engages others' responses, highlights key prompting for a *single* reason or a *single* elaboration or could involve a level of

feedback to build on. The teacher talk in this dimension is prompting at a level that may further encourage "a dynamic transformation of understanding through interaction" (Nystrand et al., 2001, p. 4).

Tālanga Laukonga

The modified term *tālanga laukonga* is a phrase coined by cultural experts in the validation phase of the study; more specifically, the term suggests an "interconnectedness by way of dialogue" (Johansson-Fua, 2020, p. 52) thus strengthening its use in the PDIT. It is similar in meaning and use to tālanga but explicitly links to "talking about literacy" and could plausibly extend across to multiple learning areas and potentially into the wider home-learning space.

Tālanga is a talanoa process that is "dialogical and involves both the acts of speaking and listening" (Vaioleti, 2016, p. 7). This suggests talanoa and this dimension in particular is a valued cultural language act (albeit from a research perspective) which can therefore reconcile the practice of being more dialogic in classrooms with a Pacific world view.

Tālanga, according to Vaioleti (2013), functions as a process that arms the participants with ways to challenge, by arguing and positioning opposing views (Vaioleti, 2013). Once again, the power of the validation process comes to the fore here. The term *kau'i-talanoa* provided by cultural experts during the validation phase contributes to this dimension and is supported by Vaioleti (2016). Cultural experts explained that the term kau'i-talanoa, means to *join in* the discussion uninvited. Initially, this sounded like a disrespectful language practice that goes against the grain of what good talanoa is, both culturally and historically. However, the opening up of a safe space in the first instance, through the practice of mālie, māfana, may allow for this *joining in* to emphasise a level of critical engagement in and through discussion without losing the flow of the arguments with fellow students and peers. Similarly, Halapua (2000) explains that talanoa is about forming relationships and enabling a degree of respect that allows a critical level of reciprocity. Where reciprocity is concerned, Vaioleti (2006) claims that, "The reciprocity embedded in talanoa will raise the expectations that researchers and participants have of each other, promoting mutual accountability, which adds to the trustworthiness and quality of the research" (p. 26). So, it is argued again that the connections and relationships and shared agreements between interlocutors are pivotal for this dimension to come to fruition in discourse-based pedagogy.

Eurocentric concepts that most closely aligns to tālanga laukonga are: "inquiry dialogue" (Reznitskaya & Wilkinson, 2017) and "collaborative reasoning" (Reznitskaya et al., 2009, Waggoner et al., 1995). These authors suggest that benefits of this level of dialogue are that it

supports higher order thinking, including argument literacy, reasoning and evaluation of positions, which does not simply direct the dialogue towards the perceived "right answers" but that works in the discussion on strengthening the process of multi-layered reasoning and critical stance and truth seeking.

The construct "argumentation" D. Kuhn (1991), also aligns. As reviewed earlier, Nussbaum (2008) notes that argumentation has multiple meanings and dual perspectives and provides the modifier referring to "collaborative argumentation" that encompasses construction and critique in collaboration (p. 348). This elaboration and refining of the construct allowed further connections to tālanga laukonga that privilege interaction and negotiation from multiple voices so that multiple perspectives and meanings may emerge.

Tālanga laukonga encompasses all of these constructs and potentially, through its visible cultural perspective, has the additional benefit of extending such dialogic discussions beyond literacy, beyond curriculum areas, beyond teachers and students in classrooms and into the wider discourse community of the learner. In line with this notion is Oakeshott (1959) who argues that strengthened communicative capability for students has the promise of great academic reach across learning areas and potentially into "the conversation of Mankind" (as cited in Wegerif, 2013 p. 26). Tālanga laukonga seeks to provide these opportunities through equipping interlocutors with skills required to be productive communicators within education and into the wider society. Therefore, getting *better* at knowing how to dialogue at this level is of great benefit for our Pasifika population of learners and their future selves.

To discriminate between these final two dimensions, the key differentiator between talk that is talanoa'i and talk coded tālanga laukonga is that in the latter, teachers' talk is deliberate. The repertoire includes moves that actively seek, invite, open up challenge and counter challenge. Where the discussion may initially begin as a single opportunity (talanoa'i) to engage at this level, multiple, sustained, collaborative opportunities to engage in the discourse become tālanga laukonga.

Talanoa Dimensions, Codes and Coding Categories of PDIT

Table 12 outlines each of the Talanoa dimensions for coding all classroom transcripts collected across the phases of this study.

Table 12

Pacific Dialogic Indicator Tool (PDIT) Coding Categories

Talanoa dimension	Code talk patterns **vave** when:	Coding categories (nested)
vave	Talk by the teacher and student does not extend or elaborate due to the teachers/students closing of the event.	**TV** teacher talk is vave **SV** student talk is vave
Talanoa dimension	Code talk patterns **mālie, māfana** when	Coding categories (nested)
mālie, māfana	*Teacher* is connecting or disconnecting to learner through responsive task/text/space/event/experience *Student* is connecting or disconnecting to task/text/space/event/experience	**TMM+** teacher is telling to connect with reference to at-home practices, family, humour, movies, culture, song, dance, stories **TMMT** teacher is connecting by telling/explaining/repeating direct/explicit reference to the text/task **TMMB** teacher is connecting by telling to give instructions or to modify behaviour **TMMS** teacher is connecting by telling of shared knowledge previously created together **TMM-** teacher is disconnecting **SMM+** student is connected **SMMT** student is connecting by telling ideas about text/task and other text/experiences in own world **SMM-** student is disconnected
Talanoa Dimension	Code talk patterns **faka'eke'eke** when	Coding categories (nested)
faka'eke'eke	*Teacher* poses a question in the discussion *Student* poses a question in the discussion	**TF+** teacher open questions **TF-** teacher closed questions **SF+** student question open **SF-** student question closed
Talanoa Dimension	Code talk patterns **pō talanoa** when	Coding categories
pō talanoa	Student authority in the discussion/locus of control is evident by continuous strings of	**PTS** student to student turns/control

	talk e.g. s-s-s-s (3 or more consecutive turns by the student interlocutor's indicates authority)	
Talanoa Dimension	Code talk patterns **talanoa'i** when	Coding categories (nested)
talanoa'i	*Teacher* talk is active and supports, engages, and prompts for *single* reason, uptake and elaboration *Student* talk illustrates uptake to active prompts by teacher as apprenticed to be attempting for reasoning and elaboration for a *single* time in the discussion	**TC** cumulative talk by teachers and children build on their own and other ideas (single) **TE** teachers prompts for elaboration (single) **TFE** teacher feedback prompts further discussion and it praises the process of reasoning and collaboration, not the right answers (single) **TSS** teacher prompts students (other than current engaged student) to get involved (single) **TTXT** teacher deliberate and active reference to text theme, knowledge, voice (single) **SE** student elaborated (deliberate) response (single) **SFE** student actively responds to teacher feedback **SS** student active in the uptake on another's idea (single) **SS+** student uptake on teachers facilitated prompt to respond (single) to another student **SUTXT** deliberate and active reference to text theme, knowledge, voice (single)
Talanoa Dimension	Code talk patterns **tālanga laukonga** when	Coding categories (nested)
tālanga laukonga	*Teacher* talk is deliberate and dynamic and teacher talk; seeks/facilitates/invites/opens up/challenges/transforms understanding/models then invites truth seeking and is extended.	**TTLP** teacher prompts to take a position (single then multiple) **TTLR** teacher prompts reasoning (single then multiple) to provide evidence (single then multiple) **TTLOP** teacher facilitates take-up of own perspective and provides an

	Talk that is tālanga laukonga is indicated through speech acts by interlocutors that build *multiple* turns in the discussion that sustain for multiple turns overall *and* produce diverse and critical knowledge, thinking and advanced understanding. *Student* talk that is tālanga laukonga, illustrates sustained, dynamic, transformative facility to seek truth, take up challenge, rework initial claims and work in collaboration	opportunity to seek others' perspectives (single then multiple) and chain the perspectives into coherent lines of thinking and enquiry **TTLCC** teacher prompt to provide counterclaims, combining evidence/ using counterclaims to strengthen current claim and position (single then multiple) **TTLCEE** teachers talk prompts elaborated, extended response that provides explicit detail, extension, building on/up of an idea. Extended exploratory talk with a level of co-reasoning and collaboration could include *reasoning markers* such as, because, so, if, I think, agree, disagree, would, could, couldn't why I think, might and maybe **STLP** student takes a position (single then multiple) **STLR** student provides reasoning (single then multiple) provide evidence (single then multiple) **STLOP** student take up own perspective & seeks other perspectives (single then multiple) **STLCC** student provide a counterclaim/s, combining evidence/ using counterclaim/s to strengthen current/own claim and position (single then multiple) **STLCEE** student elaborated, extended response that provides explicit detail, extension, building on/up of an idea. Extended exploratory talk with a level of co-reasoning and collaboration could include *reasoning markers* such as, because, so, if, I think, agree, disagree, would, could, couldn't why I think, might and maybe

Making Classroom Practice Visible Applying PDIT Coding

Finally, all transcripts once segmented and analysed using Analysis Methods 1 to 5 (this chapter) were then coded using the PDIT codes and categories (Table 12). The granularity of the approach is vital as these analyses make highly visible the frequency with which the dimensions are found in each of the teacher's transcripts thus providing key patterns for interpretation. As such, it is important to note once more, that one speech act found in the transcript can achieve multiple nested codes found in dimensions of PDIT. These analyses illustrate that Talanoa sequential structures are enacted and are used (along with prior analyses) to mobilise dialogic principles particularly at the levels of tālanga laukonga, talanoa'i and pō talanoa, though not discounting vave, mālie, māfana and faka'eke'eke. Finally, pivot tables generated graphs and were used to support interpretation of engagement in the dimensions of the developing Talanoa framework. The next chapter reported the results of the three phases of research.

CHAPTER FIVE – RESULTS OF PHASE 1

Chapter Overview

This chapter reports results from *Phase 1*, pre-intervention of the study that profiled existing patterns of classroom talk for teachers and students. The main purpose of this chapter is to explain these patterns of talk in the classroom discussions to further our understanding of how to improve dialogic repertoire of teachers and their Pasifika students. This required an exploration of talk in situ. In order to illustrate the nature of change in classroom talk, the three phased approach employed in the study were appropriate.

With the reader in mind, given the multi-layered findings presented in this chapter, for clarity, *Phase 1* referred to the overall phase of the study and Time1 is used in reference to the designation in the overall timeline of the two *data collection points*, where Time 1 (this chapter) took place pre-intervention. In this chapter all participating teachers have been deidentified and given a random number between 1 to 6 meaning the reporting about teachers were recorded as TCH1, TCH2 etc. You will also notice in this chapter additional detail in the level of explanation within sections which were deemed necessary due to the relative newness of some of the analyses that used the Talanoa dimensions found in Pacific Dialogic Indicator Tool (PDIT). Analyses conducted in this chapter begins to address the research questions concerned with PDIT as a viable tool for coding dialogic repertoires identifiable in *existing* practice.

There are three parts to report findings on. Part 1 reports the mostly quantitative analyses of classroom talk. Using all six teachers' classroom transcripts the quantitative analyses provide frequency of talk turns, total word counts by teacher and student, investigates and explores the nature of the teacher over talk phenomenon and examines the patterns of student rates of response that are limited to one word immediately following over talk by the teacher and frequency of one-word response overall.

Part 2 reports findings that are mostly qualitative by nature of employing the Pacific Dialogic Indicator Tool (PDIT) used to analyse the same transcripts and further provided speech episodes and vignettes to explain the presence of particular dimensions. Whilst findings in Part 1 and 2 of this chapter used a single transcript for each participating teacher, multiple analyses were conducted that focused on providing enough evidence-based discourse practice that would be useful to work through with teachers for the intervention in *Phase 2*.

The final Part 3 of the chapter reports on student and teacher beliefs and perceptions about classroom talk that link explicitly to the findings and patterns that are reported in Part 1 and 2.

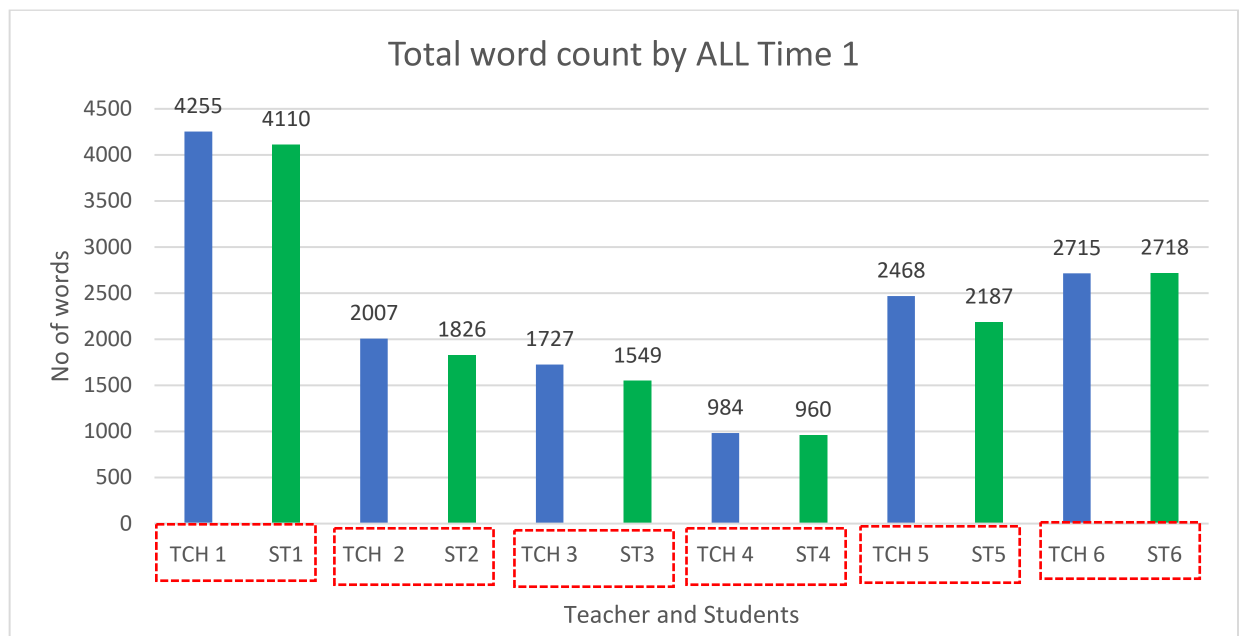
Findings – Part 1 *Quantitative Analysis* of the Pre-intervention Classroom Transcripts

Finding 1. Teachers Speak More Words Than Their Students

In the Time 1 discussions most words in the discourse were spoken by the teacher. In Figure 4 the number of words for each teacher (TCH1-TCH6) is presented next to the number of words spoken by their students combined (ST1-ST6). In each case, except one (TCH6 & ST6), the words spoken by the teacher outnumbered the words spoken by children.

Figure 4

Total Number of Words Spoken By All Teachers and Their Students in Time 1



The distribution of words spoken in Figure 4 revealed contrasts across the different year levels in relation to *volume*. To illuminate, Figure 4 also shows that TCH1 (Year 7 & 8) spoke 4,255 words *and* 3,000 more words in their classroom discussion than TCH4 (New Entrant) teacher who spoke 984 words.

Interestingly, the pattern of words spoken by all teachers (Figure 4) persists regardless of the total numbers of students working in the group with the teacher, for example TCH1 had a whole class discussion with 25 students compared with TCH4 who had a small group discussion that had only five students. Essentially five out of six teachers are “saying” more

than all of their students combined in all lessons. The exception is TCH6 but only by 3 words in favour of the students (ST6).

Finding 2. Evidence of Students Using One-word Utterance Pattern in the Discourse

Whilst numbers of words spoken, as shown in Table 13, shows teachers saying more overall, the pattern of response by student interlocutor, in these same classrooms, showed that their turns were largely made up of responses that contained just one word.

Table 13 shows both teacher and student one-word utterance**s** in each of the Time 1 (N=6) analysed transcripts. In sum, whilst teachers said more words than students, very rarely were teachers recorded as offering only one-word utterances in the discussion, occurring between 1% to 7% of all teacher speech acts. Students however, across 6 classrooms were recorded as responding with one word between 20% to 71% of their overall speech acts. An example, using the data provided in Table 13, would mean that if I am a student working with TCH2 there is a 71% chance that when I do enter the discussion my contribution will constitute one word. These findings do demonstrate talk patterns that are problematic where developing dialogic repertoire are concerned and will require a more expanded view. Analyses in Part 2 explores this notion in greater detail by acknowledging culturally sustaining aspects of discourse through Talanoa.

Table 13

Probability of One-Word Utterances by Teachers and Students at Time 1

Teacher	Total number teacher speech acts	Total number teacher one-word utterances	Converted ratio to percentage one-word utterances	Total number of student speech acts	Total number of student one-word utterances	Converted student ratio to percentage word utterances
TCH1	211	5	1:42 (2%)	115	21	1:5 (20%)
TCH2	102	3	1:34 (3%)	41	29	1:1 (71%)
TCH3	142	1	1:142 (7%)	45	23	1:2 (50%)
TCH4	86	1	1:86 (1%)	55	19	1:3 (33%)
TCH5	162	0	n/a	96	41	1:2(50%)
TCH6	127	3	1:42(2%)	123	59	1:2 (50%)

Finding 3. Turn Taking in each Classroom Also Favour the Teacher

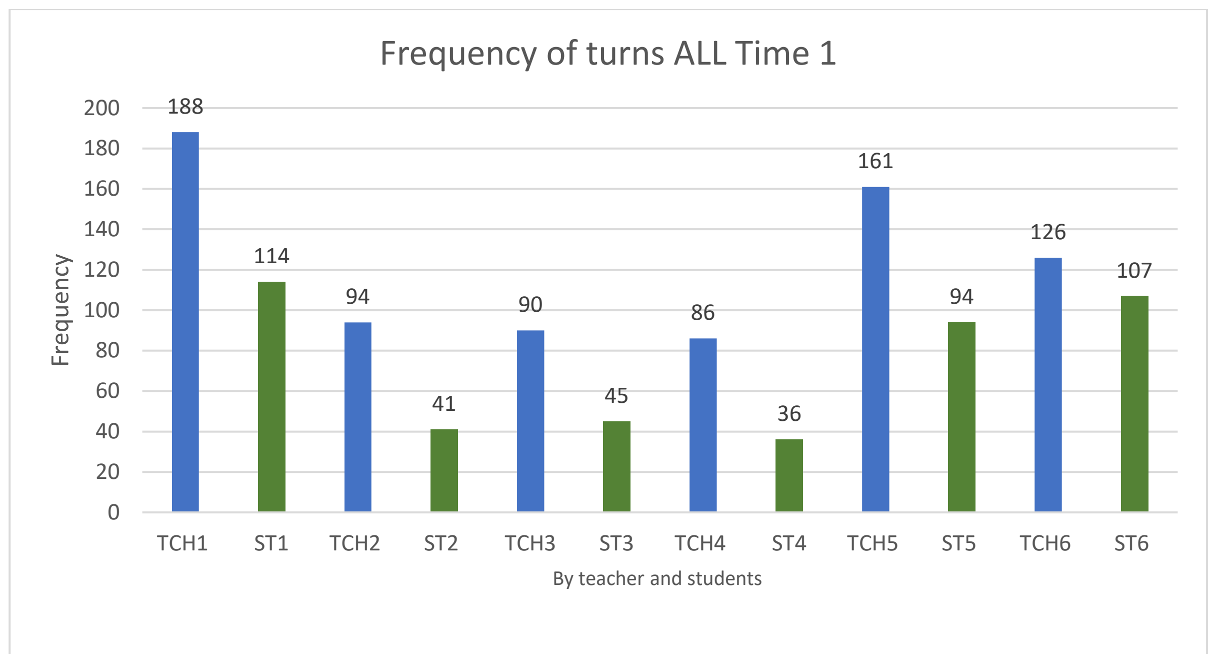
Each of the teacher's (N=6) Time 1 discussion included the *entire* transcript for analysis, including any administration, lesson organisation, interruptions and stoppages. This was

because it was important to highlight in these early discussions exactly how all the instructional talk time in the analysed lesson was utilised and subsequently where there are sections that may take time away from actual learning instruction.

Figure 5 shows the total counts of *talk turns* for each teacher and their students combined for the same Time 1 lesson. On balance the overall ratio of talk turns, teacher to student ranges between approximately 1:2 (TCH2, TCH3 &TCH4) and 1:1 (TCH1, TCH5, TCH6). This means that invitation, by the teacher, into the discussion is occurring and thus a positive foundation. However on closer analysis of the actual "enacted" dialogicity by teacher and by student indicated that whilst a student may be getting a *turn* at talk the talk itself is clipped. Further links to these initial and emerging patterns are explored throughout this chapter.

Figure 5

Frequency of Talk Turns For All Teachers and Their Students in Time 1



Finding 3.1 A Breakdown of Turns by Class Favoured the Teacher and Student Initiators

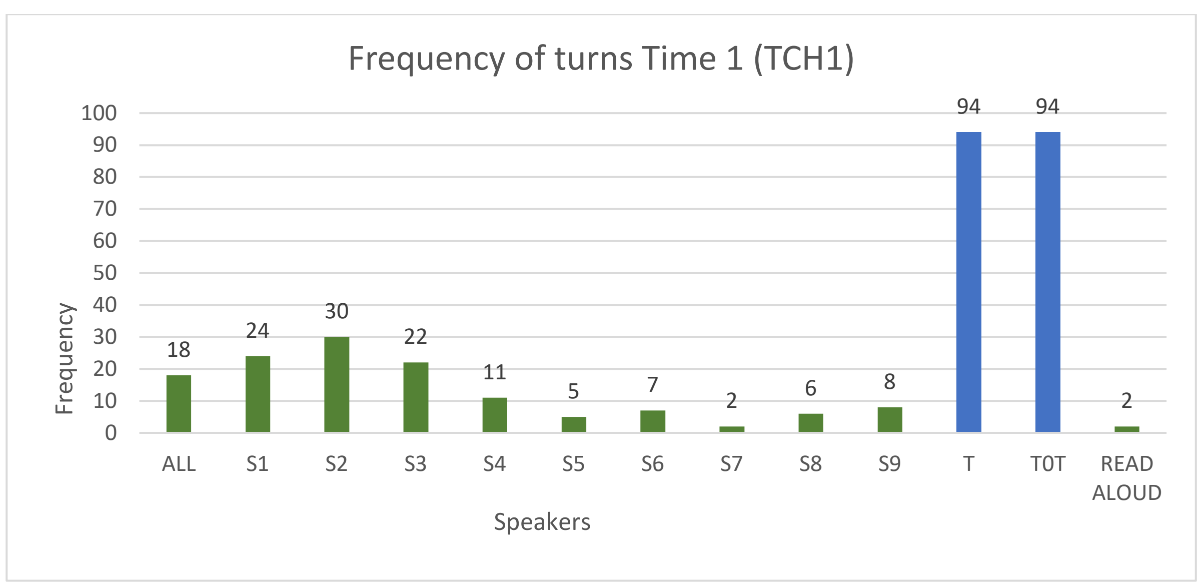
Figure 6 shows the breakdown of "interlocutor turns" for TCH1 and Figure 7 shows the breakdown for TCH4. The selection of TCH1 and TCH4 here was to show contrast of the distribution of turn patterns in a classroom of 5- and 6-year-old learners (TCH4) and a classroom of 11 and 12-year-old learners (TCH1).

With the reader in mind, the following figures included the variables "ALL" and READ ALOUD (if applicable) as they indicate frequency of a whole class choral response. For example, when all students respond in chorus, e.g. "*Yes Mrs Brown*" this is illustrated as

ALL and will be included for further analysis in the coding against the Pacific Dialogic Indicator Tool that follows. When the student/s were reading aloud text or parts of the text used in the discussion this is recorded as **READ ALOUD.** The words spoken in this instance are not ultimately *owned* by the student interlocutor, rather they belong to the author of the text of which the students were *reading aloud* in a choral or round robin manner. Where there were distinctly different voices heard and captured on audio files this was transcribed as S1 then S2, S3 and so on. Names used in all reporting that follows used pseudonyms.

Figure 6

The Number of Raw Turns by Each Interlocutor in the Year 7 & 8 Classroom Discussion in Time 1



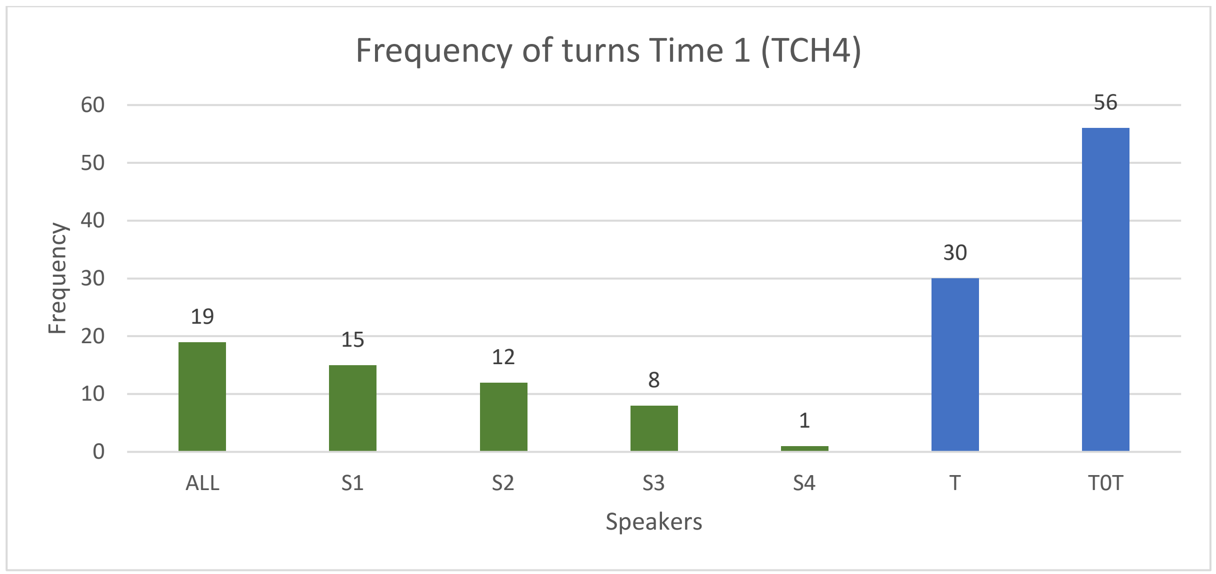
In Figure 6 the transcribed audio discussion was recorded as *whole class lesson*, for TCH1, meaning the teacher addressed the class as a whole (approx. n25) then would systematically "rove" around smaller groups of students and "monitor" the discussion. Reading out loud (round robin) was coded twice (N=2) and linked in the data to Student 1 & Student 7 only. (S1 & S7). There were 18 (ALL) choral responses, where for example it captured all students **finishing off** a sentence the teacher began saying out loud, for example:

T: And I see people are thinking and remember this works is for?

ALL: Everyone

Figure 7

The Number of Raw Turns by Each Interlocutor in the New Entrant Classroom Discussion in Time 1



In Figure 7 and for TCH4 there were 19 choral responses (ALL) of which 10 coded instances of students reading together out loud but in this class it was as a group rather than by the individual.

In both Figures 6 and 7 there are key patterns related to distribution amongst student interlocutors and, more specifically, the high number of turns that occurred for S1 & S2 and to some extent S3. At the same time there are less and less distributed turns for others in the discussion, e.g. S3, S4 and S5 etc. Of significance, despite differences in year levels, schools sites and teachers, the distribution pattern of talk is similar across teachers and their students. This suggests the need for a closer look at those *groupings* for dialogic discussion and then within those groups what opportunities are afforded to productively engage in the talk. What is clear here, however, is that the distribution of talk turns still weighs in favour of the teacher. What is also highly visible in Figures 6 and 7 were the dominant and persistent pattern of the phenomena *teacher over talk* (TOT) which is reported next.

Finding 4. Teacher Over Talk (TOT) Dominates

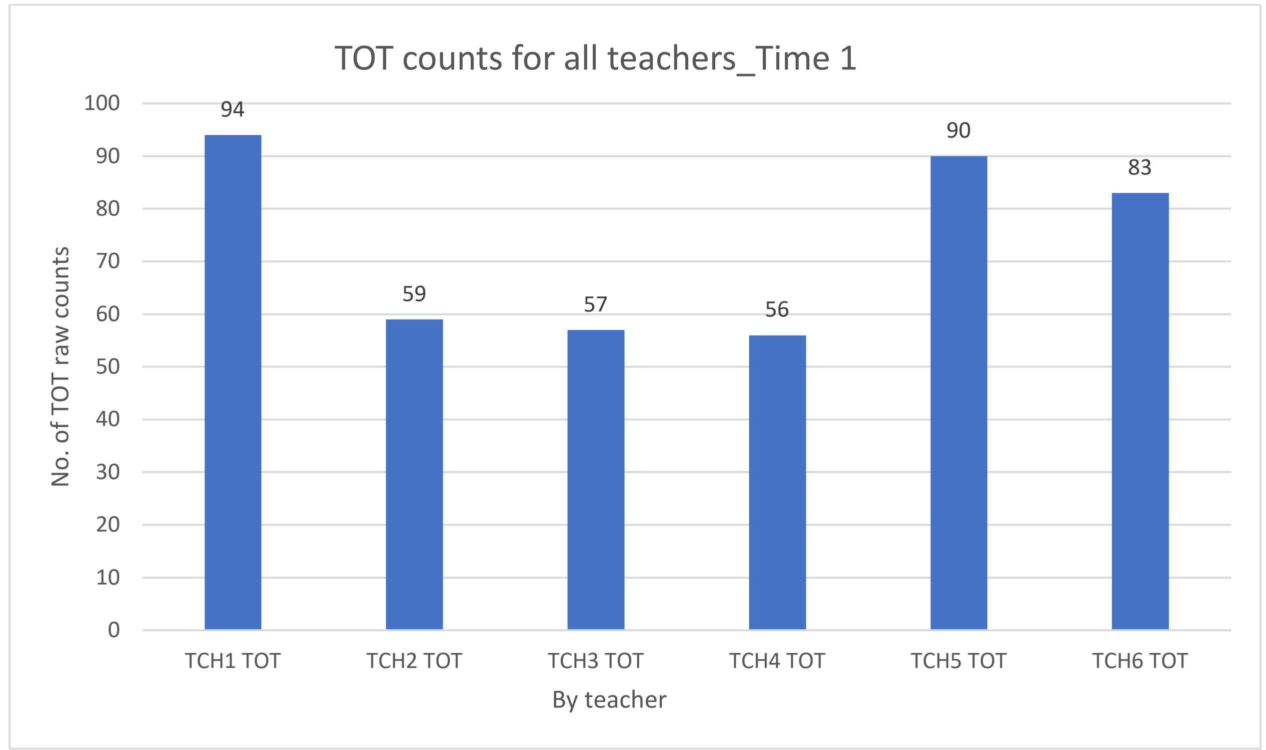
Initial close analysis of the six teacher transcripts indicated a consistent and prevalent phenomena defined here as *teacher over talk* (TOT). To clarify teacher over talk applied when speech acts by an interlocutor required segmenting due to multiple content, functions, questions posed and then finally by turn criterion. Early reading of these transcripts had shown that some teacher speech acts totalled more than 300 words so in order to be able to

code speech acts in both a quantitative (Part 1) and qualitatively (Part 2), criterion-based segmenting were deemed appropriate. (See Methodology chapter)

Figure 8 highlights just how dominant TOT talk patterns were for each of the six teachers in this study. The frequency ranged from an average of 56 instances (TCH4) to 94 instances (TCH1) total.

Figure 8

Total Number of Coded Teacher Over Talk for All Teachers in Time 1



Like the one-word utterance (Table 13), TOT is expressed as a ratio and percentage (Table 14) against the total number of speech acts for the teacher. As shown in Figure 8 TOT during a classroom discussion occurred frequently high. To further exemplify, if I am a student in any of these classrooms (see Table 14), then every second turn (approximately) that the *teache*r had in the discussion was coded as TOT, which by definition will be characteristically, multiple in *content*, and/or where there may be more than *one question* posed in the overly long teacher utterance.

Table 14

Probability of Teacher Over Talk in Classroom Discussion in Time 1

Teacher	Total number of teacher speech acts in discussion	No of times TOT recorded	Ratio of TOT (rounded)
TCH1	211	94	1:2 (44% probability of TOT)
TCH2	102	59	1:1.7 (57% probability of TOT)
TCH3	142	57	1:2.4 (40% probability of TOT)
TCH4	86	56	1:1.5 (65% probability of TOT)
TCH5	162	90	1:1.8 (56% probability of TOT)
TCH6	127	83	1:1/5 (65% probability of TOT)

Finding 5. Student Response Immediately Following Teacher Over Talk Was Constrained

Given that teachers had more turns (Figure 5) and spoke more words overall (Figure 4) it is not surprising that TOT was occurring at such rates. What was necessary given this evidence, was to examine whether TOT can be associated with factors pertaining to limited literacy discourse and thinking and learning at a general level.

The TOT analyses that follows identified trends in the student interlocutor utterances following directly on from TOT. These illustrated limited student discourse interaction almost to the point of *silence*. That is, student response features limited entry or evidence of engaged response which is at odds with the findings on balance of talk ratios but is in line with the findings on one-word utterance. Generally, talk that qualified as TOT occurred at all points in a typical classroom lesson, not necessarily just confined to one part of the discussion (e.g. beginning, middle and/or end) rather these findings point to the overtalk phenomena breaching all parts of the discussion, suggesting its proliferating nature and thus need for closer examination, particularly if student silence is associated with this pattern.

Next I provide some key examples that further characterise this notion of *silence* and provide annotated examples that may explain its construction and persistence. When TOT is not encountered the speech act for the teacher are coded T. These T speech acts indicated relatively uncluttered discourse moves by the teacher in the discussion. Uncluttering the discourse given this evidence thus becomes a key feature of *Phase 2,* the teacher workshop intervention.

Table 15 reports TOT averages and the direct student utterance average immediately after the TOT act. On average the length of utterance, in words for the teacher is significantly longer than that of their students. When looking at this evidence by individual teacher you can see that the difference is more salient for example, TCH2 average TOT utterance length is 77 words to their students average immediate response rate of three words. Whilst saying more does not equate to being more dialogic, the less said in the discourse, particularly by the student highlights the potential cognitive engagement opportunities missed. These TOT speech acts are shown as an average of 57 words *more than* student averages combined as response utterance length.

Table 15

Summary of TOT Averages for all Teachers and Students Immediate Response Averages in Time 1

Speaker	TCH1	TCH2	TCH3	TCH4	TCH5	TCH6	Average
Average TOT utterance length (teacher)	86	77	61	33	46	64	61 words
Average utterance length (student) in response to TOT	8	3	3	2	3	5	4 words

The following vignettes illustrated TOT and are followed by commentary, which detailed how students' limited opportunity to enter the discussion and engage is associated with the type of TOT preceding the student speech act. Alexanders typology of talk, specifically *rote, recitation and instruction/exposition* talk was drawn on here to highlight the characteristics of this prevalent Time 1 TOT pattern for teachers and their Pasifika learners.

Finding 5.1 TOT 1 – Explanation of Tasks

The first, TOT is found in lengthy explanations given by teachers and follows a rote, instruction typology overall.

Vignette Example 1:

The teacher over talk totalled 175 words to the immediate student response at two words.

TCH5 *"Okay for those of you that were away yesterday we've started information reports on invertebrates. Okay now you're gonna have to see someone in your group if you're not too sure what you're doing but we're writing an information report. Some people have started planning it, actually most people have started planning it, that's what we did yesterday okay and today some groups will be looking at their introduction okay and other people might be publishing because some took it home and finished it at home. Yes Ethan. Right for those of you that are going to be working at the tables okay there's a list of things up here that you need to remember for your information report. Okay so it says over here to remember to make sure your title says what you are writing about. Okay now if you were writing about the groups of invertebrates, so if your paragraphs, your sub topics are about spiders, insects and sea creatures okay then your title wouldn't just be invertebrates, it would be called?"*

S *Sub-topics*

Vignette Example 1: Commentary

In the above excerpt (TCH5; Y5 &6) TOT occurs as "recitation" and "exposition." Temporally the stretch of talk is found in the introduction, where such talk may be considered appropriate. However, given the student interlocutor enters only after 176 words by the teacher, to offer only two words which are inaccurate, diminishes this sequence of talk to be characterised solely as "telling." The long stretch is predominantly organisational and features recapping prior learning and instructions about what students need to do and where they will work for the lesson.

Finding 5.2 TOT 2 – Task Organisation and Learning Goals

Aligned with TOT found in over explaining the task, organisational instruction over talk of lesson goals is also prevalent.

Vignette Example 2

The teacher over talk totalled 132 to the immediate student response at 5, an additional 14 words by the teacher and finally 10 words by the student that are largely made up of the first attempted response.

TCH2 *Okay what we're going to do is practice using* ***this image***. *It is that man. Down the side there I've put in some vocabulary for you so you don't have to worry about your spelling I'm not looking at your spelling. What I'm looking at right now is your sentence structure okay the way you've structured your compound sentences but those words are there in case you think how do I spell batman, how do I spell coffee or just in case some of you want to write this how do I spell mochaccino. That's like coffee and chocolate together. You don't have to write that, I just thought I'd be fancy cause I like mochaccinos. Now that bottom one there is diner so diner is the shop that he's sitting in*

S1 *We can go in and (interrupted by Teacher)*

TCH2 *We can go in and have, so I know you're right yep carry on*

S1 *We can go in and eat in the shop*

<u>*Vignette Example 2: Commentary*</u>

In the above episode, support features for students are present mid-way through the lesson. The teacher has provided the topic vocabulary so that this is not a focus of teaching. This pre-teaching of vocabulary is limited however when the teacher names the aim, "*compound sentences."* The teacher is also quick to provide answers which potentially closed genuine enquiry by students in the discussion e.g. *in case some of you want to write this how do I spell mochaccino. That's like coffee and chocolate together.* The question that is asked and then promptly answered as a discourse move by the teacher reduced the opportunity for the child to employ a strategy that would allow them to contribute to figuring this out and thinking it through based on the visual cues the teacher had provided. Whilst the first entry a student offers is promising *"We can go in and* ' an interruption by the teacher is noted before the same child picks up again and completes their response to what a "diner" is.

The limited potential for entry into the discussion is noticeable and any possible dialogic markers are reduced as the goals are very narrow, valuing "doing" over "thinking." This impacted the scope of *learning opportunities through discussion* to sentence structure reducing the advancement of higher order thinking and thus dialogic discussion.

Finding 5.3 TOT 3 – Multiple Requests

A third type of TOT was found when teachers requested multiple items at once with no opportunities for interlocutors to enter directly after the teachers' requests in the discussion.

<u>Vignette Example 3</u>

The teacher over talk totalled 178 words to the immediate student response at one word

TCH6 *Opinion right an opinion alright who's sitting up ready for me to go? So you've got your Oreo recipe (pause) now I'm going to take a very simple example and again I'm finishing, I started with role plays and part of your self-assessing is I'm finishing the role plays and then I'm gonna let you tell me where you think you are. Now we know our opinion, we know our reason, we know our examples etc. Who feels that they could quite easily go and use the oreo recipe now? Let's have a look. Hands down. Who feels as if they have some understanding of the oreo recipe? Alright can I stop for a moment? And we're under way. What I want to do now is for you to have a quiet think. There's two things I want to do. I want to finish the role plays but I want you to have a quiet think about when or where you would use this sort of writing. We do use this sort of thing in real life, Missy.*

S: Persuade

<u>Vignette Example 3: Commentary</u>

The above vignette shows teacher talk linked to evaluative notions where the teacher informs students that they will need to *think about* where they are in terms of a self-assessment task that was to come. However, it is buried in talk that seeks response to multiple content, functions and questions. There is a link in the discourse to the big question or frame OREO (opinion, reason, evidence, opinion) and to real-life authentic use of where this framing might be used that links to home practices. However, there is little in the context of this excerpt that would suggest that it was geared towards knowledge building, rather it was mostly designed to test or recall and is in in lined with feature of TOT with multiple messages that do not necessarily cue pupil uptake.

What is problematic from the receiver's perspective is the multiplicity of functions, via discourse requests made of the learner by the teacher. One of the issues with this excerpt is the fact that it remains in the opinion phase only (O in the oreo recipe) and there seems to be no extended content that could prompt discussion towards the goal, meaning the stance of the utterance was monologic in and of itself. Observer notes further point to the fact that this lesson was conducted as a whole class, in a large circle format which may explain the

stoppage (line 7) for behaviour modification by this teacher due the time on the mat and size of group for learning.

Finally, the utterance directly following the TOT seemed to be one of confusion for the student e.g. “Persuade.” Whilst not wishing to suggest that these learners were unable to handle TOT what this deeper level analysis and findings aims to do is make sense of how the teacher’s dialogic repertoire could be increased that would have a more positive impact on student dialogic repertoire. These TOT analyses confirm that a closer look at one’s own talk (Phase 2) will be the most optimal place to start. For teachers these episodes reported here will help to shape a better understanding of how to plan to support productive dialogues during literacy time in line with Alexander’s (2006) dialogic teaching principles, “purposeful” and “cumulative” talk for learning.

Finding 5.4 TOT 4 – Plenary

The plenary typically occurs at the end of the lesson as a way of wrapping up the learning before students carry out follow up work independently. The following vignette features TOT again linked to the notion of student silence in the discourse and where the plenary is captured and can be generally linked with a recitation and instruction typology of teacher talk.

<u>Vignette Example 4</u>

The teacher over talk totalled 327 words to the immediate student response at five words

TCH1 *Okay and looking this way [class], I think the others are back oh we’ve got a lot more information, a lot more thinking because of those questions so just from looking at the photo we got some information, having a read of the story starter we got a little bit more information and a little bit more to think about, then from your discussion or your talking to a partner or just talking in a group there was a lot more ideas or more information that you grabbed from there okay. So just as usual with our pobble this will be what we write about and we’re not going to do the sentence challenge, we’ll have a look at this later on. Here could be some good ways to start your story. The man he would walk thousands of miles guarded the eggs with his life – okay so we’ve got that back story already so this could be how you start your story alright or the next one these actually could run one after the other in sequence, the eggs he had found in the cave were beginning to hatch OR you don’t even need to start with that if you came up with your own back story to this photo here you could find your own way to start this story and tell the story about what this could possibly be about. So your next task after all this discussion, talking and thinking is to go away and you tell the*

story about what this photo is about and get, as usual I'll give you a copy of this photo to put into your books so that we've got something to refer back to okay so leave that little space for that photo. Okay so it's time to do a bit of writing. Done a lot of thinking, done a lot of talking. In your literacy books. Any questions before we send you off?

S: *Except for the man's name*

T: *You can give him a name*

S: *Do we have to write down all the answers?*

T: *No don't write down all the answers, it's for you to think about, thinking more about what the story could be about, the back story. Okay no more questions? Off you go.*

<u>Vignette Example 4: Commentary</u>

The plenary plays a part in the traditional shape of the literacy lesson and seeks to "wrap up" the main points with students before setting off to do a follow up task. The above vignette illustrated many key dialogical aspects, for example, *"so just from looking at the photo we got some information, having a read of the story starter we got a little bit more information and a little bit more to think about, then from your discussion or your talking to a partner or just talking in a group there was a lot more ideas or more information that you grabbed from there okay."* however, these are conducted by the teacher only in a stretch of talk that is in fact 330 words in length. The plenary, sees this teacher hold the floor and instruct and review the multiple ideas and thoughts established in the lesson itself.

The student responses immediately following TOT defaulted to a surface level cue that linked to the work they were to do independently. Also interesting is how the teacher proposes that now after all of the talk that the real work e.g. "writing" can now be done essentially devaluing the ideas generated in discussion to what is actually valued, the written work.

Finding 5.5 TOT 5 – Authoritative Teacher Modelling

<u>Vignette Example 5</u>

The teacher over talk totalled 208 words to the immediate student response at one word.

TCH3 *Yes you did write them in your book and right Eve I'm gonna read yours out. Okay listen and alright right where did you alright and here's some ideas from Eve. Alright that Carol and Eve worked on together and I'm going to choose a little piece that we can maybe put into a sentence because today we want to be focusing on writing sentences from the notes, here's the notes by using connectives to join those ideas together. Animals make trees their*

home, some nights rain forests can be canopies provides rich food for animals. Oh there's 2 ideas there I could put together and so and I think I will take this one here, animals make trees their home. Alright animals make trees, right that should be, oh look at me. Thanks I wanted to put an S there. Animals makes trees their home and the other I wanted cause it goes together was provides rich food. So there's the two ideas and I want to put them into one sentence so I'm thinking to myself animals make trees their home and provides rich food. Now what word, how could we put this into a sentence? Or do you want me to give you an example?

S *Example*

Vignette Example 5: Commentary

The above excerpt highlights again long stretches of TOT 208 words in length, that whilst has some cognitive promise, for examples of teacher think aloud "*Oh there's 2 ideas there I could put together and so and I think I will take this one here, animals make trees their home"* which is a form of modelling of metacognitive activity. There is little evidence that this stretch did in fact engage the students in contributing to their learning, rather the TOT here is "authoritative" and models only what the teacher is thinking with limited opportunities for uptake by the students.

Furthermore, after the long stretch of talk the teacher asks for help to enact the model think aloud however it was to create a sentence with ideas generated by the teacher. The communicative response by the student was an appeal for the teacher to give the "example," meaning the think aloud reduces to *pseudo teacher modelling* overall given the student clearly deferred back to the teacher. Interestingly, the observer notes recorded that the teacher provided a single A3 text to engage students in the above discussion. However, the potential voice the text could offer, was limited. This was due to the extent with which the teacher controlled and had authority over the text itself observed as a single pen used, held by the teacher, for the duration of the lesson illustrating further the teacher's authority to underline key words also.

Finding 5.6 TOT 6 – Teacher and Students' Circling

The excerpt of talk that follows is an elaborated, creative and interesting "*student*" response in contrast to the responses reported above. Whilst the following episode cannot be specifically linked to a notion of silence, the example shows constrained engagement shown in Line 59 of the overall transcript. That is, whilst it is characteristically elaborated, and begins to achieve

Alexander's fifth typology, dialogue, it is a finding termed here as "circling," due to the fact that the same student contributed a very similar response earlier on in the transcript at Line 38. (See below).

<u>Example from Student 1 in TCH1 class discussion (Line 59 after TOT)</u>

S1: "A man and he came from Solomon Islands and he came to get those eggs and inside those eggs are gems and there are 6 gems and there's a secret mountain. If he installs all those eggs um gems inside the um mountain it will create a woman that gives the power of life"

<u>Example from Student 1 in TCH 1 class discussion (Line 38)</u>

S1 In this story there is a man he is a pilot and came from Solomon Islands and um he came to get those eggs because inside there is little gems when um they are installed into a secret mountain it um creates this women and she gives the power of life.

If the aims are to genuinely build on and up from within these discussions, then these above excerpts, indicate this to be more a case of repetition by the student manifested by "circling." Except for a few words, it is clear to see that there is very little difference in this student's contribution. Circling shown here had an adverse effect on the discussion that reduced the sequence by the student that did not advance their original creative response from Line 38 to Line 59.

Summary

The evidence provided in Part 1 featured TOT, a high probability of student one-word utterances, unequal distribution of turns in the discussion and highlighted a discourse of silence from student interlocutors, all of which constrained potential for a more varied and dialogic talk repertoire.

The overall Part 1 analyses framed in brief (mostly quantitative) our understanding of initial talk patterns and are used next to connect to outcomes in a more nuanced way particularly where these Part 1 patterns may be further explained and or augmented using a mostly qualitative approach through Talanoa.

Findings – Part 2 *Qualitative Analysis* of the Pre-intervention Classroom Transcripts

Introduction to Findings Using Talanoa (Qualitative)

The findings reported next employed the newly reconceptualised Pacific Dialogic Indicator Tool (known hereafter as PDIT). The PDIT analyses were central to this study particularly given the tool was designed to be in service and support of teachers and their Pasifika students discourse behaviours. The PDIT analyses were used to elaborate on and add value to the quantitative analyses conducted in Part 1.

The analyses that follow were used to make visible the enacted quality of speech acts, in situ, that used a Pacific specific lens, founded in the cultural practice of Talanoa. Given the unit of analysis included both teachers and student's speech acts/utterance, provided highly visible patterns of talk linked to the PDIT dimensions. These processes enabled further specific patterns to emerge and are reported in detail next.

Overall Patterns of Talanoa

The Talanoa dimensions overall identified types of discourse in the classroom that are recognised by Pasifika concepts. The same exact Time 1 discussion transcripts from Part 1 are used in Part 2. The reporting that follows takes the analyses carried out through quantitative approaches and begins to provide a richer, more culturally specific framing to better conceive of previous analyses in Part 1. The analyses that follow are shown to be complementary thus affirming of the quantitative reports as accurate findings and provided a lever to then extended the analyses to provide a new lens with which to look at how teachers and their Pasifika leaners are enacting and engaged in discursive practice in the classroom. The following findings also promoted Talanoa as a distinct discourse repertoire, which recognises cultural language orientations and provided the opportunity for sense-making processes that follow in *Phase 2*. In doing so has allowed a much richer and equally sophisticated approach to conceiving previous quantitative analyses reported in Part 1 of this chapter.

Figure 9 displays the Time 1 overall percentages of the Talanoa dimensions applied that used the same exact single transcript for each of the six teachers and their students combined. (see Table 12 for the PDIT codes and categories)

Figure 9 shows that five of the six teachers engaged in the dimension *Vave* the most, the exception being TCH1. *Vave* occurred in the Time 1 discussions between 39% and 72% overall.

The presence of *Mālie, māfana* (connecting principle) occurred between 28% and 50% overall.

Faka'eke'eke (questions) is shown to be engaged in all six discussions and occurred between 21% and 37%.

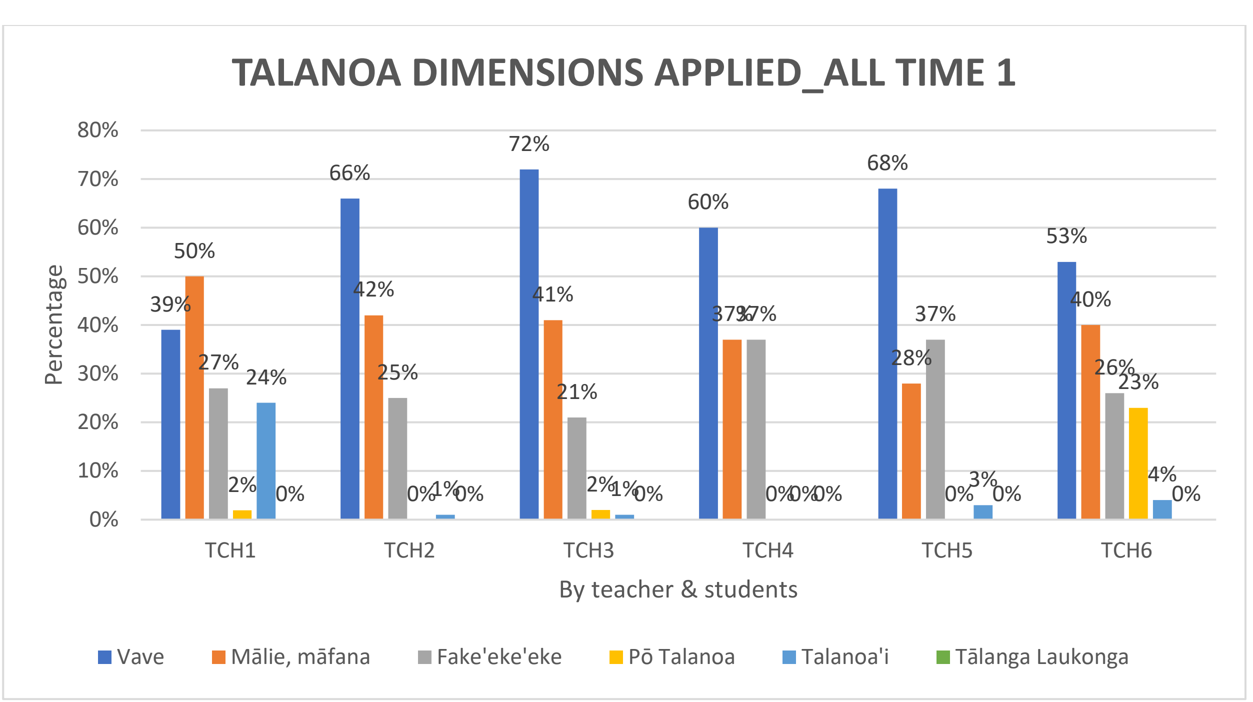
Pō Talanoa (connection through ownership) was less visible across the six teachers' discussion and occurred for only three out of the six classroom discussions and only between 2% to 23%.

The *Talanoa'i* dimensions were present in only two of the six teachers' classroom transcripts and like *Pō Talanoa* occurred at a low average rate of between 3% to 24%.

No teachers' Timepoint 1 transcripts engaged the final PDIT dimension of *Tālanga Laukonga.*

Figure 9

Distribution Percentage of the Overall Talanoa Patterns for All Teachers and Their Students in Time 1

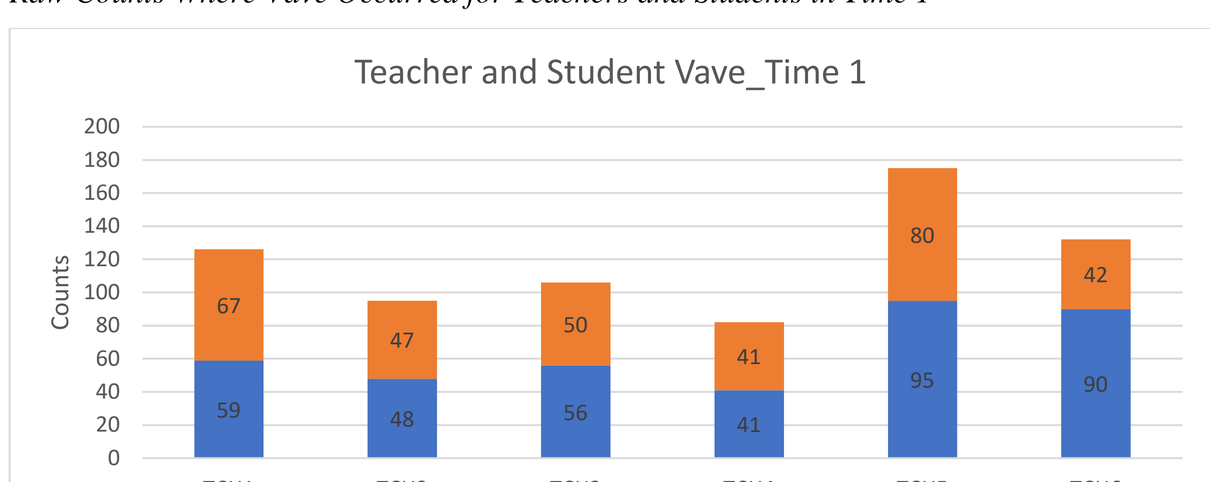


Detailing Time 1 teacher and student Vave repertoire

Vave highlights the prevalence of short, recitation type talk exchanges. Figure 10 reveals high frequencies for both the teacher (TV) and students (SV). Transcript examples of these coded instances of vave patterns are also reported below. These data are aligned with the one-word utterance found in Part 1 (this chapter).

Figure 10

Raw Counts Where Vave Occurred for Teachers and Students in Time 1



Finding 1. Vave Is Expressed As Brief, Clipped Engagement in the Discourse

Speech acts that achieved vave are seen here as very brief talk patterns that are similar to IRE patterning e.g. Teacher initiates an exchange with a known answer question or prompt, student responds in a clipped manner and the circle is closed by the final evaluative statement by the teacher. Examples of vave in Table 16 illustrate the uniqueness of the coding dimensions used for reporting. Meaning the first speech act by the teacher "What breathe fire?" achieves multiple codes it is both vave and in this case faka'eke'eke (closed question).

Table 16

Example of Coded Vave in the Transcript of TCH1 in Time 1

Speaker	Speech act	Talanoa coding applied
TCH1	What breathe fire?	TV/TF-
S1	The dragons	SV
TCH1	Yep ok	TV
S1	Cause dragons live in caves	SS (S1 built on from their initial clipped response)
TCH1	It could be yep	TV

Similarly, in Table 17, one speech act applied to three coding categories. For example, TCH2: *"Subject, well done Toni, yep so it has a subject what else? Oh someone said it but I need a quiet hand. Yep?"* This line was coded both vave and mālie, māfana for connecting principles of feedback (albeit evaluative) "*well done Toni*" and fake'eke'eke, a question. Questions

posed in this excerpt, however, illustrate a tightly controlled question, answer sequence that closes further discourse entry for interlocutors and thus vave is achieved.

Finally, bidding and nomination features in this teacher's speech acts illustrated the missed opportunity for dialogic flow that could have occurred though due to interruption by this teaching e.g. "need a quiet hand" thus aptly coded vave.

Table 17

Example of Coded Vave in the Transcript of TCH2 in Time 1

Speaker	Speech act	Talanoa coding applied
TCH2	Subject, well done Toni, yep so it has a subject what else? Oh someone said it but I need a quiet hand. Yep?	TV/TF-
S1	Verb (one-word response)	SV
TCH2	A verb, good boy Zane, so it has a subject and a verb. What else does a sentence have?	TV evaluative feedback) TF-
S2	Settings?	SV (student intonation in voice appeals to the teacher)
TCH2	Not a setting darling, that would be in orientation	TV

In Table 18 the sequence follows a pattern that reveals the responses offered by the student were not in fact what was in the teacher's head, meaning multiple vave interchanges that even after 7 more vave exchanges did not resolve itself.

Table 18

Example of Coded Vave in the Transcript of TCH 3 in Time 1

Speaker	Speech act	Talanoa coding applied
TCH3	Okay alright could be and what do you think connect might mean?	TF-
S1	Connect to the topic	SV
TCH3	To the topic. What do you think connect might mean?	TV/TF-
S2	Like the same meanings	SV (confusion)
TCH3	That's synonyms	TV

S3	The time connectors	SV
TCH3	That's part of it	TV (not the answer in my head sequence and 7 more TV/SV followed)

For TCH4 (Table 19) the talk sequence is a typical question answer example where the teacher provided limited evaluative feedback and instruction and the student uttered a short clipped reply.

Table 19

Example of Coded Vave in the Transcript of TCH4 in Time 1

Speaker	Speech act	Talanoa coding applied
TCH4	What's that?	TV/TF-
S1	A sandal	SV
TCH4	A sandal well done Are you still reading that? Where's the first part of the story William?	TV/TMMT/TF-

For TCH5 (Table 20) there is an initial invitation for activation of prior knowledge, however the discussion quickly reverts to vave in the following exchanges, by the teacher/student and due to clipped, unelaborated responses. Researcher notes recorded on the lesson also associate the exchange with the teacher's tight control through ownership of the recording materials which overall limited access for the students to the actively document their thinking and ideas in order to refer to, within and through the discussion.

Table 20

Example of Coded Vave in the Transcript of TCH5 in Time 1

Speaker	Speech act	Talanoa coding applied
TCH5	Actually before we do that what do you know about invertebrates?	TF+ (initiates prior knowledge activation APK)
S1	They are small	SV
TCH5	Okay so invertebrates…	TV
S2	Don't have backbones	SV (student finishing off)
TCH5	Okay don't have backbones, small – what else?	TV/TF-
S1	They hide	SV

The round robin question and answer moves in Table 21 that achieved vave are illustrative not only as recitation here, but noticeably the observer notes highlighted that there were no use of texts or charts or even the **OREO** frame referred to by TCH6 in this discussion.

Table 21

Example of Coded Vave in the Transcript of TCH6 in Time 1

Speaker	Speech Act	Talanoa coding applied
TCH6	That's right and then what was the R?	TF-
S1	Reason (one word)	SV
TCH6	Reason that's right and then what was the E?	TV/TF- (teacher is leading)
S2	Example	SV (one word)

Summary of Vave

The one-word response from students in the above episodes of vave**,** are linked to the notion "*discourse of silence*" (Part 1). Interestingly, vave (IRE patterning) is a recognised pattern in Pasifika talk, and subsequently does have a role to play in classroom discussion. However, it is significant that vave is highly represented across all teachers' Time 1 transcripts, thus problematic in relation to the aim of improved dialogic repertoire or rather achieving tālanga laukonga (dialogic) patterns of talk.

To sum up, what has been indicated so far is that talk coded using PDIT in Time 1, took the form, predominantly, of vave with TCH1 as the exception. This among other findings reported in this chapter will be used to drive *Phase 2*, with the key aim of understanding how and why certain Talanoa dimensions occurred in classroom talk as often (or not) as they did. The goal will be to support teachers to think about what aspects in their current talk repertoire and in their approach to planning and design, potentially engages more productive elements of Talanoa.

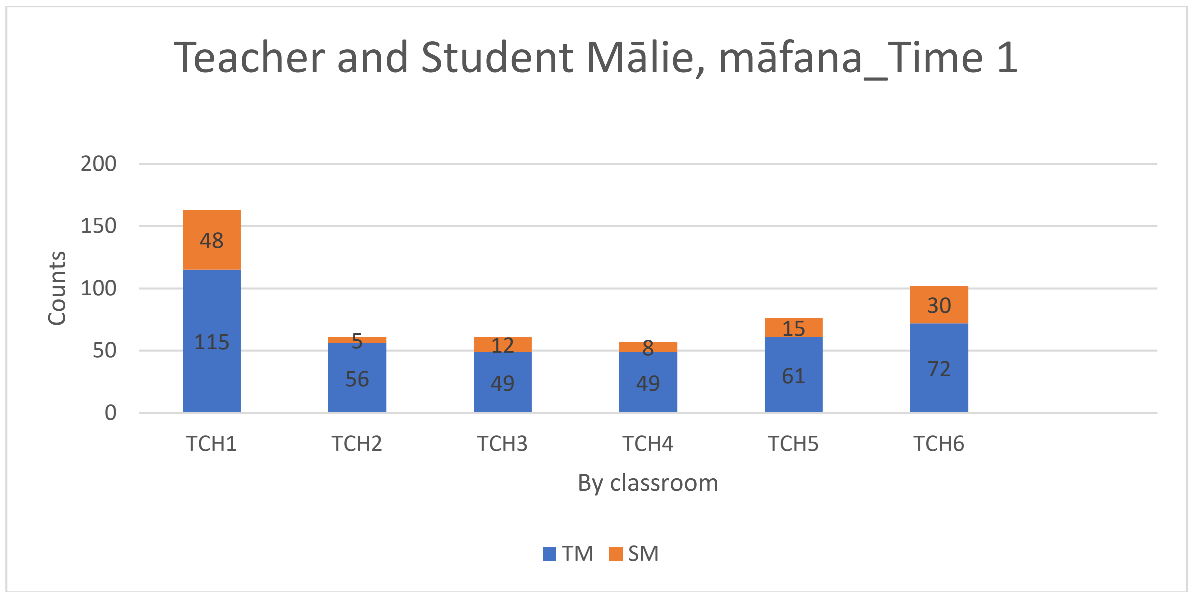
Detailing Time 1 Teacher and Student Mālie Māfana Repertoire

Mālie māfana represented the ways in which teacher and students connected to aspects of, time, space, text, task, behaviours, humour and culture in the discussion. Figure 11 illustrates the high overall percentage of mālie māfana appearing in the Time 1 transcripts. For TCH1, mālie māfana occurred as their highest dimension and for TCH5 mālie, māfana occurred as their third highest dimension. For TCH2, TCH3 and TCH6 mālie, māfana occurred as their second highest dimension after Vave.

Figure 11 shows both teacher (TM) and student (SM) mālie māfana frequency counts. What this highlighted was that all *students' discourse engaged* this dimension though not with the same frequency of their teachers and across classrooms the range this occurred for teachers was between 49 times to 115 times and for students between 5 times to 48 times in the Time 1 discussion.

Figure 11

Raw Counts Where Mālie, Māfana Occurred for All Teachers and Students in Time 1



Finding 2. Mālie, Māfana Reflects Connection at Varied Levels

Whilst the above figure was useful as an overall snapshot of mālie māfana, it is the *nested coding* within each Talanoa dimension that added important details that is reported next. In Figure 12 and 13, two nested codes, specifically, *TMMT & SMMT* (connecting in the Talanoa by the teacher or student by telling, repeating, single reference to *text*, single reference to *task*) are the most frequent.

Figure 12

Mālie Māfana Nested Coding Distribution for TCH4 and Students in Their Time 1 Discussion

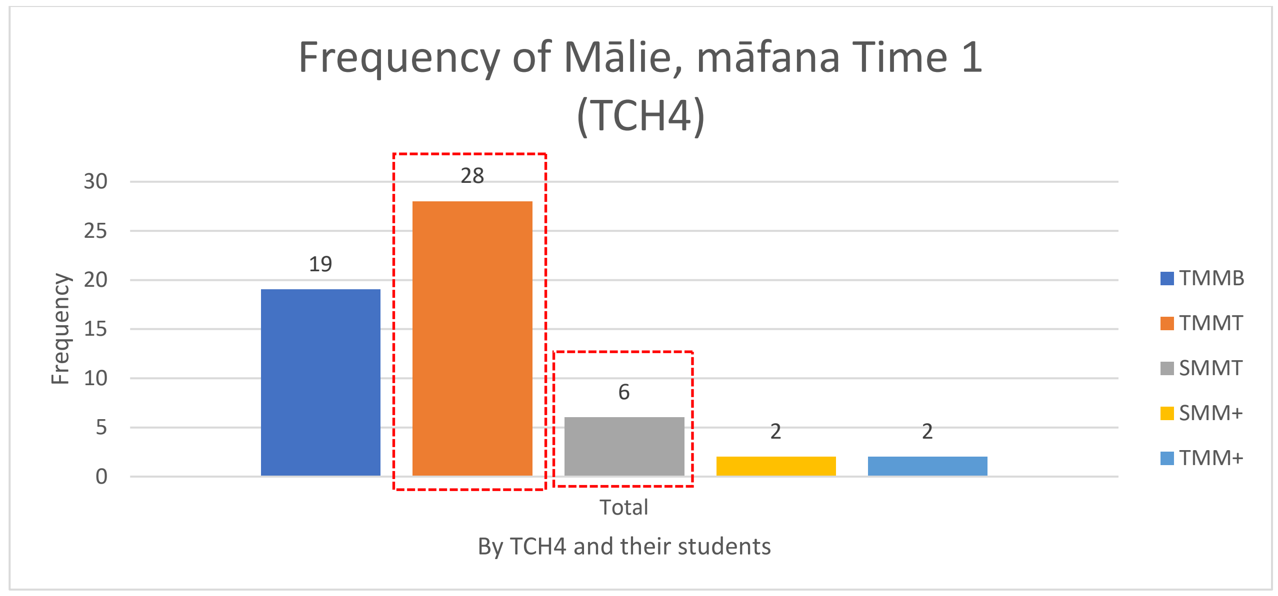
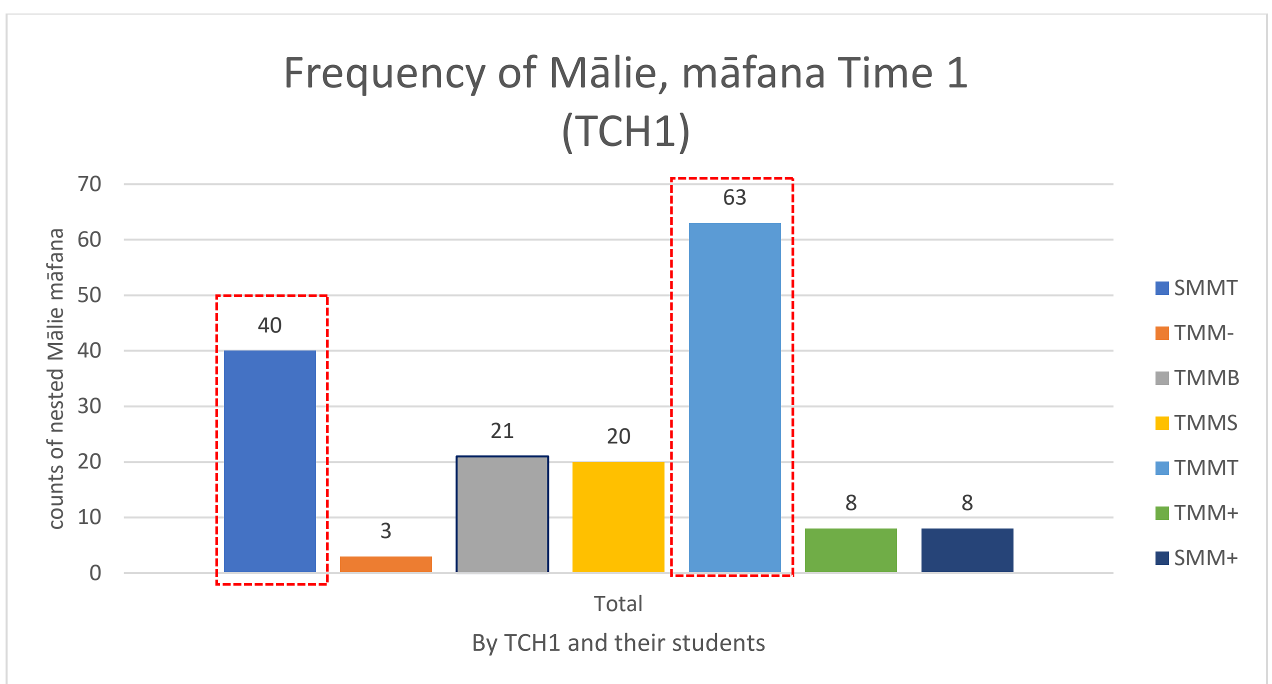


Figure 13

Mālie Māfana Nested Coding Distribution for TCH1 and Students in Their Time 1 Discussion



By way of contrast, TMMT occurred 28 times for TCH4 and their students' SMMT occurred 6 times (see Figure 12). For TCH1, TMMT occurred 63 times and their students 40 (see Figure 13). The decision to choose these two teachers to report here was to illustrate two different year levels. TCH1 worked with Year 7 to 8 (11–12-year-olds) and TCH4 worked with New Entrant (5–6-year-olds).

TCH1 engaged in more of the *nested principles* in this dimension than TCH4. These dimensions identified patterns of talk that link a singular connection to the text or the task in the lesson. Given that the focus is on talk in literacy it would be common to see a text and or artefact used and referenced in some manner, the evidence is no different in this section except to say that teachers are engaging more of this dimension even at the nested levels.

Connecting learners to the lesson through text and task is a difficult feat and where text is absent this becomes even more difficult as connecting then would be linked to student recall of such. The essence of the nested principles in the mālie, māfana dimension better outlines how these codes occurred or not as the case may be. The rationale provided by Vaioleti (2012) argued that being expert in mobilising all Talanoa dimensions begins to signify the service of each, for example, mālie māfana, and its relationship with and connections to other Talanoa dimensions which will produce more dialogic elements.

Example of connecting to texts (TMMT):

The examples in Table 22 refer learners to the actual texts/artefacts used in the task and linked to the overall aim of the lesson.

TCH1's example below illustrates a "noticing" discourse strategy through use of a visual text that required high-level cognitive engagement of these learners. TCH4 (New Entrant; 5–6-year-olds) and TCH5 (Year 5 & 6, 10–11-year-olds) reference text and learning artefacts in Table 22, but at a very surface level that illustrated lower level cognitive response. Contrasting the degrees by which this dimension is characterised is important as we begin to shape our understanding of the role that talk, texts and task play in the discussion.

Table 22

Examples of Coded TMMT in the Transcript of TCH1 and TCH4 and TCH5 in Time 1

Speaker	Speech act	Talanoa coding applied
TCH1	So same thing, have a look at this image, don't talk. What I want you to do first is really notice, oh you might want to turn off the light to make it a little bit clearer. What do you notice in this photo?	TMMT/TF+

TCH4	Okay let's read our sentence together one more time. Can you point to the word When you read it?	TMMT/TF-
TCH5	Okay now what? Choose from our list of things that we've got there. Information – what comes next?	TF+/TMMT/TMMS

Example of connecting to task (also coded TMMT)

Similarly TMMT examples in Table 23 are also used to code references to the actual task in the discussion and which can be seen in varying degrees of this discourse feature but allows a clearer insight into how the instructional time is being utilised and possibly give rise to alternative approaches in the discussion. Examples from TCH6 (Year 3 & 4; 7– 8-year-olds) and TCH2 (Year 4 & 5, 9–10-year-olds) are included in Table 23.

Table 23

Examples of Coded TMMT in the Transcript of TCH6 and TCH2 in Time 1

Speaker	Speech act	Talanoa coding applied
TCH6	Right stop. Have you given an Example? Think of the oreo. Have you given an example of how you could?	TV/TMMT/TF-
TCH2	So today we are, so our Writing context at the moment is narrative writing, make sure your eyes are up here.	TMMT (refers to chart)
TCH2	So today we're looking at compound sentences so a compound sentence is usually 2 sentences joined together by a conjunction.	TMMT/TF+ (refers to chart)

	Any questions about that?	

Finding 2.1 Talk That Connects With Humour or Makes Connections to Home (TMMT+)

Humour characterises some of this dimension and has been identified in only a few episodes. Connections to at-home discourse are also found (Table 24) within this dimension and examples of both follow.

Table 24

Examples of Coded TMMT+ in the Transcript of TCH1 and TCH6 in Time 1

Speaker	Speech act	Talanoa coding applied
TCH1	Yeah that's what I was saying nah very good.	TMMT+ (humour)
TCH6	Right have you two had at any time where mum or dad had to write something that would convince. Carl just talked about his mum having to write to the teacher.	TMMT+ (reference to home)

Finding 2.2 Talk That References Shared Learning (TMMS)

Recapping past learning in literacy is a common feature in classroom talk. The following Table 25 provides examples TMMS. TCH5 recaps past learning, but this is from memory only and TCH2 below has only the goal of the lesson written down but there are no texts in active use nor any records of the past collective activity being accessed. Whilst both seek to engage the learners on what has been previous shared learning, the communicative responses in both lessons by the student, were clipped and reverted to Vave.

Table 25

Examples of Coded TMMS in the Transcript of TCH5 and TCH2 in Time 1

Speaker/s	Speech act	Talanoa coding applied
TCH5	No remember your title, so let's just quickly go over what we did yesterday. Yesterday we did our planning didn't we.	TV/TMMS (refers to model book)

S1	Yes	SV
TCH2	We are learning to use the correct sentence structure for a compound sentence. We've looked at a simple sentence, can you remember what a simple sentence has? Nice loud voice.	TMMS (refers to model book)
S1	A name at the start	SV

Finding 2.3 Talk That Disconnects the Learner in the Discussion (TMM-/SMM-)

In Table 26 there were two requests by TCH3 that resulted in obvious silence markers and thus coded here as *dis*connecting (TMMB). The first examples suggested no one was actually "brave" enough to read out their notes and the second example suggests students were not willing to read out loud from a text on their own. Researcher notes also reveal that whilst texts were visible on one A3 sheet, this had to be shared between the entire group and controlled largely by the teacher for the duration of the lesson.

Table 26

Examples of Coded TMM- in the Transcript of TCH3 in Time 1

Speaker	Speech act	Talanoa coding applied
TCH3	and who feels brave to read out their notes from the other day?	TMM- (silence, no takers)
TCH3	Okay give it a go. The rain forest. Read it out loud to us.	TMM- (no takers)

Similarly, when TCH6 requested their students to share back to the group (Table 27) this was met with student reluctance e.g., *"Miss I don't want to say it*" [share in front of the class] and embarrassment, thus coded as the *learner* disconnecting (SMM-) in this speech act example. Researcher notes recorded did observe that the lesson with TCH6 was conducted as a whole class where students sat in a large circle on the mat and there were no visible texts actively used in the session by either teacher or student, rather it was an open circle whole class discussion.

Table 27

Examples of Coded TMM- and SMM- in the Transcript of TCH6 in Time 1

Speaker	Speech act	Talanoa coding applied
TCH6	Talk to it we'll wait for you quietly. If you haven't got one that's fine	TMM- (student reluctance to talk)
S2	Miss, I don't want to say it	SMM- (student disconnects)

Whilst behaviour modification was rare across all teachers' Time 1 classroom talk the following are examples of where these were coded. In Table 28 you can see that TCH4's speech act example is mostly of authoritative behaviour control in the learning whilst TCH 6's examples were intended to modify behaviour in the learning with some praise woven in between.

Table 28

Examples of Coded TMMB in the Transcript of TCH4 and TCH6 in Time 1

Speaker	Speech act	Talanoa coding applied
TCH4	Okay put your books on the floor. Okay who's got their books on the floor? Come and get your books and you are all going to do this activity. Right we'll wait for Harry to finish off the story and we're gonna look at this word.	TMMB (mostly telling/direct instruct)
TCH6	Ivan, I did ask you to go to time out, your choices were not appropriate. Sit down please.	TMMB (behaviour modification)
TCH6	That's not a good choice. Alright some people managed to get to a point and some people refused to cooperate but for the rest of you well done.	TMMB/TMMT (behaviour modification)

TMMB (behaviour) and TMM- & SMM- (teacher and student disconnecting principles in discussion) are closely aligned. The communicative acts or non-acts that followed TMMB resulted mostly in gesture (students moving to a designated area) whilst TMM-/SMM- resulted in vave (clipped response) student silence and/or outright reluctance and thus students disconnected to contributing at all.

Where talk have been analysed to show evidence of TMMB and TMM- & SMM- codes, further observer field notes highlighted two factors that may have impacted here. The first field note pertains to the size of the group linked to disconnection and secondly, the limited use or reference to texts in and through the discussion.

Summary of Māile, Māfana

Results from speech acts that were coded mālie, māfana are very much centred around talk that limited the pathway to move beyond this characteristically monologic dimension. Grouping factors of these discussions bear further purposeful exploration. Even though there were glimpses of promising invitations or talk moves into the discourse by the teacher often these talk moves did not have the desired impact of extended or elaborated student response.

As the mālie, māfana dimension relates to how purposeful teachers are connecting learners by instantiating text and elevating task (TMMT) in their literacy lessons, talk productivity seemed to remain monologic for the most part. Text use and task reference is linked closely to the coding of this dimensions and there is variability in both that resulted in the finding that illustrated varying degrees of talk productivity where such are concerned.

Detailing Time 1 Teacher and Student Faka'eke'eke Repertoire

Faka'eke'eke or posing questions is arguably one of the most common discourse practices used by teachers and these analyses affirm that notion. Noticeably these results suggested that the teacher is by far the authority on this strategic discourse move. I report first the total number of questions posed by teacher and student followed by the quality of these questions and then what the different types of questions yield in terms of engaged response.

Figure 14 reveals the volume of questions posed across all Time 1 transcripts. For the teachers (TF), this was between 31 and 90 questions. For students (SF), questions posed ranged between 1 and 18.

Figure 14

Raw Counts Where Faka'eke'eke Occurred for Teachers and Students in Time 1

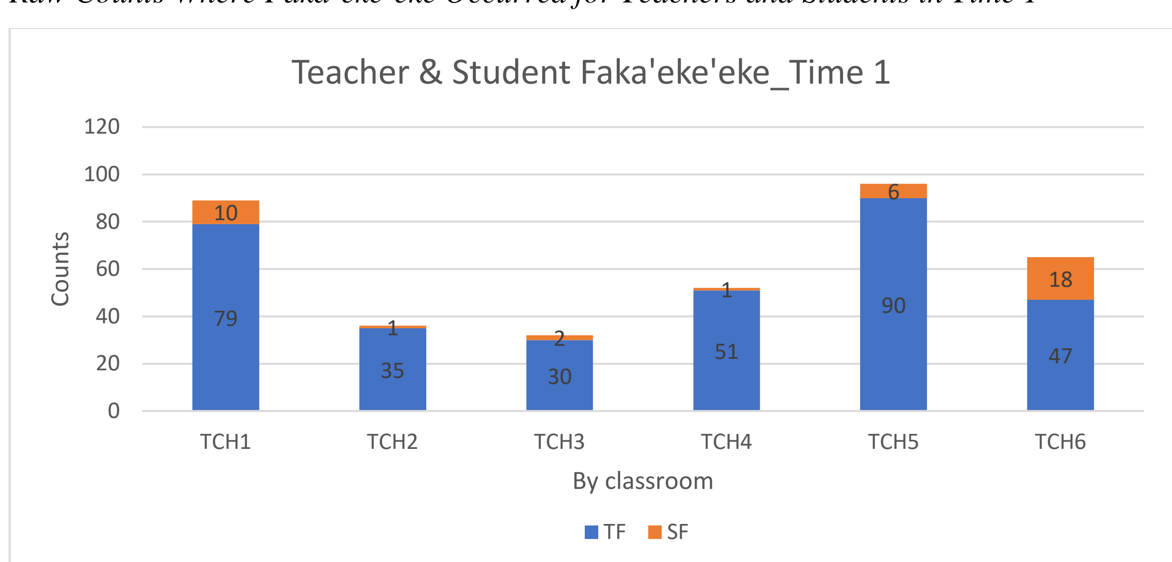


Table 29 reports the quality of these questions revealing for example, of the 90 questions posed by TCH5, 72 were coded as *closed* with only 18 coded as *open*. For students of TCH2, and TCH4 only one question was posed in the entire transcript, each one coded closed. Of the total number of student questions posed (N=37) only three of these were open questions.

Table 29

Total Number of Student and Teacher Faka'eke'eke in Time 1

Total number & type of questions posed	TCH1	TCH2	TCH3	TCH4	TCH5	TCH6
Teacher totals	79	35	30	51	90	47
Closed	41	34	29	51	72	34
Open	38	1	1	0	18	13
Student totals	10	1	2	1	6	18
Closed	10	1	2	1	5	16
Open	0	0	0	0	1	2

Finding 3. Using More Than One Faka'eke'eke at a Time Constrains Discussion

The following data (see Table 30) suggests that where more than one faka'eke'eke is posed by the teacher, in the discussion, the communicative sequence by the responder (student) resulted in addressing only one, not all. This strengthened the argument for segmenting criteria linked to questions. Moreover, the faka'eke'eke dimension sits on the threshold of

moving up and over into more dialogic properties, found in *pō talanoa, talanoa'i and tālanga laukonga* dimensions, which follow later in this chapter. Whilst open coded faka'eke'eke is plausibly moving towards these final three, it is the responder's communicative uptake that may define whether the speech act was more clearly a dialogic contribution. With the reader in mind, TF+ refer to teacher open faka'eke'eke, TF- teacher closed faka'eke'eke. For students, SF+ open faka'eke'eke and SF- closed faka'eke'eke.

Table 30

Example of Coded Fake'eke'eke in the Transcript of TCH4 in Time 1

Speaker	Speech act	Talanoa coding applied
TCH4	What's happening in this picture Anna? What's that?	TF+/TF- (2 questions)
S1	A sandal	SV (Response only to the last question even though first question one has much more dialogic potential).
TCH4	A sandal well done!	TV (Evaluative in response and values a correct answer to the closed question)

The next example in Table 31 from TCH1 shows glimpses of promising discourse, by the teacher, but ultimately blocked potential dialogic entry through the long stretch of talk that included multiple questions. Even though there was considerable cognitive depth in some of the teacher questions posed, the net result constrained student response. Instead, what is shown is a response by one student that displayed confusion S1, *"All talk at once"* then an appeal *"Can we say one-word answers?"* then finally a short unelaborated response by S2 that correlates to a question in the middle of Line 1 by the teacher, *e.g., "What do you think he is holding?" Line 5, S2 response, Looks like he is delivering eggs?*

Table 31

Example of Coded Fake'eke'eke in the Transcript of TCH1 in Time 1

Speaker	Speech act	Faka'eke'eke present
TCH1	"Think to yourself so it might actually be good if you turn your body around yep have a look at what you can see on the ground, see what's in the background there. Okay just by yourself, maybe thinking of maybe a back story behind this because I know you've got really good imaginations as well. What do you think it is – I'm not asking anyone to say anything *What do you think it is that he's holding?* What do you think it might be? Who do you think he might be? What do you think he might be doing? And I see people are thinking and remember this work is for? About 30 seconds, turn and face someone close to you. What do you notice? What can you tell me about the photo"	Total faka'eke'eke posed by the teacher in this excerpt (N=7)
S1	*"All talk at once?"*	SF-/SV
S2	*"Can we say one-word answers?"*	SF-/SV
TCH1	"No, no one word answers. Say as much as you can. If it's one word, are you saying as much as you can? Okay what could you say, what could you tell, what did you notice about this photo here? Okay so have a bit of time to	Multiple faka'eke'eke posed by the teacher in this excerpt (N=3)

	think what are you going to say. Speaking in detail, saying as much as you can. Maybe picking up something that your partner said. Have a think.... wait time.. Alright William what can you tell me?”	
S2	*“Looks like he’s delivering eggs.”*	SMMT (responding to one question only from earlier TCH1 utterance)

Summary of Fake’eke’eke

Although coding each question for their form and function, either open or closed, is the high-level analysis, looking deeper into the communicative acts that immediately followed assisted in understanding the art of questioning in discussion. The reporting in Table 29 shows that teacher questioning is prevalent whilst students asking questions is barely visible.

Whilst I do not wish to paint a negative picture about the capability of Pasifika students to deal with the multiplicity of questions, I do highlight, that if the resulting communicative response is a short clipped closed vave response, uptake as shown in Table 30 and Table 31, cannot be fully realised. Furthermore, given the low rate of student-initiated questions in the discourse suggests this strategy is not firmly part of the students talk repertoire. The findings to this point, that included vave, mālie, māfana and fake’eke’eke served as key markers for hypothesis building with teachers in *Phase 2,* the intervention.

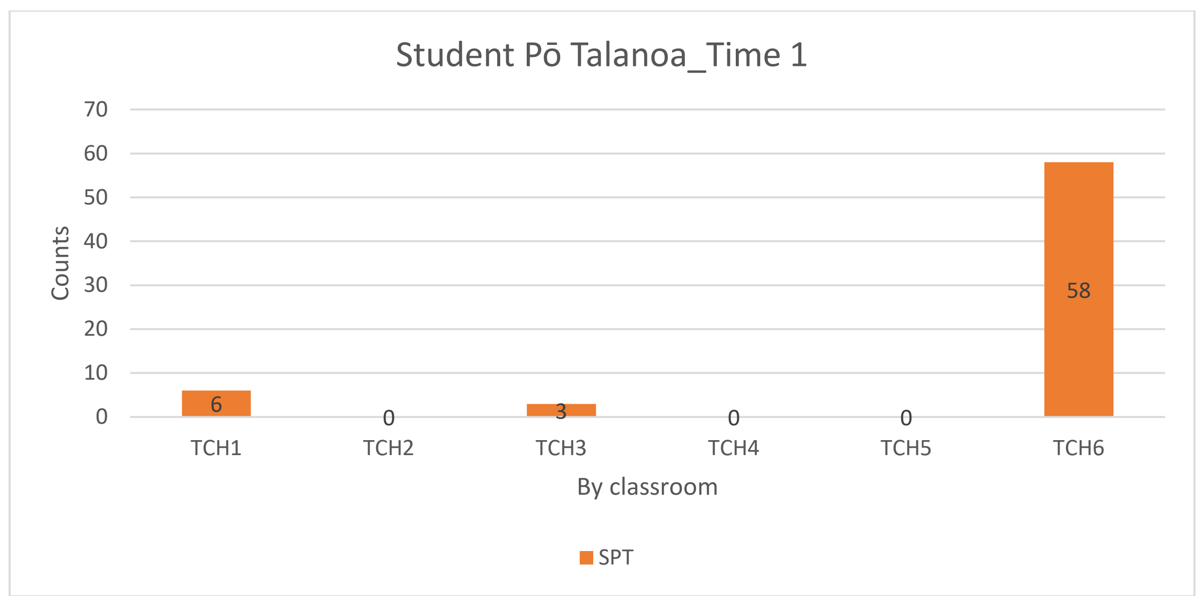
Detailing Time 1 Teacher and Student Pō Talanoa Repertoire

What is clear to see in Figure 15 is that students from three of the six classrooms achieved pō talanoa in their discussions. Pō talanoa is when students take control of the talk based on a) their connection to the lesson followed by b) ownership in and through the discussion that advances student agency and thinking and knowledge and illustrated by student-to-student-to-student strings of discourse and coded PTS (Pō Talanoa Student).

Explanations for the high frequency (N=58) of this dimension for TCH6’s students are explained in Table 32 with close analysis provided for TCH1 also.

Figure 15

Raw Counts Where Student Pō Talanoa Occurred in Time 1 Discussions



Finding 4. Pō Talanoa in Action Promotes Connection Through Student Authority

For TCH1 (see Table 32) two episodes in their early lessons were coded pō talanoa. That is students taking control and authority in the lesson through multiple turns (3 or more) at a time where no teacher interlocutor is entering the discussion. In TCH1's example there is some level of uptake in these strings but the full potential of pō talanoa in these examples is not seen through to its fruition. To be clear, pō talanoa criteria can only be applied if the student displays these patterns. This however is manifested when teacher's repertoire is moving deliberately towards more dialogic discourse.

Table 32

Examples of Student Pō Talanoa in the Transcript of TCH1 and TCH6 in Time 1

Class	Transcript excerpt speech acts by students
TCH1	S1 He would've got them from the cave cause you know how
	S2 I think it came from up there and it landed on him
	S3 I think he got it from the cave because it said in the story starter
	And…
	S4 Where lava
	S3 Where the lava is
	S4 They were shining like diamonds
TCH6	S8 Can I go to the movies?

S9 No

S8 Why?

S9 *You're not old enough*

S8 What do you mean? Can I go with Kail?

S9 No

S8 Can I go by myself?

S9 No

S8 Why?

S9 Cause we said so

S8 Can I go steal the money from the house?

S9 No

S8 Why?

S9 That's bad

S8 Can I go to the shop?

S9 Nope

S8 Can I go somewhere?

S9 No

Noticeable for TCH6 (Table 32) were several continuous student strings within the discussion that would characterise this as pō talanoa. The content with which revealed this percentage of student pō talanoa, was linked to the task. To clarify, role plays were carried out as the *task* in this lesson as a way of interpreting persuasive techniques. I have included this string of discussion in the context of this lesson for two reasons, it presents as opportunity for control and authority by the students themselves to interact in discourse but more importantly I include these to address the enacted pō talanoa quality.

For these students the role plays were a manifestation of a prompt by TCH6 to show how they could convince someone to do something. Whilst an initial promise of reasoning where the student responded, "*you're not old enough*" (Table 32) the rest of the coded pō talanoa episode is constrained, thus also coded, vave in the database. Again, this is a talk move that does not advance the aim of the task, illustrated here by poorly reasoned chains by the "actors" in this role-play excerpt.

The lack of resources is problematic as although the potential of pō talanoa is to prioritise student voice over teacher voice this example clearly shows that the cognitive aim in the exchange was never addressed. Which suggests that whilst role-play enactments, *as task*, within the discussion lead to high student engagement it did not produce any resemblance to what pō talanoa could potentially enact, that of authority in and through the discussion by students that genuinely promotes reasoning and knowledge building. The resourcing of the discussion as revealed in the researcher notes showed that there were no text resources used to fuel these discussions nor were any written or visual modes of exemplar texts as possible cameos to highlight what constitutes persuasion and for these students to refer to or utilise in their *oral role-play performance*. For the teachers these data highlighted the important role of the more knowledgeable other, that could have been mobilised by TCH6 in the discussion when required, so that the communicative acts by students produced talk that was less performative (in this instance) and included more rational reasoning processes that more closely align the cognitive aims that were no doubt intended.

Summary of Pō Talanoa

For students to genuinely contribute to learning then ownership is key. From a Talanoa perspective it is ownership of knowledge that the students come with, to share with others, in this context both teachers and peers, that genuinely invites uptake. The aim is then for student repertoire to have developed to a degree that does not diminish into the back n forth pseudo enquiry characteristics of talk illustrated by the students of TCH6 (Table 32).

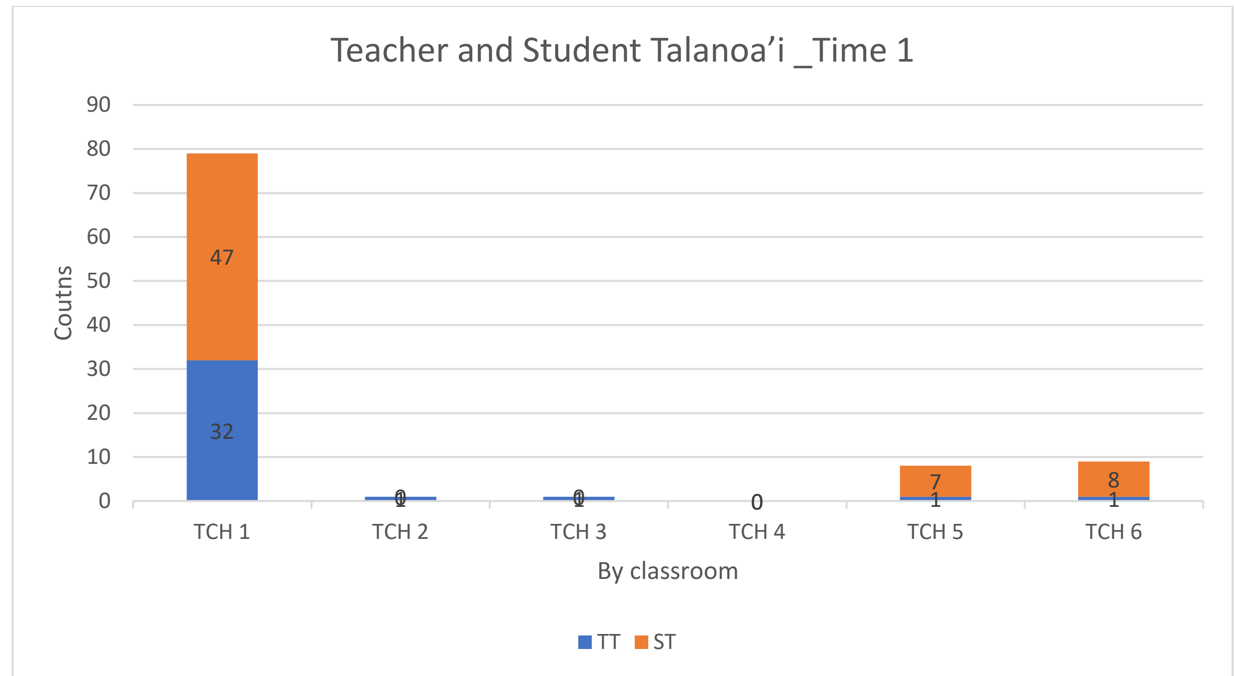
The key finding here is that pō talanoa is present for only three of the six teachers. These data suggest that the redesign intervention phase will need to emphasise the notion of strategically resourcing the discussion and further employing more deliberate and strategic, vave, mālie, māfana and faka’eke’eke so that pō talanoa may have more of a chance of being enabled. These analyses also speak to the climate of the classroom environment linked to who holds the power and authority, but moreover, how distribution of authority can be shared, while still emphasising cognitive knowledge building.

Detailing Time 1 Teacher and Student Talanoa’i Repertoire

The dimension of talanoa’i emphasises more dialogic elements than those dimensions reported on thus far. Figure 16 shows the breakdown where talanoa’i occurred and if it was by the teacher (TT) or student (ST)

Figure 16

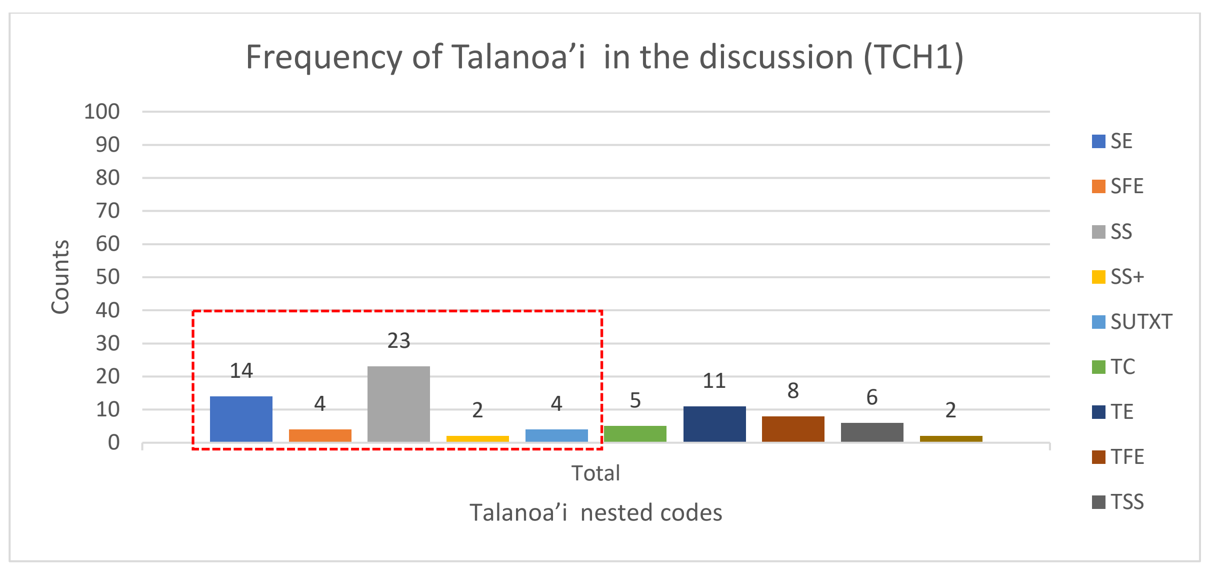
Raw Counts Where Talanoa'i Occurred for All Teachers and Students in Time 1



As there were limited examples of talanoa'i in Time 1 where only TCH1, TCH5 and TCH6 achieved this, I will use TCH1 data to further explore the nested principles that constitute this dimension of which these occurred 47 times for students and 32 for the teacher. The following analyses report positive features of classroom talk which included student uptake. Figure 17 illustrates the nested coding that constitutes talanoa'i that occurred in TCH1's Time 1 discussion and clearly shows, though not at the same frequency, that nine out of ten nested codes were engaged.

Figure 17

Talanoa'i Nested Coding Distribution for TCH1 and Their Students in Time 1



Finding 5. Talanoa'i Revealed Some Student Uptake

Table 33 further illustrates the features of talanoa'i. The short speech episode provided below (1 minute and 7 seconds) sat within the larger whole class literacy discussion of which is linked directly to Figure 17. Again, we notice how *one speech act* can achieve *multiple codes*, an emerging strength of PDIT. What is interesting in the breakdown of applied talanoa'i in Figure 17 is that students were seen to engage in *more* of the nested talanoa'i talk dimensions than their teacher. This finding will be crucial to consider in the Intervention *Phase 2*

Table 33

Example of Coded Talanoa'i in the Transcript of TCH1 in Time 1

Speaker	Speech act	Talanoa coding applied
TCH1	And why do you think he feels protective?	TF+ TC
S1	Like he carries them… takes them everywhere	SMMT, SFE
TCH1	So he takes them everywhere with him (refers to the photo)	TV, TMMT
S2	Can I add on?	SS, SF-
TCH1	Sure	TV
S2	I think that oh yeah that he feels um that he's holding it gentle oh gently and he's oh	SMM+ SE, SS+
TCH1	Yep can you add onto that Ruby? So what did Claire say?	TF+, TSS

S3	He's holding onto them in a carton	SMMT, SS
TCH1	Yep that could be a carton or an egg carton an egg box, okay so carton there's another word for it. Stuart?	TMMT, TSS
S4	Um I think he's carrying them around cause he's trying to find a shop to sell it to them for more than the previous shop, cause like he has no money and he's a farmer	SMM+, SE, SUTXT
S1	Is he a farmer?	SF+
TCH1	Well we don't know what he is so this is us making assumptions from what we know so he could be a farmer	TMM+, TTXT
S3	He might be a survivor	SMM+, SFE

Often it is hard to illustrate the various levels of talk as they are coded in this study, particularly when they are isolated and taken out of context. The granularity of the approach to analysis looked at presence (talanoa'i) and then nested presence (SFE) more specifically to report.

The talk episode in the above passage (Table 33) does provide key properties of talanoa'i to report. Talk that illustrated uptake, initiated by S1, *"Can I add on?"* and valued by the teacher as an apprenticed move and used shortly after *"Yep can you add on to that Ruby? What did Claire say?"* did in fact build up to an elaborated student response by S4 that engaged inference and evaluation *"Um I think he's carrying them around cause he's trying to find a shop to sell it to them for more than the previous shop, cause like he has no money and he's a farmer.* Beyond the above episode and reflecting on Figure 17 it is clear to see that both the teacher and the students in this class have engaged in many of these nested principles that make up this dimension. This key finding can be used as lever for refining and modifying the dimension in practice and more importantly to better understand the potential impact on the sequential structure, the learner's context that which allowed a mobilising of more talanoa'i student interactions.

Other Factors Promoted Talanoa'i

Given the relative infrequency of Talanoa'i across the six teachers I have drawn heavily on features from TCH1's classroom transcript and their observer notes that were shown to constitute the dimension to report further enabling conditions to consider with the intervention front of mind. The evidence to this point does in fact suggest that TCH1 is a highly effective teacher and further substantiated the decision to examine their data more closely for potential dialogic features that would support their "effective teacher" label.

Finding 5.1 Resourcing the Discussion for Talanoa'i to Occur

Previous analyses for mālie, māfana indicated the significance of the presence and use of textual resources. The talk in TCH1's example episode (as shown in Table 33 and Figure 17) achieves a much more deliberate and active reference to the text, that engages inference, perspective and elaborated responses. Given that TCH1 employed a technique of layering of texts in their lesson is important. That is, this teacher used a still image to begin the discussion then after a period spent using this to leverage thinking and ideas (again in the above example) introduced a written text to accompany the image, then after another period of time introduced requisite comprehension questions as the last layering of text into and through the discussion. This approach to discussion that clearly allowed for principles of talanoa'i to be achieved will be used as a key lever for discussion where resourcing is concerned with teachers in *Phase 2*.

Whilst arguments could be made for talking *first*, to learn and engage cognitive content, this teacher clearly understood that their students contributed more to the discussion when resources that were employed allowed them to consider multiple perspectives, points of views and engaged broad thinking. Although talanoa'i were not the primary dimension achieved in the analysis for TCH1, findings here strongly support more critically positioned resourcing, such as the ones this teacher provided, that could potentially extend the discourse to talanoa'i and quite plausibly, tālanga laukonga the final Talanoa dimension.

Finding 5.2 Consistent Teacher Messaging Throughout Promoted Talanoa'i

What was striking about the analysis of TCH1's Time 1transcript was the consistent messaging in the discussion albeit delivered by the teacher but designed to prompt and engage and encourage students to contribute fully to their learning. For example, of the total 211 TCH1 speech acts in Time 1, 30 comprised speech markers that deliberately valued thinking. The finer grained analysis pays attention to where this messaging about thinking with reason and justification materialised into elaborated responses and uptake by the students and the

teacher as noticed in the table and figures above. Again, whilst in Time 1 talanoa'i was not the most achieved dimension for TCH1, it would seem such messaging provided in Table 34 next, may have contributed to the 24% of talanoa'i in their overall discussion.

Table 34

Examples of Messaging to Promote Talanoa'i from TCH1 Transcript in Time 1

Examples of key messaging from TCH1's Time 1 transcript
"Great thinking takes time";
"What you have to say matters";
"Get in ready in your head first";
"Speak in as much detail as we can";
"One-word answers are not good enough – you need to stretch your brain to grow your brains";
"Your sharing is important to all of us";
"If it challenges you it will change you";
"Every offering is important".

To sum up, whilst the episode and features reported on here, for TCH1 hold promise, it is apparent that there still more effort required that would support both TCH1 and all others in this study to build talk repertoire that would consistently increase Talanoa as dialogic talk interactions. The messaging in Table 34 provides key reference points for the intervention and co-design in *Phase 2* and which require the need to look into the clear and explicit focus on developing with teachers, ways that build and develop a culture of talk through such frequent messaging in the discourse.

Finding 6. No Instances of Tālanga Laukonga Occurred in Time 1

Across all early Time 1 transcripts (N=6) there were no speech acts/utterances in the discourse that achieved tālanga laukonga. The criteria that constitute this dimension became the central focus for the intervention, *Phase 2*, essentially an aim-high notion to support lifting the talanoa, purposefully and strategically. Furthermore, by starting with tālanga laukonga as the goal, may seek to better position and operationalise all other dimensions, vave, mālie, māfana, faka'eke'eke, pō talanoa and talanoa'i, an embedded notion of the Talanoa approach itself.

Summary of Talanoa in the Classroom

The overall patterns of classroom Talanoa fell largely in the dimension of vave. That is clipped dialogues between interlocutors that are closed events. The next most prevalent

dimension applied was mālie, māfana and faka'eke'eke, all three being defined as more monologic. Given these reports provided comprehensive understanding of how these monologic markers were positioned in the talk, afforded a deliberate refocus in the intervention for more optimal solutions. These solutions were further pursued through theoretical and pedagogical discursive underpinnings found in the final three coding categories of the PDIT, pō talanoa talanoa'i and tālanga laukonga.

That said, connections evidenced in applied mālie māfana related to text presence, task alignment, shared review of previous knowledge and similarly disconnections, played a significant role in the overall discussion given the content area of literacy is the focus. Whilst the mālie, māfana dimension occurred in Time 1 between 28% to 50% the breakdown revealed that the nested principles showed an overwhelming application of the dimension applied mostly to the *teacher*, in particular TMMT and thus signalled a problem of equity. That is, through each of the six classroom discussions closely analysed, teachers, through their discursive practice, illustrated connection at a reference level to text resource used and/or through the task *more than* their students and where no opportunities to reciprocate emerged. This is somewhat problematic in particular if the text being referenced is not aligned to the task or if there is no text or resource in play.

The pō talanoa dimension is also seen here as a significant tipping point towards a more productive dialogic repertoire for students. The PDIT model deliberately positions pō talanoa in service of and in preparation to, critically receive, engage and respond to other dimensions of the PDIT particularly where uptake and shifting the locus of control features prominently. Arguably then, achieving pō talanoa in the discourse will be a focus in *Phase 2*. More specifically a more deliberate plan to increase purposeful dialogic events that critically considers repertoire inclusive of talanoa'i and tālanga laukonga.

In sum, the key emerging areas that can be addressed in the intervention (*Phase 2* to follow) as evidenced by these findings were to;

1. Address the counts in favour of the teachers where turns, words spoken and teacher over talk (TOT) are concerned; require a closer look particularly how they link to principles of community membership. That is how well do teachers and their Pasifika students come to understand their role and responsibility, in the discussion among their learning community.

2. Address limited talk repertoire of teachers and student; Given the high levels of TOT, high levels of one-word utterance response by students, high counts of vave applied and less visible pō talanoa, talanoa'i and zero occurrences of tālanga laukonga. This can be better achieved through growing understanding of how each dimension in PDIT occurred and were operationalised in the discourse.
3. Address the resources used in discussions. One teacher in particular (TCH1) had provided an exemplary model of practice and subsequently this multi-text resource will be used as a model in the intervention phase which coheres with the principles of design-based research methodology.

Analyses that follow binds to that which has been reported thus far, offering student and teacher perspectives and beliefs of classroom talk in their contexts. These are closely aligned to the summary above on key emerging patterns and linked overall to the following themes already reported on repertoire, resources and rules.

Findings – Part 3

Semi-Structured Student Interview Findings Time 1

"Because if the teacher just answers the question and then they tell you to answer it, you don't know the answer and then they just give you, they tells you so you don't think about it" (ST5)

The quote that began this section is from a student interviewed in Time 1 who indicated that the 'heavy lifting' in discourse, according to them, is largely controlled by the teacher.

Student interviews (N=26) were used to provide perspectives on talk in the classroom. Among the questions raised in the interviews was whether students were aware of the role of talk to support their learning and what they thought enabled discussion or were barriers to discussion. Again, with the reader in mind, when referring to student reports, these appear as ST1 (students in TCH1's class) or ST2 (students in TCH2's class) and so on.

The following sections are organised around the emerging patterns of student beliefs on talk repertoire; resources in the discussion and rules for talk.

Finding 1. Student Beliefs on Who Talks the Most

Students identified that from their perspective, teachers do the most talking in classroom discussions, with 23 out of 24 students identifying this notion. Students understood that the teacher's voice was privileged in learning. This finding corroborates existing evidence in the

study, for instance the high levels of TOT patterns in observations. The following student responses further clarify what students perceived as rules in their classrooms where instructional literacy discourse occurred.

Finding 2. Rules in the Class for Talking and Discussions

Table 35 provides a summary of students' responses that refer to the ground rules for classroom talk at the initial interview. The rules have been coded into three key categories: cognitive, social and authority. These rules were followed up as a key activity in the intervention.

Based on the frequency of response, it seemed that rules linked to cognitive aspects of talking in class (2 responses) were far less visible to these learners than those categorised across the other emerging themes. These cognitive responses indicated discourse behaviours that promoted for example, thinking and asking questions for clarity.

From the student perspective *authority* (N=10) in discussions was clearly held by the teacher. These findings suggested that there is some confusion about the role of the student in discussion, given the frequency of responses linked to authority. There is evidence to show that these learners are aware of *social/behavioural* aspects (N=10) of learning which provides a necessary condition for productive classroom discourse.

Table 35

Student Collective Responses to Perceived Rules in Their Classrooms for Having a Discussion in Time 1

Cognitive (n=2)	Social/behavioural (n=10)	Authoritative (n=10)
"Ask questions if you don't know" (ST1) "Ah maybe to think why you are going to talk and then you can talk" (ST1)	"And to always speak loud so the class can hear you" (ST1) "Oh, we need to speak louder" (ST1) "It's okay if you cry cause we're all here to support each other" (ST1) "That we only have one speaker at a time" (ST1) "Always talk with a buddy if you're stuck" (ST2) "If you want to talk to somebody and if you're stuck	"Well rules is don't talk over the speaker because that's disrespectful, that's part of our class rules and I think this is the same as the talking" (ST1) "Don't talk when the teacher is talking" (ST1) "Um we can't talk when the teacher is speaking and she's teaching us" (ST2) "Never talk when the teacher is talking but put your hand up if you want to talk" (ST2)

	you have to keep the noise level down" (ST2) "Show respect" (ST5) "No bullying" (ST1) "No running around" (ST1) "Don't be mean" (ST4)	"Listen to the teacher" (ST6) "Don't say a word bad to the teacher" (ST6) "Don't, when the teacher's talking don't talk back" (ST6) "Teacher tries to share the talking equally by choosing and that's why we get time to think about what we should say so then we don't look stupid when we get chosen like so then like the Teacher shares it easily between us to like all have a turn in talking in front of the class" (ST1) "Don't talk over people, put your hand up" (ST5) "Put your hand up" (ST4)

Finding 3. Talk That Supports Learning

Of 24 students interviewed, 23 suggested that talk supported their learning, whereas one suggested that talk did not help their learning though this student was unable to provide any clarification for why this is so. The examples below suggested that these students were clear on the potential benefits of talking to learn and highlighted the enablers that they were aware of.

Students clarified that talk during their literacy lessons enabled collaboration, as follows,

"*When you hear other people's ideas you tell them what you think and if you think they're wrong you just say what you think but you don't tell them the answer's wrong, you just say for example"* (ST5);

"Cause it makes us be a learner" (ST4).

"It helps us learn better because we discuss it and like if you're stuck on a problem you just like talk and figure it out" (ST6). One student suggested talk was useful for the productive stages of literacy (writing), *"Yeah talking helps with our learning because we can like share ideas, and we'll get two very good ideas like to write and stuff*" (ST2).

Another student suggested that talk potentially provided the platform to *"Add onto other people's ideas"* (ST3). Finally, one student described talk as an enabler to support generating new ideas with peers, *"I think so because when we sort of don't talk to people it's just like our*

ideas, we don't get it expanded like vision of what like I could be thinking of one thing that's really plain and not really you know interesting and then someone can say something and you're like oh yeah I can expand on and my ideas as well" (ST5).

One student's response combined social and cognitive potential of talk, *"So it's like we talk about the story behind the picture and then the questions we talk about it together and I think it helped us learn what we think individually about that picture and it helps us like understand more about each other"* (ST1).

Aspects of problem solving and reasoning were also offered, for example, "*Ask them why they disagree, the reason why they disagree"* (ST3); *"It's so people can know the truth"* (ST3) and *"So that we can tell each other our problem"* (ST2).

While student self-reports on the potential benefits of talk to learn can be considered positive, their views on the potential of talk contrasts with the content that they described in Table 35 about rules for talk. The students in these interviews understood that talk could support ideas and thinking in collaboration. However, the rules, detailed in Table 35, placed restrictions on that discourse, thereby potentially curtailing any of the cognitive benefits that these students noted.

These findings corroborated those in the teacher interviews and observations, to the extent that the table of rules (Table 35) played a prominent role in the observed lesson shape, content, and direction in Time 1.

Finding 4. Student Grouping Preferences

When students were asked what their grouping preference was for having discussions, 18 students preferred small group, five preferred whole class and one student replied "both."

Students who affirmed small group configuration provided qualifiers such as, "*So we can each get a turn" and "So I can ask more questions"* (ST1). Small group dynamics as a space where ideas were generated was mentioned by one student, "*Talking in our groups yeah that's good because the more groups you have the more ideas that there will be in the group"* (ST5).

Students also provided reasons that were more negatively positioned about the less preferential whole class discussions, for example one child reported, "*Because sometimes I get humiliated in front of a big group instead of a small one. I will get very sad if I get humiliated*" (ST6). Overcoming shyness was an issue raised also, "*Because it's easier to talk*

and if you are talking to the whole class you get shy; (ST5) *and "Yeah I'm not used to talking in like bigger group"* (ST1).

Semi-Structured Teacher Interview Findings Time 1

Teachers' interviews revealed beliefs which contrasted with the enactment observed in the observations.

That is, whilst teachers (N=6) spoke about features of discourse such as open-ended questioning, uptake and elaborated interactions these aspects were not as prevalent through enactment. The following findings are organised to link with the patterns already reported: beliefs around talk roles, talk repertoire, and resourcing talk in the classroom.

Finding 5. Teacher Beliefs on the Power of Talk

All six teachers in the study agreed that talk was a powerful pedagogical tool.

> *It's a very powerful tool, I think it's as a teacher, becoming more aware of that and then finding strategies and I don't know if I've got the strategies or not on how I can encourage the talk so that they don't feel oh I've given the wrong answer or I don't want to answer you cause if I get it wrong or I'm way out of tangent or something or I wasn't listening so yeah, I'm not sure if I've got the strategies for that* (TCH3)

Another teacher qualified differentiated and purposeful literacy talk as significant for her students and that learning to talk *about* books not just talk in general, for example,

> *Doing a lot of talk, getting them to talk is my big thing and it's okay to have a conversation but again with books it's different because it's probably sometimes it's the first – they are actually opening a book and trying to look at pictures, some of them would have already had that experience with their families but some of them it's really new to talk about the book. It's different from having just a conversation about the day and having a conversation about the book, so it's kind of building that, just let's talk about it, what's happening in the picture – just getting them to talk is the main purpose* (TCH4)

This comment considered both developmental aspects of the learner as well as valuing what already takes place in terms of talk in the home.

A final affirmation on the power of talk for its collaborative learning benefits, is found in another teacher's comment;

> *Lots of, you know, collaborative work is the way to go I think because them teaching each other is really important and I think they respond quite well when they're working with their pairs, there's that sense of you know, there's not that threatening and they can come on side and it's also for the ones that have got more expertise or knowledge is really, cause you can't teach something unless you really know it. I think just like whatever anyone says, if they're listening really well which I try and promote you know, really active listening and everything that people say really matters and add their own, that might spark off an idea in their own minds, in their own understanding or knowledge and they'll be able to add onto that or they might just sort of think oh yeah that was good and this sort of thing Yeah so it's a shared understanding, it's not a one person's idea but there's ownership together* (TCH1)

Talk as a powerful mediator was widely accepted as promoting broad capabilities for literacy learners. All teachers agreed that talk in their contexts meant greater benefits for students' overall achievement but recognised at the same time limitations, which illustrated the deeply complex nature of shifting discourse practice.

Finding 6. Teacher Beliefs on Their Roles in the Discussion

All six teachers affirmed that they, not their students, did the most talking in class and this is best summed up by one teacher who reported;

> *I probably speak the most. I'm not sure; actually, I have to be honest, I'm not sure as I was trying – what I was doing was more directing and keeping a fair-weather eye and keeping it flowing* (TCH6)

Another stated valid belief for why they talked more but this was clearly at the expense of the students talking, contributing to or participating in the discussion;

> *I've seen that before where I'm doing all the talking – at the end of it I thought oh I shouldn't have done that but you know how the lessons are like, you want to cover lots of things and I was trying to get them to retell the story and I wanted them to say it in complete sentences which I thought they can do it and then I was like oh I'll just limit it to saying complete sentences but I wanted them to do two things* (TCH2)

This statement coheres with patterns of over talk captured in classroom transcripts analysis. Similarly, one teacher believed, "*Possibly I do yeah, but I'm trying to – that could just be in prompting, prompting them to say more you know to think more 'cause I try and make them do all the work as well you know I don't want it to be me talking all the time and sometimes*

you get carried away, sometimes you do need to do a bit of talking" (TCH1). Whilst prompting might allow entry for the student to talk in an elaborated more critical manner, this self-report identified potential opportunities that were missed due to the extent that balance of talk favoured the teacher.

All six teachers affirmed their dominance in the role of questions in discussions. The best intentions for this imbalance were, optimistically explained by one teacher,

> *Hopefully it's kind of a balance you know so if I'm modelling or I'm asking questions as well they can sort of catch onto the types of things I'm asking and a bit of prompting, a bit of scaffolding – if they're asking me a question, I say well what do you mean, do you mean this or can you tell me a little bit more, what do you want to find out. Thinking about their thought process as well for their questions* (TCH1)

Another teacher conveyed, *'For my class it would be me asking a majority of the questions and they'll [students] be just checking in on them, checking their knowledge or leading questions yeah, when I think about it however, if we're doing something like P4C those are really open questions to develop the critical thinking but yeah mostly me"* (TCH2*).* This reporting aligns with the finding that the number of student questions posed in the Time 1 discussion was very low.

Finding 7. Teacher Beliefs on Building Relationships and Talk

All six teachers believed that establishing positive learning relationships was fundamental in classrooms for learning to take place. These teachers talked about these relationships as vital in developing safe shared spaces,

> *I mean you have to have that foundation first, that relationship, the understanding between each other and then the learning happens. If you don't have them feeling like they're in a safe learning environment they don't feel like anyone understands them, they can't relate to anyone – that's a barrier in itself to any of the learning actually getting through – they can sit there and take it in but if it's not meaningful and they're busy thinking about everyone laughing at them To have that relationship – yeah I do, I truly believe that. I say – that's something I do say to teachers is without that relationship there's no learning because you need that, if they don't respect you they're not going to learn from you, they might teach you a few things – if they don't feel safe, sure they could turn around and say yeah I know my 5x tables now but if they didn't feel safe while they were doing it you know, it could have taken them*

> *longer than it should have – if they felt comfortable to make mistakes, take risks oh sweet they can learn all of their timetables – yeah, I do think that relationship is a must have* (TCH2)

Another teacher talked about building relationships between students initially, to then be able to work closely together like a family**.**

> *So I tried to get them talking to each other first, sharing their ideas and then so, I've explained to them that they – so they already know that they have to share an idea that's come from them, it can be one from their buddy so do that but I'd say like from learning experiences I think. Yes I think it is where they can feel comfortable to talk to you. Yep, but then cause I don't know, in the beginning of the year I tried to push the idea that our class is a family so I don't know if that would be. Well, we spend most of the day here, we spend most of the week here so they need to know how to work together and to help each other for them to do well* (TCH5)

Two teachers mentioned the familiarity that some of their children seem to have with them, due to having similar cultural backgrounds. They reported that culture could be used as a lever of reciprocity, meaning the teacher can be open to learning from the child about 'their' culture.

> *Yeah I think so cause I'm quite – I'm a pineapple lump…..Sometimes I think oh I can just fake it 'til you make it, keep going cause I can see they relate to me as soon as they see brown skin, this Island lady, she's kind, she's not using – she doesn't have the big loud voice or she's not telling me off and I use that to my advantage but when it comes to understanding the culture I'd actually be like I have no idea but I ask them and they teach me* (TCH2)

> Similarly, another teacher reported that "*Yeah I think so because I well there a little bit of similarities and then I can sort of see where they're coming from. I've already experienced it a bit so then I've got that understanding*" (TCH1)

.

Lastly, one teacher summed up quite succinctly just how fundamental positive relationships in the classroom are and how teachers can promote these daily,

> *I think it is really important across all the classes as well. If you don't have that relationship you know or understanding with where your students are coming from*

> *and what's going on in their lives they are less likely to open up and relate to you. You need to establish the relationship and it's not easy by spending time with each student even if it's just a moment of the day just to say how's it going, what have you been up to and how are things at home or yeah* (TCH2)

Clearly, building positive relationships are seen here as important, particularly where these social actions are advantageous for not only impactful connections between teachers and learners but can also contribute to cognitive aspects also. These relational aspects do in fact underpin mālie, māfana and are considered fundamental in this study particularly for Pasifika learners' dialogic development.

Finding 8. Teacher Beliefs on Resourcing Talk

One teacher reported using multiple text resources to engage or connect to students and begin to scaffold thinking about the goals and content of the lesson and then for productive student contribution. To clarify one teacher explained*;*

> *Oh that's just to, as a motivation sort of thing. Something for them to really, to maybe really look deeply and to notice what they can see there I have done it, like we do it quite often when we do writing and I'll given them sort of like a springboard with a picture or a photo or a little short video for them to get thinking about that I think the kids are used to, cause that's the way I do it, how I do it in my class so they're used to that way so if they don't have that little what do you call it – motivational thing or thing to scaffold them with their talk they do get a little bit lost but they still get it I think they'd be able to find an image and stuff but whether it'd be the best sort of image because you've got to be – cause when I choose them I'm thinking about them you know, what can they relate to, what have they got experience with and things like that so that's why I chose that one of the umu cause I knew a lot of them might have experienced something along those lines and they would have been able to draw their own experiences and background knowledge, they might have done it themselves. So I think picking the right image or photo or the motivation thing is you've got to be quite careful, Yeah, yeah a lot of the time yep so I always start off with an image first and then whether I do bring up the text afterwards you know because it all links in you know, what they can see, what they can say and the it sort of link in you know, what can you read and write and things like that Yeah and it just draws from their own background doesn't it and what they know and what they've heard and seen before*

> *and I think she was talking about a movie, she was talking about Moana or something* (TCH1)

This self-report signalled a specific design approach that illustrated connecting to learners' culture and background strengthened through visual text layering aspects, not only engage learners but significantly used to draw on students' background knowledge to deliberately link what the students know with the goal of the discussion.

Another teacher conveyed *"Yeah, so maybe having a range of examples instead of just having a text that the teacher's done or one from an article, take it directly out of the text that they have and that they're exposed to everyday and creating that relationship with the words and the ideas"* (TCH2)

Given these statements provided by these teachers concerning *text use* as a *key discourse resource*, the previous reports in this chapter (Part 1 and Part 2) did not fully cohere. Moreover, the nested principle TTXT found within the talanoa'i dimension, which indicated deliberate active reference to text theme, knowledge or voice, were limited to only a few teachers and at a very low frequency overall.

Resourcing discussions, use of multiple text, visual and a layered text approach, were actively explored in the planning and intervention *Phase 2* based on these self -reports from teachers.

Finding 9. Teacher Beliefs on Planning to be Dialogic

Four out of six teachers reported that they preferred the shape of their lessons *be conducted as "whole class discussion"* and that further one to one support would be given to students if required, though this support was not necessarily planned for.

When asked if planning to be dialogic formed part of their approach one teacher reported,

> *Not specific no, no I wouldn't – like it would be cool just to have talk time or some little symbol where it says this is where we discuss but the teacher steps back and that's your opportunity to talk about your learning and I'll just listen in yeah, but I don't actually specifically plan for any dialogic anything. Like it's just an assumption that it happens and I guess that's where it's easy to not do it because I haven't planned it you know* (TCH2)

For some, discussions would take place naturally rather than tightly planned for, '

> *More talk, more discussion I think 'cause I've thought of doing that in topic like starting with an experience and then they start talking about it and then actually*

zoning into some of those that they've brought up and yeah so I've thought of doing that like we did a trip and I think if we started with the trip, they would have so much more to talk about and then the learning would have been so much better in topic (TCH5)

One spoke of planning as a map for where they want to go but also as a formative planner for next steps, though this was more in terms literacy rather than discourse**.**

I think they're good because they guide, they remind us as teachers what we're actually intending for the children to learn and it's also good for the students because as I say well that's what I was trying to learn there – have I done it or have I not and then they can reflect so mine at the back of their book will say I found today I was most pleased that I was able to identify the main part of the sentence and on that I can now take that through into reading or where to next, the points I made I'm going to write in my own sentences and summarise in my own words – so they're actually trying to say yes I'm most pleased about this, this is how I can use it, this is where I want to go next (TCH6)

On the other hand, one teacher shared a specific planning framework used to support discourse pedagogy that scaffolded talk across the curriculum, not just in literacy,

That framework that I've been using, I use it all the time so that's just intrinsic I put it in my planning so whenever I'll do something I'll go through the – you've got to think by yourself first you know, so everyone's doing a bit of thinking and then I might just pick on a few people, just randomly and then I'll go – okay share with the person next to you. Just in case they're struggling and then they've got something to work from and then sharing back to the class. Whether I put oracy down but like I said, I do it right across all curriculum subjects so even in Maths we're doing something – yep, think to yourself first, share with the person next to you (TCH1)

TCH1 had already been identified as an effective practitioner, given the highest frequency of talanoa'i achieved across all six teachers' analyses (Figure 17). Therefore, the ideas shown to work in these contexts were highly valuable and thus acknowledged in *Phase 2*.

Summary of Interviews

The student interviews provided key themes that were taken up in *Phase 2*, the intervention. Students clearly articulated that talk was a powerful way to learn but that the roles for talk were a point of confusion, particularly where authority for talk favoured the teacher.

Moreover, barriers to talk from the perspective of the students fell under two broad categories; rules in their learning communities and grouping preference. These signalled the need for critical reflection in *Phase 2* (intervention) to ensure a more responsive approach to talk in the classroom. By acknowledging the voice of these participants, *Phase 2* sought to address these findings from students and use them as levers to support teachers to responsively co-design their follow up lessons.

The evidence from teachers' perspective was varied – some through self-report classified the "discussion" as more of a brief exchange, sometimes conducted where necessary while teachers roved around the class. Some teachers were critical of student participation suggesting that talk would not take place for some. Teachers agreed on the power of talk to be transformative and reported on designing instruction through text selection as a key enabler, but this contrasted with barriers identified in the earlier part of this chapter, that which highlighted tight control by the teacher in terms of questions posed, and talk patterns characterised as vave.

Summary of Phase 1

Results for *Phase 1* were organised under quantitative (Part 1) and qualitative (Part 2 and 3) analyses and highlighted the complexity of how talk is considered in the classroom space. Moreover, findings that used the new PDIT frame, founded on the culturally located practice of Talanoa, suggested even further complexities linked to teachers' repertoire of talk with their Pasifika learners. *Phase 1* overall then, has presented what 'currently exists'.

Part 1 highlighted the premiere talk pattern TOT or teacher over talk, pervasive in all areas of early discussions. Factoring in to TOT were results that favoured teacher authority related to turns, words spoken, and questions posed in the discussion. Student and teacher perspectives also confirmed these results with participants agreement on who talked the most in classroom discussions but also signaled the power of talk for both social and cognitive benefits.

Results reported using PDIT highlighted the prevalence of vave followed by mālie, māfana. The latter arguably important in terms of its underlying connecting principle but not fully realised as evidenced in the limited talanoa'i and limited or non-presence of both pō talanoa and tālanga laukonga (dialogic) dimensions.

Findings in *Phase 1* overall provided a positive grounding for a reset or rather disruption of the traditional approaches to "discussions" in literacy. Responding however needs to be in conjunction with context to be able to explicitly avoid the one size fits all approach as a

solution. That is, to focus simply on binary shifts, from monologic to dialogic, vave to tālanga laukonga, detracts from all the evidence presented thus far. Through intentionally "leaving the door wide open," *Phase 2* next elevated the *Phase 1* findings on resourcing discussions that provided space for multiple and critical voices to develop in classroom talk and simultaneously worked on resetting cultural norms for discussion. Both are genuinely positioned to advance capability, knowledge and subsequently develop teachers' and students' dialogic repertoire.

The next findings chapter, *Phase 2*, continues to focus and report on evidence collected in this study linked specifically to the Intervention.

CHAPTER SIX – RESULTS OF PHASE 2

The intervention: Teachers designing instruction for improved patterns of classroom talk

Chapter Overview

The previous chapter reported on the sub-question, "*what are the current patterns of talk in classrooms with high pacific populations."* In this chapter findings were presented to address three broad principles identified in *Phase 1* profiling patterns of talk which concerned, teacher and student talk repertoire; resources used in discussion and dialogic community membership. Moreover, the reporting in this phase addressed the final two sub-questions; *What culturally appropriate protocols for talk can be established classrooms with high Pasifika populations? What resources can be used to support dialogue in classrooms with high Pasifika populations?*

This chapter is reported in two parts. Part 1 explored the activities and procedures of the intervention, a full day workshop with teacher participants. During the intervention there were collaborative exercises aimed at critical reflections as a process and categorical knowledge building of the culturally located practice of Talanoa. Teacher participants were positioned as valued, key contributors, voluntarily assuming the role of researcher which led to the final purpose of the intervention, teachers as lesson designers, designing instruction for improved patterns of classroom talk.

Part 2 of this chapter reported findings related to teachers' co-design of their lessons that responsively considered three principles, talk rules, repertoire and resources. The rationale for these foci aligned explicitly to *Phase 1* which illustrated how these emerged in the data collected and analysed. Part 2 also reported patterns in teachers' development and design of ground rules for talk and the resources designed that would impact on overall teacher and student talk repertoire which is fully detailed in *Phase 3.*

For clarity the reporting in this chapter references Time 1 (pre-intervention) and Time 2 (post-intervention and used the same codes as the previous chapter for reporting findings by teacher as TCH1, TCH2 and so on.

Part 1: Procedures of the Co-design

Activity 1: Teachers As Researchers

Mode of delivery

As previously outlined (see Methodology Chapter 4) a full day workshop took place with all teacher participants (September 2017). The workshop design was based on findings from *Phase 1* data collected between June to August 2017 that included classroom audio data, teacher and student interview data. In order to conduct both an effective and efficient workshop the *mode of delivery* ensured that there was a shared understanding between teachers and researchers that set the tone for the intervention. This meant an agreement was entered that sought to actively establish a safe space in which teachers were able to contribute, share, and question, and challenge without fear of embarrassment. Four main activities were employed in the workshop intervention, teachers as researchers, teachers' categorical knowledge building of PDIT, teachers as critical reflective practitioners and finally teachers as designers. The latter activity was initiated during the workshop with teachers completing their designs in their own time and back in their own learning communities. Part 2 (this chapter) reports evidence for the effectiveness of the activities engaged in Part 1.

Holding Up the Mirror – Teachers as Researchers Reflecting on Their Own Classroom Transcript

A collaborative sense-making task was undertaken in the first part of the workshop. Teacher participants were given a copy of their own transcript to read, reflect and begin to make sense of this. The ensuing collaborative dialogue from this task, that lasted approximately one hour, showed that teachers were able to reflect on their classroom discourse with considerable awareness of the wide range talk features present and/or not present. A reflective sheet designed to guide, and prompt thinking and engagement was also provided for each teacher and was organised around three guiding principles, types of talk/repertoire resourcing and dialogic community membership rules (see Appendix J).

Teacher Noticing and Recognising Talk Patterns and Their Impact

As a result of the sense-making task teacher participants were able to identify some talk patterns. The first emerging pattern noticed were TOT or teacher over talk. A reminder that teacher over talk as a practice did in fact block to a large extent, student uptake in the discourse and prevented promising sequences impacting on development of dialogic repertoire. On recognising this featured pattern, one teacher reported, *"I found it really hard*

to look for any positives in my one, I notice that I am doing a lot of airy, fairy fluff [in the discourse] that did not register to the students" (TCH2)

Often hidden in the overly long stretches of teacher over talk (TOT) were in fact positive aspects such as academic apprenticing in the talk and promotion of language features, open questions and think alouds. The researcher recognised these markers and deliberately engaged teachers in a dialogic discussion aimed at noticing where in the over talk teachers could identify specific productive talk markers. Two things are advanced by this, the first is honouring and recognising these teachers existing strengths and secondly, simultaneously building new discourse understandings as a lever for one's own improvement. The notion of adaptive expertise is elevated here. If these exercises seemed to be too far ahead of what the teachers can actually do, meaning analyses were so abstracted that I can't put my finger on what next, will surely miss the mark. This rather deliberate focus on what exists first, to develop the more promising discourse approaches later were likely to yield shift in practice because the approach valued their practice for what it currently demonstrated as important.

Noticing What Talk Meant for Students

The teacher researchers then moved expertly to what the *students* in their transcripts were saying, thereby achieving the intended depth of reflection the exercise aimed for. Whilst fundamentally the aim of this study is to increase the teacher's dialogic repertoire, this study is positioned in a way that is equally interested in how students can also develop their own dialogic repertoire.

Critical reflections of student contributions analysed in transcripts, revealed for one teacher, "*My task was not even challenging, I don't even think my kids knew what the purpose was*" (TCH3).

Another teacher reported that they were, "*trying to prompt the students to say more to add a bit of value and rephrase more*" but at the same time noticed that, "*I was asking a lot of closed question prompts so then I realised I was filling in the gaps more*" (TCH1).

Finally, one teacher looked directly at how the prompts they used were responded to by students and noticed, "*I was doing the same sort of prompting they say a little bit more, do a little bit more thinking, so I was pushing but forgetting that we did not quite get in depth understanding exactly so I needed to plan better to get the kids to genuinely take it up and move it along"* (TCH2).

By far the biggest impact for this group of teacher researchers were the ability to sit in their own transcript data and be given time and space to simply notice what their practice looks like from both teacher and importantly student perspective. This exercise provided a foundational shift in the process of "noticing" and suggests that looking at talk in this way using the strategy that highlighted the responders (students) lens allowed teachers to confront their own notions of what they envisioned were effective approaches for talk.

To advance teachers as researcher a step further, the unique cultural framing that this study offered emphasised the next mode of delivery in the intervention, promoting a cultural approach to analysis, and building depth of understanding around the indicators and nested indicators found in the PDIT.

Activity 2: Teacher Categorical Knowledge Building of PDIT

The second intervention approach introduced teacher participants to Talanoa as a culturally sustained practice through the Pacific Dialogic Indicator Tool (PDIT). This was highly appropriate given the large percentage of Pacific learners already identified in their learning communities. The intervention goal was to acknowledge Talanoa as both coding frame and as a pedagogical support frame for developing a more dialogic repertoire.

The researcher took the time to explain each dimension and sub-dimensions of PDIT (see Table 12) and provided each teacher with a hard copy of the coding frame. By leveraging what teachers had noticed already in their transcript, to this point in the intervention, this activity provided a means to give these noticing's a name that linked to highly valued Pacific ways of knowing and doing and talking embedded in the PDIT and are appropriate given the context.

Each coding category of PDIT were augmented with examples from across the six transcripts as reported in *Phase 1*. Teachers were given time to talk through how specific speech act examples were coded by the researcher. Following this exercise, the final task required teachers to attempt to identify presence of the indicators in their own full transcripts and code accordingly.

The exercise which took approximately 2 and a half hours directly positioned the teachers as researchers. Using the dimensions in the PDIT also required a specific level of reflection about how their Pasifika learners were being positioned in the talk. Subsequently these reflections supported a responsive approach to their own lesson designs further outlined in Part 2 of this chapter.

Activity 3: Potential Versus Actual Talk Analysis (PvATA)

In the third activity, teachers were given excerpts from the collective student interviews. Teachers were asked to read student responses to two specific questions asked of them. The first lot of responses were linked to student beliefs about what supported their talk in the classroom and the second group of responses were student beliefs on what might be getting in the way or what they believed the rules of talk were in the classroom. The duration of this exercise was approximately one hour long and included the task of teachers reporting back to the each other the findings of the exercise. In order to complete the exercise efficiently the group of teachers were split into two groups.

> **Group 1** was asked to discuss and group/categorise student responses to the interview question posed of all students in the interview; *Does talking help with learning? Why and how?*
>
> **Group 2** did the same but with different student responses to the following question: *What rules do you have in your classroom for discussions or talking?* Teachers allowed this part of the workshop to be audio recorded so that the researcher could gain greater insight into this task and due to the fact that I was facilitating the activity at the same time.

The power of this exercise was found in the discoveries made and subsequently reported. Teachers reported two key findings from analysis of the students' interview responses:

1. *Students valued talk for learning*

   Group one reported back on their question of how talk helps with learning and why/how? Grouping and sub-categorising of these responses showed variation. Teachers highlighted where students *valued* talk for learning at a dialogic level that supported higher order critical thinking. Teachers in group one shared specific student responses with the wider group that strongly suggested students value talk and that extended to student understanding of reasoning and collective problem solving as a support.

2. *Rules for classroom talk privileged the teacher*

   By contrast, when reporting back to each other *group* two highlighted that most "rules" offered by the students fell into the behaviour, respect and listening sub-categories e.g., *don't be mean, no talking if the teacher is talking*. Very few discussion rules shared by the students in their interviews Time 1 were linked to higher order

cognitive aspects such as knowledge building and critical thinking (see also Chapter 5: Table 35). Teachers in this group expressed the need to find a way to balance the talk between "learning types" and "behaviour" and further suggested that once established these "rules" needed to be used in other learning areas as well as literacy. One teacher further commented that "once students felt empowered and safe, they would be better able to pick these [cognitive rules] up and if we can equip our kids with that then we are setting them up as they go through no matter where they are"(TCH2).

Analysing student voice in this way (PvATA) was fundamental as the exercise revealed voices that are largely overlooked in studies beyond final reporting. One teacher (TCH6) concluded after hearing both groups' reports, *"there is a huge discrepancy, they [students] are saying in detail how talk helps them, but actually the rules around talk is this* [pointed to the behaviour rules categorised]. Another teacher revealed, *"thinking about my own class, how often do I talk about the talking as part of your learning, how valuable is that, what are they gonna get out of it. Usually you talk about behaviour, we don't talk about what can we get out of the talk, [reading student contributions] 'its valuable, you get knowledge from other people, adding things, we don't say that often enough, is that right? I don't know?"* (TCH1).

As teachers reflected and shared and discussed these responses it became obvious that there was an opportunity to leverage these findings and respond to this critical analysis in their final series of planned discussions.

Activity 4: Planning and Co-designing Post-intervention Discussion

Approximately 60 minutes were used in the final part of the workshop to begin co-planning and co-designing teacher's post-intervention discussions. It was agreed that two further lessons would be implemented. The first lesson was going to be based on the ground rules for talk followed by up to two further literacy discussions that used the activities engaged in the workshop, to drive the lesson goals and content.

Aim-High Notions with Tālanga Laukonga

Finally, teachers were provided a set of resources to support them to complete their lesson designs on their own. This first resource reintroduced the principles that constituted tālanga laukonga. Given there were no recorded instances of this dimension in the *Phase 1*, these were shown to support teachers to aim high and in a culturally responsive manner.

Following the template that included the nested principles of tālanga laukonga the researcher created and shared a series of slides that referenced receptive and productive aspects that

underpin English in the *New Zealand Curriculum*. These resources were intended to both reinforce and act as thinking prompts as teachers sought to redesign their next series of lessons and to maximise what they learned about student voice and rules, theirs and their student talk repertoire and the resources that were employed in Time 1.

This section does in fact signify the adaptive value of the PDIT and its multi-purpose use as not only and analytic coding tool but useful as shown here as a thinking tool or pedagogical frame. By providing these cultural underpinnings to support teachers address the aim-high notion also assisted deliberate selection of text resources to improve talk patterns. The unique nested principles of tālanga laukonga share synergy with higher order thinking (about text/task) in the discourse and move towards reasoning, perspective taking and extended exploratory talk.

Summary

The mirror metaphor used in Part 1 is most fitting. Essentially the teachers' transcripts as initiators became the centre of a dialogic discussion on patterns found in one's own classroom talk aligned closely to and reconciled with the Pacific orientation of Talanoa. Informed by both the review of literature and *Phase 1* results teachers next took part in a deliberately planned task that privileged students' voice. In presenting student beliefs on aspects of classroom discussions and then using these as principles to guide instruction elevates and propels these beliefs to take their place at the centre of the teachers designing and planning of post-intervention discussions and instruction.

Part 1 has illustrated a "genuine" collaborative effort on developing an understanding of student perception on ground rules for classroom talk. The intervention workshop also began to advance thinking and knowledge on planning and resourcing dialogic discourse. Underpinning both are the identification and acknowledgement of Talanoa a culturally sustained practice which values Pacific ways of knowing and doing and are highly appropriate given the context.

Part 2 next begins to make visible exactly where and how teachers mobilised this thinking in their designs.

Part 2: Findings from the Co-design Sessions

Finding 1. The Need to Design Community Membership

All teachers implemented their deliberately planned community membership discussions in Term 4, 2017. The creative designs elements were noteworthy. Tables 36-40 presents an overview that includes;

i. teacher identifier
ii. teacher approach to their design of developing talk norms
iii. an example of resources used to engage their learners in the discussion
iv. the final "product" (community membership norms established)

Following on from the evidence in each table are short excerpts from the *co-constructed rules discussion transcript* that highlighted in particular the student engagement in the process.

Evidence for Effectiveness: Rules That Go Beyond the classroom

For TCH1 the sophistication of their approach reflected the year level of the students (Y7 to 8). Use of terms such as *rights* and *obligation*s in Table 36 were levers to engage high order thinking that moved beyond rules for dialogue in the present but towards participation in dialogues outside of the classroom. Students worked through a specific teacher designed and created power point to explore what these terms were defined as and then used this new knowledge to co-construct an agreed set of classroom talk rules. The final product references the notion of civility which takes the understanding of discussion norms beyond the walls of the classroom and are considered highly effective and impactful.

Table 36

Community Membership Overview for TCH1and Their Students in Time 2

Teacher	Approach	Teachers design elements used to initiate discussion	Community membership *product* – agreed rules published for the group of students post this discussion
TCH1	Is talk important? Rights and obligations	Is talk important?	Discourse Rights and Obligations You have the right to..... ..make a contribution to an attentive and responsive audience. ..be treated civilly. ..ask questions. ..have your ideas discussed, not *you*. You are obligated to..... ..to participate* in class discussions ..speak loudly enough for others to hear. ..listen for understanding. ..treat others civilly at all times. ..consider other peoples ideas and to explain you agreement or disagreement with their ideas.

Example of student responses in the co-construction of Table 36 rules:

S1: Ah rights are things that you have the right to do and are things that you get like human rights, sort of like that like you have your right to, and then obligation is like the same thing

S2: You have the authority to do something

S3 Obligation is when they're committed and right is where someone gives you the choice

Evidence for Effectiveness: Genuine Collaboration and Co-Construction

For TCH2 the approach was a student-led discussion resulting in rules that were reasoned through by the group. The final set of agreed rules were a balance between both social and cognitive. One rule however that was potentially problematic for a dialogic discussion was the agreement not to debate. The reason provided by the student who proposed this idea was that *"Yeah Miss and I think we should be like, I know debating is like good for learning and community enquiry but like if one person and the other person keeps on debating to each other the other people won't have a turn to speak"* the contribution was not taken up at the time. The researcher has listed the agreed rules beneath the photo in Table 37.

Table 37

Community Membership Overview for TCH2 and Their Students in Time 2

Teacher	Approach	Teachers design elements used to initiate discussion	Community membership product – agreed rules published for the group of students
TCH2	Student lead discussion	Teacher allowed students to lead and record their contributions	1. Clarify answers but avoid debating 2. It's ok to be wrong in a discussion 3. It's hard to hear when people call out 4. Go around in circle girls go first 5. Shouldn't have to put up hand, but put your hand up if you want to speak 6. 'Because' is the best way to explain something 7. We pick who speaks next 8. Don't talk over others 9. Be prepared to think have ideas ready in your head 10. There's no right or wrong answers

<u>*Example of student responses in the co-construction of Table 37 rules:*</u>

S3: "So something I think we should have as rules in discussion is that you shouldn't just put your hand up and talk and forget what you said because you have to be prepared to think because if you just put up your hand and for example if I just said dinosaurs lived in Jurassic Park and then someone put their hand up and said can you please clarify that um you don't just put your hand up, just to say that, you put your hand up to like give ideas"

S2 "Also you have to be prepared to think because like if I oh if you said a question and then I said something and then for example if Nathaniel shouts over me then he wouldn't be prepared to think cos he said the same answer as me."

These excerpts in the rules discussions above, show students awareness of the impact some rules will have for themselves, for example S2 suggested that one must be *"prepared to think"* though the qualifier is painted as a notion of control over behaviours that S2 does not like when they are in dialogues. S3 also has a novel qualifier for the rule they put forward which is in line with S2 but, at the centre of the suggestion is the notion of preparedness and genuine contribution to the discourse not just entering to utter a step lock talk move e.g., "can you please clarify?"

Evidence for effectiveness: Contrastive visual prompts engaging and impactful for students

Table 38 shows a collaborative effort from two teachers. TCH3 and TCH5 were in the same learning community (which is a team of teachers and students of the same year level/s) and decided to collaborate on the *resourcing* for their community membership discussion. Visual resources were used to support both groups of students to think about what features they felt were necessary for their own classroom discussion, similarly the visuals were used to show what features of discourse were less desirable. The contrasting visuals (see Table 38) were supplemented by the following questions and prompted by these teachers to initiate discussion,

"What is going on in the picture? Is there anything wrong? "I want you to discuss what the groups should be doing as they have their discussion" and why do you think that?"

An interesting highlight in Table 4 found in the final column, is rule number 5, that promoted a review of these co-constructed rules, after their final literacy discussion.

Table 38

Community Membership Overview for TCH3 and TCH5 and Their Students in Time 2

Teacher	Approach	Teachers design elements used to initiate discussion	Community membership product – agreed rules published for the group of students
TCH3 & TCH5	What is going on the picture?		1. Listening to each other- by not talking over them 2. Share your opinion- you could be right but if you are not you will LEARN something new 3. Include- giving everyone a chance to speak 4. Ask questions- to understand something, to challenge someone if you disagree with them 5. After our discussions we can come back and change or add to this list

Example of TCH5 student responses in the co-construction of Table 38 rules:

S1: They should be listening

T: Because you're all sitting up but you're actually doing something

S1: They're talking

S3: They should be talking

S4: They should be asking questions

S2: Participating

T: Participating, asking questions cool. What about the other pictures?

Example of TCH3 student responses in the co-construction of Table 38 rules:

S3: They should work together as a group

S2: They should all be participating in the learning

S3: If they're confused they should ask some questions

S3: If we agree or disagree

T: And we say yes and who can add onto that?

S3: Also questions

T: And what else do we say?

S1: Ideas, ask for

S2: And argue

T: Yes and what else do we say?

S3: Do you understand

S1: Do you want to give some

T: Do you want to add on, do you want to say that a little bit louder please

S3: Should always be participating

S1: Include everybody in the learning

T: Thank you, what do you mean by including everyone in the learning?

S1: That everybody gets to ask some questions and participate in every subject

T: Okay, that everyone asks questions and, so what do we mean by, what else could we have as our rules?

S4: Defend your reasoning

The transcript excerpts (above) reveal a level of commitment and engagement in this discussion that was creatively and deliberately designed by these two teachers. The ensuing discussions highlighted student's awareness of some of the key elements of effective classroom ground rules that included elements such as '*talking*' '*defend your reasoning*' '*ask questions*', '*participate' and' agree or disagree*'. By promoting these offerings as part of the

classroom culture of talk allowed critical positioning and greater responsibility for the learner through their final discussions.

Evidence of Effectiveness: Rules Development that Were Age Appropriate

For TCH4 (see Table 39) again the approach was appropriate to the age of these learners (5 to 6 year olds). This discussion was designed in a creative way, again using visuals, that yielded a core set of rules to position learners as *contributors, listeners, thinkers and questioners*, for their next and final lesson.

Table 39

Community Membership Overview for TCH4 and Their Students in Time 2

Teacher	Approach	Teachers design elements used to initiate discussion	Community membership product – agreed rules published for the group of students
TCH4	Signs and symbols	Symbols used to scaffold the discussion 1. Ear 2. Light bulb 3. Thumbs up smiley face 4. Talking face	Transcribed rules from the above photo Listening Asking questions All ideas are OK Everyone must talk Listen to the teacher Listen to (student name) Say in complete sentences

<u>*Example of student responses in the co-construction of Table 39 rules:*</u>

S2: We should talk because people will talk back and they have questions

T: So asking questions, so you could put your hand up to ask a?

S3 A question

S1 Someone listening

T: Someone listening and what do we listen with?

S3: With our ears

T: What do you think I can draw here?

S3: A ear

A contrast of Evidence for Rules Development

By contrast TCH6's approach and final product (see Table 40) were more like previous Time 1 norms. This was because on closer analysis of their rules discussion transcript, the teacher's line of questioning did initially pose a teacher constructed over a co-constructed approach for developing community membership rules.

Table 40

Community Membership Overview for TCH6 and Their Students in Time 2

Teacher	Approach	Teachers design elements used to initiate discussion	Community membership product – agreed rules published for the group of students
TCH6	What do we think about "status quo"?	No resource designs provided	Use personal voice C3 before me Get feedback Wait time Listen Ask Re-voice

The sequence provided next showed this teacher initiating their "rules" discussion that invited student opinions but began with current status quo for example, *"This morning I want to talk to you about what we do in our discussion circles. We know that we have them every day. What do you think of our discussion circles at the moment?"* The teacher approach did seem somewhat in contrast with the student messages illuminated in the workshops that suggested student perspectives on the current rules in their classroom were largely authoritative.

Overall, however the resulting *product* Table 40 highlights potentially effective rules such as "*Ask" "revoice"* and *"listen, give feedback and wait time."* There was perhaps a missed opportunity here to begin the rules discussion with a focus on facilitating discussion towards

more cognitive aspects such as reasoning or perspective taking, in line with the collective student Time 1 reports on the power of talk to produce such.

Example of student responses in the co-construction of Table 40 rules:

T: This morning I want to talk to you about what we do in our discussion circles. We know that we have them every day. What do you think of our discussion circles at the moment?

S1: I think our discussion circles are good so we can tell our problems

T: Okay and what do you think?

S2: I agree

T: You agree and what do you think?

S3: In my opinion I believe that we are happy to do this with people in this class

T: What do you think?

S4: In my opinion I agree with Lauryn

T: And what do you think?

S5: In my opinion I will use wait time in the sharing circle

T: Okay so you're talking about a rule that you'll use. Okay really good.

S6: I agree with Lauryn

T: So basically you're all telling me that you're comfortable with the discussion circles we have, we know them as cognitive circles. What rules do you understand that we have in that time?

S6 By helping one another

S5: By using manners

S1: By caring for others

S5: By sharing

S3: By waiting for the person to speak

S4: By listening to the person who is talking

S2: By using your manners and no fighting

S6: So we can't swear. So the problems start and we gave feedback and we have a discussion

S4: We help people if we're finished

S5: We stand by them

Evidence of Effectiveness; Reference to Community Membership Norms

The effectiveness of community membership norms is ascertained through comparison from Time 1 to Time 2. A noticeable pattern in Time 1 suggested that almost all references to any type of *rule* during Time 1 discussions, related to teacher authority or behaviour modification, for example, "*Alright okay listen up please. Ah class noise down please*" (TCH3) and *"No I didn't ask you to talk yet Hayley"* (TCH1). Whilst Time 1 teacher authority in the discourse is largely centred on behaviour and coded TMMB, in Time 2, four out of six teachers reference to their class rules, were more in line with the PDIT coding TMMT+, TMMT (connection to learner, learning text/task).

Examples from Time 2 privilege students understanding of *their* responsibility in and through the discussion. TCH3, for example referenced norms at the start of their Time 2 lesson, *"We're going to have a discussion about NZ notes and coins making money and let's remember we need to be building on our knowledge, we need to all talk and share our ideas, we need to be actively listening and we need to be accountable for our own learning ".*

For TCH1 and TCH4 explicit opportunities were also provided at the start of their final Time 2 literacy discussion that invited students to review their co-constructed rules, for example, *"So before we start, just having a think about some of our rules for our discussion for discourse okay who can think of one that we need to be thinking about when we are speaking and sharing?"* (TCH1).

For TCH2 there was a similar pattern but an even greater emphasis is placed on elevating student authority on the co-constructed Time 2 ground rules seen in the invitation to a student member to explain and remind the group of these established norms, *"But before we do we're going to run over some rules that you guys came up with so I'm here with Jo, Kim, Lydia, Emma and Karen. Jo because you were part of the group that came up with these rules, do you mind just explaining them to everyone here"* (TCH2).

Interestingly TCH5's final discussion did not reference any rules co-constructed. For TCH6 rules referenced were expressed as behaviour modification due to less desirable discourse

events occurring and thus coded TMMB and this was a pattern that applied in Time 1 and Time 2.

The final part of this chapter deals with the next major finding, related to text resource use and visibility of these in Time 1 through to Time 2 discussions.

Finding 2. The Need to Design and Plan a Multi-Text Set Approach to Resource the Discussion

Evidence of Planned Texts and Resources Pre- and Post-Intervention

Drawing on the critical teacher reflections in Part 1 that considered Pasifika discourse frames of reference, teachers planned to effectively resource their post-intervention discussion.

Table 41 provides an overview of the texts and resources teachers used to resource their analysed discussion Time 1 (pre-intervention). Table 42 provides an overview of the planned text and resources used Time 2 (post-intervention). Several aspects were analysed to help determine the role that the texts/resources play in the discussion. Information entered into the following tables is drawn directly from the corresponding timepoint transcripts for each teacher and their students. Following these two tables a detailed report is provided, with links to some of the teacher designs. The next two tables provide a detailed overview of the texts or resources employed under the following categories;

i. Provides detail on the group size, whole class (20+) Large group (10+) or small group (less than 10)

ii. Text resource title/source detailing the actual number of texts employed also

iii. Provides the approx. reading level of the text resources on a scale of at/above or below

iv. Provides the learning intention as described by the teacher

v. Provides an example directly from the transcript of the teacher referencing the texts/resources used in the discussion

Table 41

Text and Resources Used in Discussions Time 1 For All Teachers (Pre-Intervention)

Teacher/Year lever & group size	Texts resource title and source	Approx. reading level	Learning intention	Example of the teacher reference to text pre-intervention
TCH1 Whole Class	Magical Eggs (Multi-text on power point Source: Pobble 365.com Visual – Image by Marius Cinteza	At	To draw ideas from students' prior knowledge and experience To construct an oral and written paragraph (Writing)	"From this photo we are going to come up with something that tells us what you notice? And by noticing, I mean what we see in the photo, in the background our ideas/thoughts that are brought about by something in the photo"
TCH2 Small group	Model Book – digital modelling book with examples of compound sentences and a list of vocabulary Source: Teacher authored	At	How to structure correctly a compound sentence (Writing)	"Okay so we know that sentences need capital letter, full stop, subject and a verb and we did that before. A simple sentence has a subject and a verb for example, the subject here is oh actually Estelle jumped off her bike, the subject is?" (Teacher authored sentences)
TCH3 Large group	Anatomy of a rainforest Source: World wide web David Shuckman	At	Use connectives to join ideas together. (Writing)	"I'll give you an example first aye? Alright and we'll go for a right, so I'm gonna go...the canopy provides rich food and animals right animals make their home in a canopy as it provides rich food for them"
TCH4 Small group	At the beach (reader) Janice Marriott Magenta	At	We are learning to point to the words (Reading)	"Where should we put our pointer? Under the? Under the words. Well done x"
TCH5 Small group	Model book & student created collaborative text on invertebrates Source: Teacher recorded the ideas	At	We are learning to write an introduction for an information report (pen held by T only) (Writing)	"Yep, so it's all written there, what are invertebrates, what groups of invertebrates are there and where are they found. Those were our sub topics"

	generated by students			
TCH6 Whole class	No visible text provided	n/a	We are learning to convince people using OREO technique: opinion, reason, explain, opinion (writing)	"What does persuasive writing mean to you guys?" (All students in one large circle for most of the lesson)

Table 42

Texts and Resources Used in Discussions Time 2 For All Teachers (Post-Intervention)

Teacher & year	Text resource titles and source	Approx. reading level	Learning intention	Example of the teacher reference to text post-intervention
TCH1 Small group	Visual text (image) Framework for thinking/speaking Video clip Prompts Source: Newshub reporter Teacher author	At	Form an opinion on the recent events of the RLWC 2017 in South Auckland. Ideas in the discussion can be used Exposition / persuasive piece of writing. (Writing)	"Looking at this image here and I'm sure you saw this all over the streets in Mangere, in Otahuhu, before you speak you always need to take time because great (teacher paused) [student response: thinking takes time] … And thinking about what we're talking about today, is it good support, patriotism or is it over the top, too much?"
TCH2 Small group	Multiset of text PowerPoint with hyperlinks The history of coal – multiple text How coal is formed –multiple text Carbon cycle article – multi-modal Articles in science Non-fiction Visual Nasa Climate Kids Kids and energy Science learning hub	Varied – between 9-12 years so At and above	Take a position on a statement or visual and explain what you think and why ok? (Reading)	"So as part of this discussion today you need to take a position. I'm going to put up an image and you need to take your position and that means you need to explain what you think and why okay? So you're going to take your position?"
TCH3 Small group	Play money Making money Source: Tricia Glensor Play monies copied for students to use	At	To find out about the money we use in NZ. To find out what is special about NZ money. (Reading)	"We're going to have a discussion about NZ notes and coins making money and let's remember we need to be building on our knowledge, we need to all talk and share our ideas, we need to be actively

	(Tongan/Samoan/ NZ) Junior Journal 55 Gold 1			listening and we need to be accountable for our own learning and my first question, I have an article here for you to read about NZ money."
TCH4 Small group	Hybrid Animals text Visual text (images x 2) Source: Unknown Video Source: www.youtube.com/ watch?v=AMD6c9 oN1Ys 20 strangest hybrid animals Grolar Bear	Sophist-icated and engaging Hybrid animals – fiction At/Above /Well Above 9+ multi-modal	Can we tell each other about what we think about hybrid animal? Is it possible or is it not possible and I wonder why? (Reading)	"Awesome and then we'll have to come to the picture remember? So if we're going to talk about what picture? Oh that was a zdog for that animal. What do we call these animals? They're called?"
TCH5 Small group	New Boots Source: Tim Jones SCHOOL JOURNAL LEVEL 3 MAY 2017	At	Make predictions using the visuals and group discussions (Reading)	"Alright so over here we've got the text, it's called New Boots and it's just a picture that you can see alright so what I'd like you to do is just have a quick think okay about what's happening in the picture and why you think that"
TCH6 Small group	There are more plastic bottles than the world can handle Source: Kid news- audio text and X 2 related theme songs	Above	Inquiry into 3 big questions. What are the problems? What should we do now? What is being done? From a sustainability perspective (Reading)	"No, no okay we need to stop. Now we're dealing with the first question. What are some of the problems that we found? Sebastian can you give me 3 problems that you found?"

Levels of Text Complexity

Table 41 shows the Reading levels in Time 1 (pre-intervention) were at the appropriate curriculum level for the learners with one teacher (TCH6) having no visible text/resource in use during their discussion. This contrasts with Table 42 and Time 2 (post-intervention) texts used, where firstly each teacher planned and used a text/s in their final discussion and the level of these text/resources used ranged from at curriculum level (N=3) to above curriculum level (N=2) to well above the curriculum level of the students (N=1).

Learning Intentions as Indicators of High Expectations

Each teacher selected a specific focus and learning intention which are detailed in Table 41 and Table 42. Shifts in focus from Time 1 to Time 2 are illustrated in elevated expectations of learners in the discussion. A specific example of this positive shift is shown by TCH4 who in their first discussion proposed as the learning intention, "*We are learning to point to the words*" (Table 41). By contrast TCH4 in Time 2 (Table 42) selected the following learning intention, "*Can we tell each other about what we think about hybrid animal? Is it possible or is it not possible and I wonder why?"*

Another contrastive shift is illustrated by TCH2 who in Time 1 selected as their learning intention, *"How to structure correctly a compound sentence*" versus their Time 2 learning intention of *"Take a position on a statement or visual and explain what you think and why ok?."* Shades of the tālanga laukonga nested principles e.g., positioning, are also privileged in the latter learning intention and highlight clear and promising shifts toward more cognitive aims of the literacy discussion through a shift in learning focus linked to the resources employed, that are clearly elevated.

TCH6 also illustrated a departure from their patterns in Time 1, by planning learning around three big questions, *What are the problems? What should we do now? What is being done?* and further supplemented with multiple texts (see Table 42). By contrast their learning intention in Time 1 (Table 41) was "*We are learning to convince people using OREO technique Opinion, reason, explain, opinion"* and whilst this intention is aligned to a persuasive strategy for students to recall the features of the genre, Time 1 transcript data showed that the talk that manifested from this learning intention, enacted a round robin exercise that included testing student understanding of a related but single focus, e.g. "what does persuasive mean?"

Finally, for TCH1, *both* intended learning intentions sustained a high-high pattern of expectations for learning confirming TCH1 an effective practitioner. Their learning intention in Time 1, *"To draw ideas form student's prior knowledge and experience to construct an oral and written paragraph"* and in Time 2*, "Form an opinion on the recent events of the RLWC 2017 in South Auckland. Ideas in the discussion can be used Exposition / persuasive piece of writing."* Again, both of intentions encouraged higher order thinking and privileged student knowledge as valued contributions for advancing thinking and learning. A similar high-high patterning extended to the resources planned, designed, and employed by TCH1 and are explained in more detail next.

High-Level Multi-Text Set Resource Examples

Table 42 highlights a privileged positioning of text/resource in and through the discussion. The positive shift in teachers design and use of multi-text resources, draws on an approach used and shared in *Time 1* by TCH1 who was considered an exemplary practitioner. The intervention provided a unique opportunity for teacher participants to explore and discuss with TCH1, the approach they employed and share the processes by which their multi text sets were developed (see Appendix K). As such teachers were given an additional option to explore the TCH1's *Time 1* model, the multi-text approach, as a means to support their own lesson designs for their final classroom discussions in Time 2.

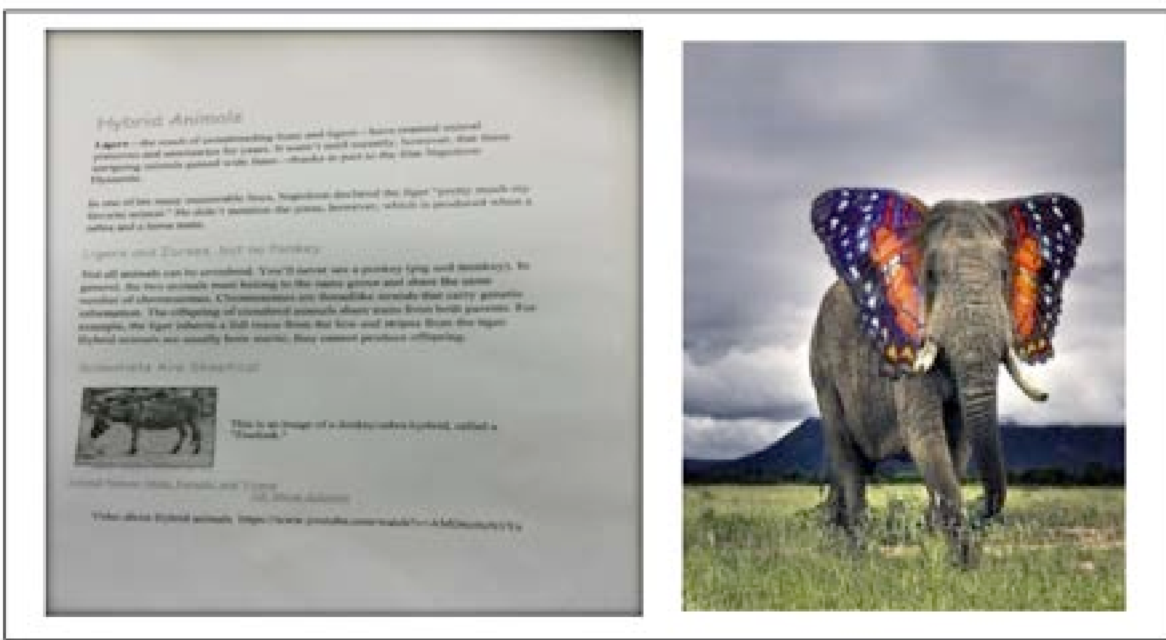
In *Time 2* the planning provided by TCH1 were a visual and video text (see Appendix L). What was also visible in their Time 2 "*plan*" were key foci, a teacher script that highlighted indicators and specific teacher prompts as reminders that would be more effective for *"Talanoa F2F dialogic"* this title specifically recorded on their Time 2 lesson plan.

Uptake of Design

Another exemplary resource (Figure 18) points to one teacher's uptake on and expanded view for resourcing talk in their classroom that draws specifically on the shared resource provided by TCH1. Figure 18 highlights a design that is especially critical for TCH4, given the level of technical vocabulary found within the text they selected, the shift from fiction (Time 1) to non-fiction (Time 2) and the additional provision of a digital mode of text seen in the "hyperlink text" for students to engage and explore. TCH4 encouraged their students to engage in the text set they designed "before" the planned final discussion. These examples show a rather large departure from typical literacy resourcing and reading instruction for this level of new entrant learners and thus the gravitas of this finding in this study. The design from TCH4 aligned with the high expectation's notion promoted in the teacher intervention and linked to sub-dimensions found in tālanga laukonga.

Figure 18

Text and Visual Resource Designed by TCH4 for Their Final Time 2 Discussion


Hybrid Animals

Another exemplary resource designed and created for classroom talk from TCH2 can be found in full in Appendix M. For TCH2 their text design features share similar traits from the model shared in the intervention workshop by TCH1. The six-page resource illustrates the use of multiple modes, visual text, written texts for close reading, again a departure from the over reliance of just one text, one genre from Time 1. Provision of historical texts, listening and viewing texts, and powerful imagery allowed important genre variation for students to engage with and again, prior to, the final discussion. Like TCH4, this provided the opportunity to expand thinking and knowledges beyond what a single text approach might provide, and which was much more prevalent in Time 1.

One exception however to the teacher's designs was TCH5 who employed just one text in their final discussion. The strategy used however was to zoom in on the visuals as part of the one text supplied which became the focus and centre of a more dialogic discussion that engaged learners. Visual texts planned for instructional use by all teachers in their final Time 2 discussion can be seen in Appendix N.

Summary

To be more dialogic in classrooms where there are high numbers of Pasifika learners requires high-level skill, knowledge, strategy, ultimate conceptual understanding of the road map of learning and discourse that may ultimately lead learners in multiple directions. Key to highly

effective discourse pedagogy are the findings presented in this chapter and summed in brief as; teacher willingness to critically reflect, notice and plan a responsive approach to their follow up discussion; opportunity to critically dialogue ways to be purposeful and deliberate in planning to dialogic; critical evaluation of how text or resources could potentially be used as levers in the discourse and finally how to design and co-construct norms for more positive impact on the culture of classroom talk with students.

Then next and final findings chapter (*Phase 3*) reports teachers' and students' classroom talk patterns, following the intervention.

CHAPTER SEVEN – RESULTS OF PHASE 3

Reporting "shifts" in classroom talk patterns for teachers and students

The third and final results chapter reported on findings post-intervention. That is, did the focus areas for the collaborative workshop intervention have impact on or positively influence teachers and students' dialogic repertoire, which addressed the main question of this research. My argument has been made simple, if teachers provided the platform to collaborate on the rules of discourse and design instruction with targeted resources that would see an opening of the discourse space, will result in positive shift in teacher repertoire and towards more dialogic pedagogy. The function of the resources was to raise awareness of the content or topic for the teacher and inform and scaffold new discourse practices during the post-intervention discussion. The rules that were co-constructed acted as a support that privileged responsibilities to discourse itself.

Chapter Overview

The three phases in this study operated to progressively report patterns that addressed the main research question, how can we design and employ dialogic processes as appropriate and effective discourse forms for Pasifika learners in English medium literacy contexts? *Phase 1* described the findings of talk patterns from six teachers' classroom transcripts and identified; limited talk repertoire for both teachers and students; the inadequate presence of and deliberate use of textual resources; a teacher over talk phenomenon and misunderstanding about what constituted community membership norms. Subsequently, these became principal foci explored together, with teacher participants in *Phase 2*.

Phase 2 outlined specific intervention activities undertaken to support all six teachers. These activities supported teachers to assume the role of researcher; to undertake critical examination of their own practice; engage in categorical knowledge building of both patterns in their own transcripts and the cultural relevance of PDIT and finally, to adopt the role of co-designer for their post-intervention lessons which included co-constructed community membership discussion followed by the final literacy-based discussion that are used to report findings in this chapter.

This chapter followed a similar reporting structure as *Phase 1*. This is designed to show shifts that occurred. There are three parts to this chapter. Part 1 examines shifts through close quantitative analysis of the post-intervention classroom transcripts. Part 2 used qualitative

data to examine shifts through close analysis of classroom transcripts using the PDIT. Part 3 reports shift that occurred in the perceptions and beliefs of students and teachers interviewed for this study and that explicitly linked to Part 1 and 2.

For clarity, all reporting that follows referred to pre-intervention *Phase 1* as Time 1 and all post-intervention *Phase 3* (this chapter) as Time 2. *Phase 2* will refer to the "intervention" when reported on here.

Findings Part 1: *Quantitative Analysis* of the Post-intervention Classroom Transcripts

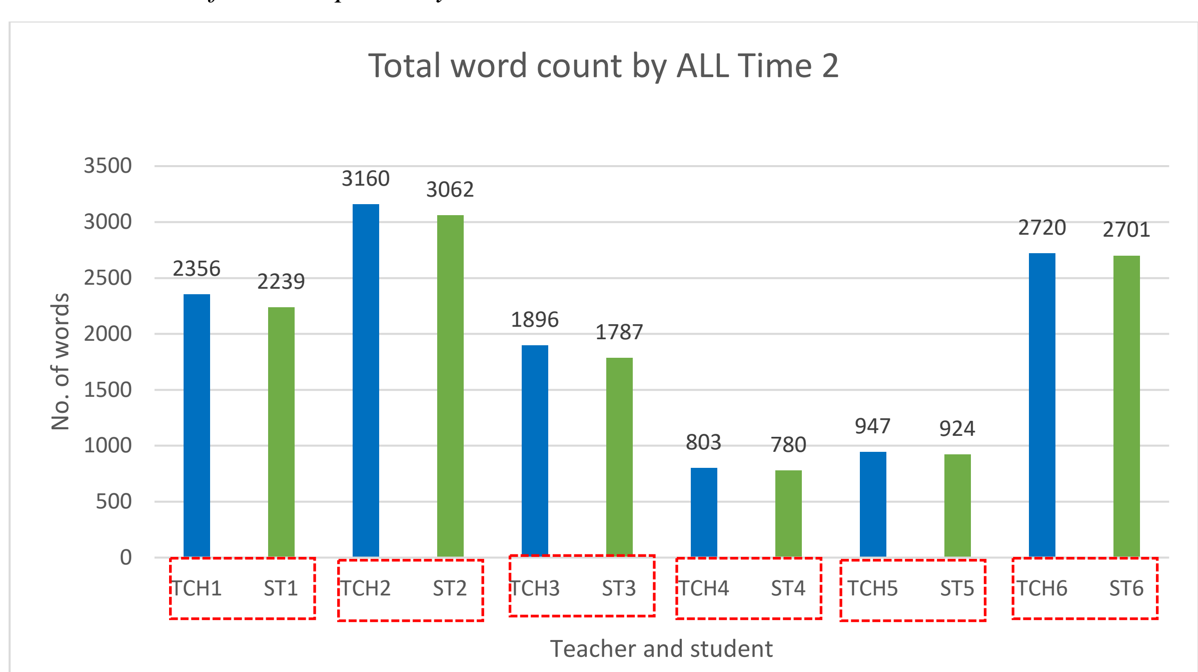
Finding 1. No change: Teachers Speak More Words Than Their Students

Like Time 1 findings, the Time 2 transcript analyses concluded that most words in the discourse were again spoken by the teacher. In Time 1 the student average across all six classroom discussions was 2,225 words and for the teachers 2,359 a difference of 134 words spoken overall. In Time 2 there was a closer match overall with students average of 1915 and for their teachers, 1981, a difference of 66 words overall. Figure 19 shows all six teachers' and their students total words uttered and illustrates where teachers outnumbered the words spoken overall by their students combined.

TCH5 and TCH4 showed the smallest difference of 23 words more than all students combined. TCH2 had a difference of 98 words more than their students but a definite contrast to the 181 words more than their students in Time 1.

Figure 19

Total Number of Words Spoken by All Teachers and Their Students in Time 2



There was a relationship between word counts by teacher/students and group configuration. Instruction in Time 1 comprised two configurations: a whole class configuration that included the teacher and approx. 20-30 students and a small group configuration, the teacher and between 5-9 students approx. In direct response to student voice reported Time 1, all final Time 2 literacy discussions were conducted in small group configurations between 4-11 students. This approach to literacy discussions was a distinct change from Time 1 for three out of the six teachers (TCH1, TCH3 & TCH6).

Finding 2. Shift in Student One-word Utterance Pattern in the Discourse

Whilst word counts, as shown in Figure 19, still favoured the teacher, when students spoke in the discussions in Time 1, many utterances were constitutive of a single word response captured between 19-59 times across the six classroom transcripts. The student one-word utterance in Time 2 however, had decreased and now occurred between 5-37 times. This was a distinct shift for 5 of the 6 classrooms. The exception was TCH3 and their students (ST3) who recorded an increase in the one-word utterance pattern from 23 in Time 1 to 37 in Time 2 as shown in Figure 20.

Figure 20

Total Counts of One-Word Utterance by Students Across All Classrooms Time 1 and Time 2

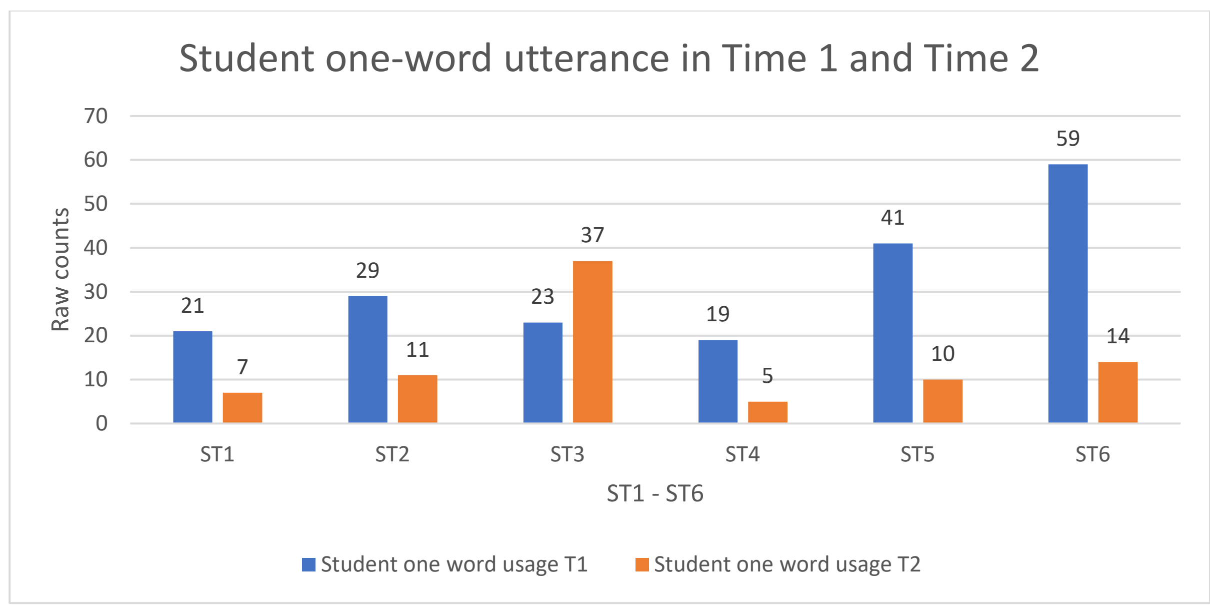


Table 43 presents the frequency pattern of student one-word response in Time 2 was between 5-37 counts (or 4% to 16%) of the overall discussion. The teacher pattern of one-word utterances was 2-8 counts (or between .3% to 13%) overall. In contrast with Time 1, the frequency pattern of student utterances that contained one word were between 19-59 counts (20%-71%) overall. For teachers a similar pattern from Time 1 between 0-5 times (1% to 7%) overall.

For TCH3 whilst there were more raw counts by their students of one-word utterances overall the percentage of these acts of the overall discussion reduced from 50% overall to 33% and is a result of *turns* in the discussion which actually increased for these students, in Time 2 and detailed in the next section.

Table 43

Probability of One-Word Utterances by Teachers and Students at Time 2

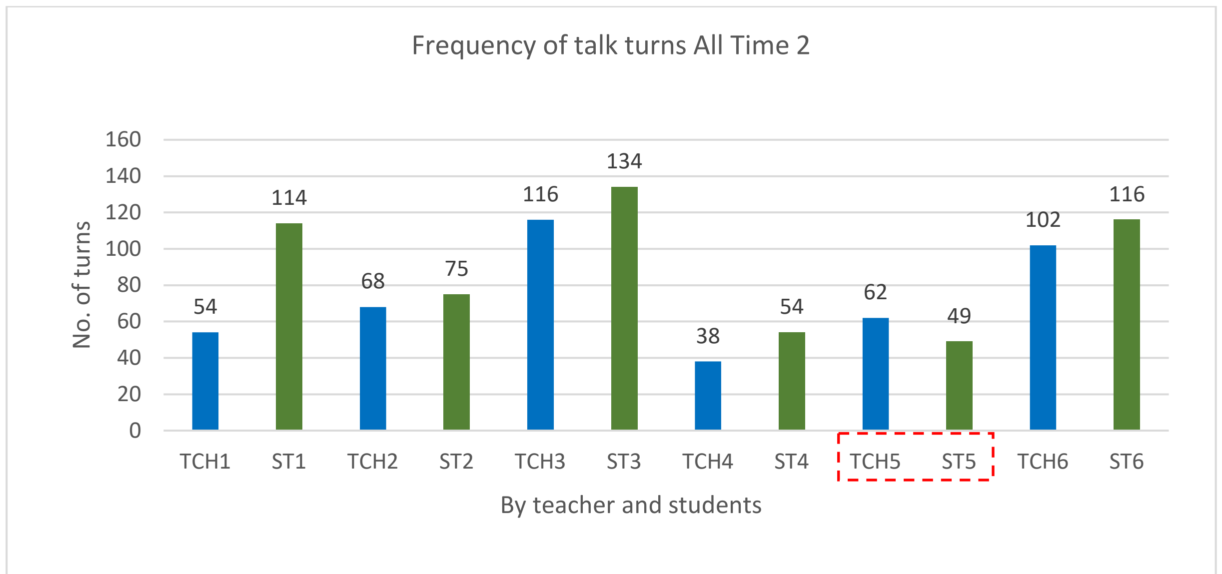
Teacher	Total number of teacher speech acts	Total number teacher one-word utterances	Teacher ratio and percentage	Total number of student speech acts	Total number of student one-word utterances	Student ratio and percentage
TCH1	58	2	1:29 (.3%)	114	7	1:16 (6%)
TCH2	68	5	1:14 (7%)	75	11	1:7 (14%)
TCH3	116	8	1:15 (7%)	134	37	1:3 (33%)
TCH4	25	3	1:8 (13%)	54	5	1:11 (9%)
TCH5	61	3	1:20 (5%)	49	10	1:5 (20%)
TCH6	100	4	1:25 (.4%)	116	14	1:8 (12%)

Finding 3. Shifts in Turn Taking in Classroom Talk Now Favouring Students

Figure 21 shows the total counts of *talk turns* for each teacher and their students combined for the Time 2 discussion. By comparison to Time 1, there is a substantial shift that showed *students turns* in these Time 2 discussions outnumbering their *teacher turns*. This showed that invitation, by the teacher, into the discussion still occurred but that simultaneously, these invitations turned into sustained turns by students across 5 out of 6 discussions. The exception was TCH5, who had 13 more *turns* overall than their students combined. However, the difference in Time 2 for this teacher (TCH5) is much more positive than in Time 1 (see Figure 5) when turns for TCH5 were 161 to their students combined 94 turns a difference of 67 turns. Further explanation of these positive turn patterns and their dialogic properties are explored later in this chapter.

Figure 21

Frequency of Talk Turns For All Teachers and Their Students in Time 2



Finding 3.1: Shifts in the Time 2 distributed turns at classroom level

Figure 22 and 23 shows a further breakdown of "*interlocutor turns*" in the Time 2 discussions. The decision to select TCH1 and TCH4 was again to contrast the disaggregated talk distribution patterns in a classroom of 5-and 6-years old learners (TCH4) and a classroom of 11 and 12-year-old learners (TCH1).

Figure 22 and 23 included the variable "ALL" which indicates frequency of a whole class choral response. Figure 22 and 23 also show TOT (teacher over talk) which is reported on in detail later in the chapter. Again, where there are distinctly different voices heard and captured on audio files this was transcribed as S1 then S2, S3 and so on.

Figure 22

The Number of Raw Turns by Each Interlocutor in the Year 7 & 8 Classroom Discussion in Time 2

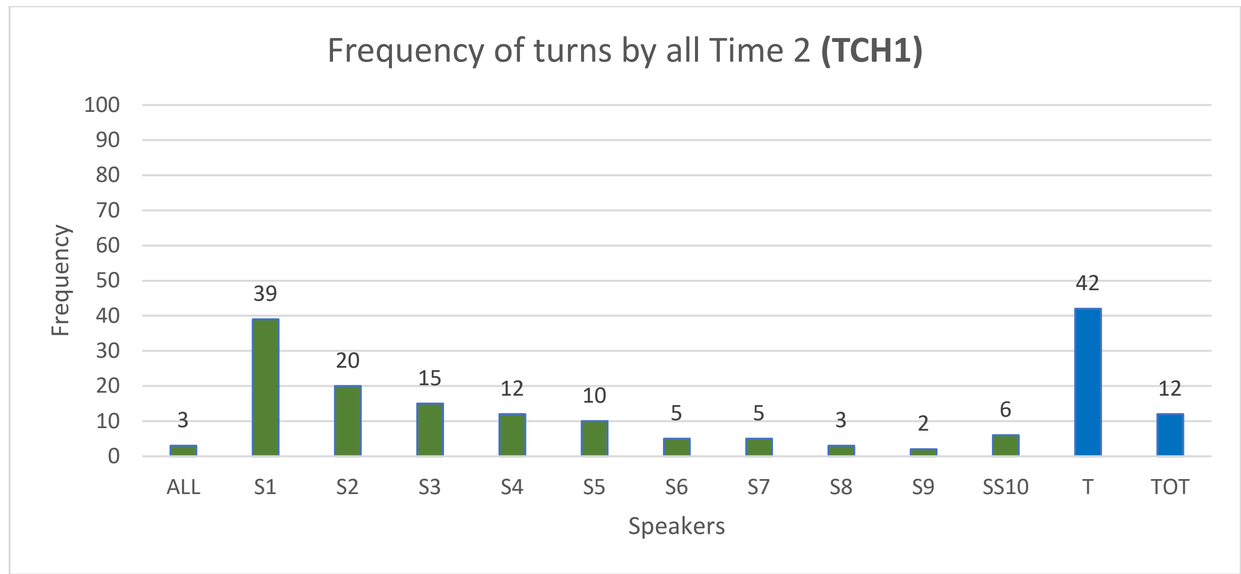
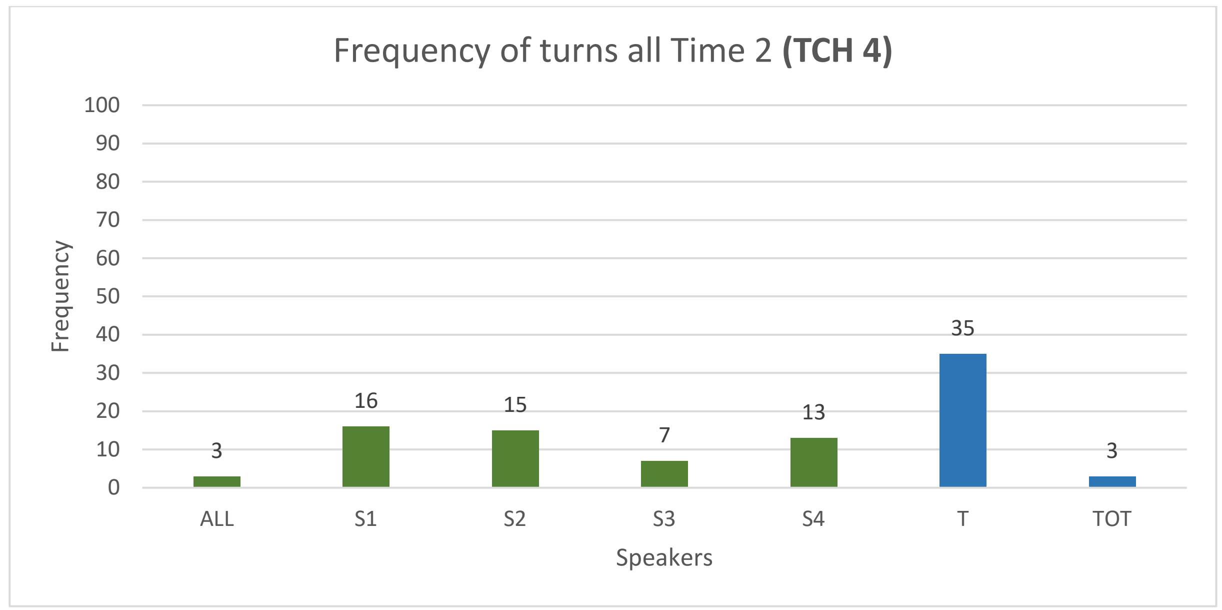


Figure 22 highlights the discussion recorded with the Year 7 & 8 teacher (TCH1) and their *small group (n10)*. Compared with Time 1, and for this teacher (TCH1), the Time 2 results showed no sequences of "*Reading out loud"* by any student. There were 3 (ALL) choral responses in Figure 22, compared with 18 in Time 1. All ten students in the small group configuration had a "*turn*" and thus contributed to the discussion and possible learning. Figure 22 also shows that S1 to S5 contributed significantly more to the discussion with less contribution from S6 to S10. However, all 10 voices in the group were captured, which was not the case in the Time 1 distribution for TCH1 that which highlighted approx. 15 students were essentially missing from that discussion overall. Finally, it is clear to see that the distribution of turns by students (total) outnumbered their teacher turns and TOT had reduced from Time 1 at 94 to Time 2 at just 12.

Figure 23

The Number of Raw Turns by Each Interlocutor in the New Entrant Classroom Discussion in Time 2



For the New Entrant teacher (TCH4; Figure 23) interacting with a small group (N=4) there was also a drop in choral response (ALL) from 9 down to 3. Figure 23 also shows that no part of the discussion was coded as "round robin reading aloud" compared to 10 coded instances of this behaviour in Time 1. The students in Figure 23 have an overall distribution pattern that illustrated S1 and S2 and S4 as having a greater contribution in discussion with S3 having significantly fewer turns than the others. For TCH4, TOT had reduced from Time 1 at 56 to Time 2 at 3.

Finding 4. Shift in Teacher Over Talk (TOT) Markedly Decreased

The close analyses of classroom transcripts in Time 1 reported dominance of the TOT pattern and reported teacher frequency of this practice in the range of 56 instances to 94 instances. Figure 24 illustrates a reduced frequency of TOT in Time 2, which now occurred between 3 (TCH4) to 24 (TCH3) times.

Figure 24

Total Number of Coded Teacher Over Talk for All Teachers in Time 1 and Time 2

TOT is again expressed as a ratio/percentage as shown in Table 44.

To further illuminate this finding, if we look at Table 44 from *the receiver's perspective*, if a student is engaged in discussion with TCH3 for example, the chance that the teacher "turn" in the overall discussion will be an overly long stretch of talk is only 2% compared with their Time 1 chance of teacher over talk at a confounding 50% of the time. For TCH5, who recorded the highest percentage of TOT in Time 2 at 16% of all utterances, this reduced from their Time 1 TOT of a 33% of utterances. For TCH1, TCH2, TCH4, and TCH6, TOT had reduced to a range now of between 3%-9% contrasted with much higher TOT range in Time 1 of 33% to 50% of utterances for those four teachers.

Table 44

Probability of Teacher Over Talk in Classroom Discussion in Time 2

Teacher	Total number of Teacher speech acts in Time 2 discussion	No of times TOT applied	Ratio of teacher over talk (rounded) Time 2
TCH1	174	12	1:14 (7%)
TCH2	143	10	1:14 (7%)
TCH3	248	6	1:43 (2%)

TCH4	89	3	1:30 (3%)
TCH5	110	18	1:6 (16%)
TCH6	216	20	1:11 (9%)

If reduced TOT and reduced one-word utterance were the only shifts to have occurred in this study this can be considered positive. That is because teachers in Time 2 have understood their own Time 1 patterns in ways that directly addressed these phenomena and is reported on next, where the reduction has further impacted the immediate student response overall.

Finding 4.1 Student Utterance Length Shifts, Immediately After TOT

Table 45 illustrates average TOT utterance length and the corresponding student average length response *immediately* after a TOT turn, for all six teachers and their students at Time 2.

Table 45

Summary of TOT Averages for all Teachers and Students Immediate Response Averages in Time 2

Speaker	TCH1	TCH2	TCH3	TCH4	TCH5	TCH6	Averages
Average TOT utterance length (teacher)	78	88	66	34	35	43	57
	<7	<11	>4	>1	<12	<21	<4
Average utterance length (student) in response to TOT	10	33	4	6	8	10	12
	>1.2	>30	>0.87	>4.4	>4.7	>5.3	>8

Key: *>increase from Time 1 <decrease from Time 1*

To orient data in Table 45, any increase in average is indicated by >; associated overall as *unfavourable*, but for teachers only. If *students*, on the other hand, reported an increase >, this was considered a positive effect. Table 45 shows that TCH1, TCH2, TCH5, and TCH6 decreased their average utterance TOT length from Time 1 to Time 2 while TCH3 and TCH4 increased their average, but only slightly between 1 to 4 words only.

An interesting impact on the decrease of TOT utterance length is shown in students' average utterance length *immediately after* teacher over talk and were recorded as 12 words on average up four words in total from Time 1. You will notice also that TCH2's students recorded an average utterance *response* of 30 words approximately compared to two words on average in Time 1 which is a profound shift for these students.

While the overall average in Time 2 for students showed a small response increase of only eight more words this is still a positive outcome compared to Time 1 average of only three words. From the receiver's perspective these results can be linked to a developing student talk repertoire of which is further detailed in relation to TOT specifically next.

Vignettes to explore the positive shifts in student immediate utterance to TOT

The following examples showed there were qualitatively improved discourse markers firstly by the teacher, and that manifested into much more elaborated student response advancing theoretical propositions related to over talk that would potentially open dialogic space.

The researcher engaged Alexander's typology of talk (see Methodology chapter) to understand how TOT in Time 2 appeared. Close analysis of examples of teacher over talk in Time 2 no longer aligned with the three-dominant types of talk in Time 1, *rote, recitation, and instruction*. The examples that follow, while still fundamentally defined as TOT, showed how TOT moved towards "discussion" though not quite "dialogue" (Alexander, 2017) given students immediate response, that while improved, did still appear limited for some.

To be clear, the three vignettes selected below (TCH5, TCH1, TCH2) were not the longest teacher over talk, by teacher participant. Instead, they were those that provided evidence of where the practice of TOT illustrated student engagement that could no longer be referred to as a discourse of silence, which was a more probable student response to TOT in Time 1.

Finding 4.2 TOT 1 - Student Produced an Elaborated Response

Vignette Example 1:

TCH5: *It could be that these two were complaining about this boy that's angry. Alright what you're going to do now is in your books, you're going to write your predictions. Remember you didn't all agree on the same thing so you write down what you think. (4 second pause no other interlocutor entered) Alright so now that we've read the text okay what is it about or what have we found out?*

S: *The boy was like angry with the boy at the back with the teacher because he brang everything*

Vignette example 1 commentary:

TOT by TCH5 totalled 166 words to the immediate student response at 18 words.

Vignette 1 started with the teacher finishing off a thought linked to a previous student's turn. The first TOT commenced at, "*Alright what you're…*" and marks a change in function. The

next TOT applied to the sentence "*Remember you…*" due again to segmenting criteria for function. The final TOT applied, begins after the 4-second PAUSE, and signalled which part of the overtalk students should attend. The evidence is highlighted in the student response.

The response from the student was distinctly different from most of the Time 1 student responses, namely that these were an average of approximately three words immediately after teacher over talk. Notably, the teacher over talk highlighted missed opportunities for potential uptake, in particular to the line from the teacher that valued the fact that it was ok that they *"didn't all agree on the same thing"* which promoted perspective and thinking. This example whilst not considered *rote* or *recitation* has promise of being characterised as more of a *discussion* due to the uptake and the beginnings of an *exchange* which is a shift from patterns of student response overall in Time 1.

Finding 4.3 TOT 2 - Student Achieved a Position With Reason

<u>*Vignette Example 2:*</u>

TCH1: *So who wants to make a start? 'I'll give you a bit of time to get your thoughts together, prepare something and then as listeners, it's our right to listen, it's our obligation to question, add on and I might show you a little bit of a clip. Okay who wants to go, who wants to say, who's got something to say about this?*

S: *I think it's cool how they're doing that, it's cool showing the, it's um I just think it's cool that they're like showing pride of their culture*

<u>*Vignette Example 2 commentary:*</u>

TOT totalled 65 words to the immediate student response at 27 words.

This vignette illustrated very clear over talk but that linked explicitly to the co-constructed community membership, *"rights, and obligations,"* established as a critical process undertaken in the design phase of the intervention (*Phase 2*). There are higher order markers in the teacher over talk in the above example that begin to promote past shared agreements, positionality in the discussion, explicitly identifying responsibility for students, expectations to utilise all the knowledge and learning already undertaken to support their position response.

The immediate student response illustrated a student position statement punctuated with "I," and the student provided a reason to support the claim also. Clear indicators are emerging from these first two vignettes that provided distinctive parameters with which non-productive over talk patterns can be addressed and aligned to more productive discursive practices. These

examples clearly supported by markers that serve as conditions with which teacher over talk can productively exist impact such that these TOT patterns can no longer be associated with a discourse of silence as they were reported in Time 1.

Finding 4.4 TOT 3 - Student Illustrated Uptake

<u>Vignette Example 3:</u>

TCH2: *Yeah so that was a very closed question. So with all this, say you've got the fossil fuels burning and the carbon dioxide's being released into the atmosphere, can anyone explain or talk about what happens within our atmosphere when the carbon dioxide is released when there's too much? Thinking about temperature, yep you want to start us off?*

S: *I think like everything will be dry and like nothing can move cos things are dry and people start to die if it's dry and no air.*

<u>Vignette Example 3 commentary:</u>

TOT totalled 59 words to the immediate student response at 27 words.

The vignette illustrated discourse markers used by this teacher to address their less productive talk on the run, with admission to posing a "closed question" in the opening sentence. This noticing prompted a quick return to the learning content and thus to improved discourse markers that contained essential vocabulary, learning, and content knowledge. Much of which was largely ignored by students in Time 1.

The uptake by the student in their immediate response to the over talk illustrated a much-elaborated response from Time 1. Although the uptake did not necessarily leverage the academic language modelled by the teacher, the student response is still well connected to thinking about environmental impact, an aim of the overall lesson.

Summary of Shifts for Part 1

The evidence provided in the close analysis of transcript evidence in Time 2 illustrated some positive shifts in classroom talk. Word count analyses were the only indicator that favoured the teacher in Time 2, but the differences were small overall. Turn taking was now mostly in favour of students, made visible in disaggregated data, by interlocutor. In contrast to Time 1 all Time 2 discussions were run as a small group, which were in response to the overwhelming preference for this as reported by these students, in Time 1 interviews. The TOT phenomenon that was prolific in Time 1 has shown to have reduced in frequency overall by teacher, and there is now evidence of positive shift supported by close quantitative and

qualitative (vignette offerings) that provided clear findings related to shift in student responder's utterance immediately following TOT.

The next section reported on the patterns of shift indicated in the approach that used the distinctly cultural lens found in the PDIT, to further comprehend how talk manifested, post-intervention, (Time 2) with these teachers and their Pasifika learners.

Findings Part 2: *Qualitative Analysis* of the Post-intervention Classroom Transcripts

Introduction to Findings (Time 2) Using Talanoa (Qualitative)

Analyses using the PDIT framework added to the quantitative analyses by providing interpretation using distinct cultural lens. This is important for two reasons. Firstly, both teacher participants and students in this study come from communities that were predominantly made up of Pacific peoples. Secondly, the PDIT has theoretically sound advantages that provided a culturally robust approach to examine transcript evidence that combines the quantitative analysis.

Analyses reported next make visible the *enacted quality* of speech acts in situ from a Pasifika perspective, that drew on the principles of Talanoa.

Finding 1. Shifts in Overall Patterns of Talanoa Dimensions in Time 2 Post-intervention

Figure 25 shows percentages of the Talanoa dimensions applied for each teacher and their students in Time 2 and that used the same exact transcript from Part 1.

Figure 25

Distribution Percentage of the Overall Talanoa Patterns for All Teachers and Their Students in Time 2

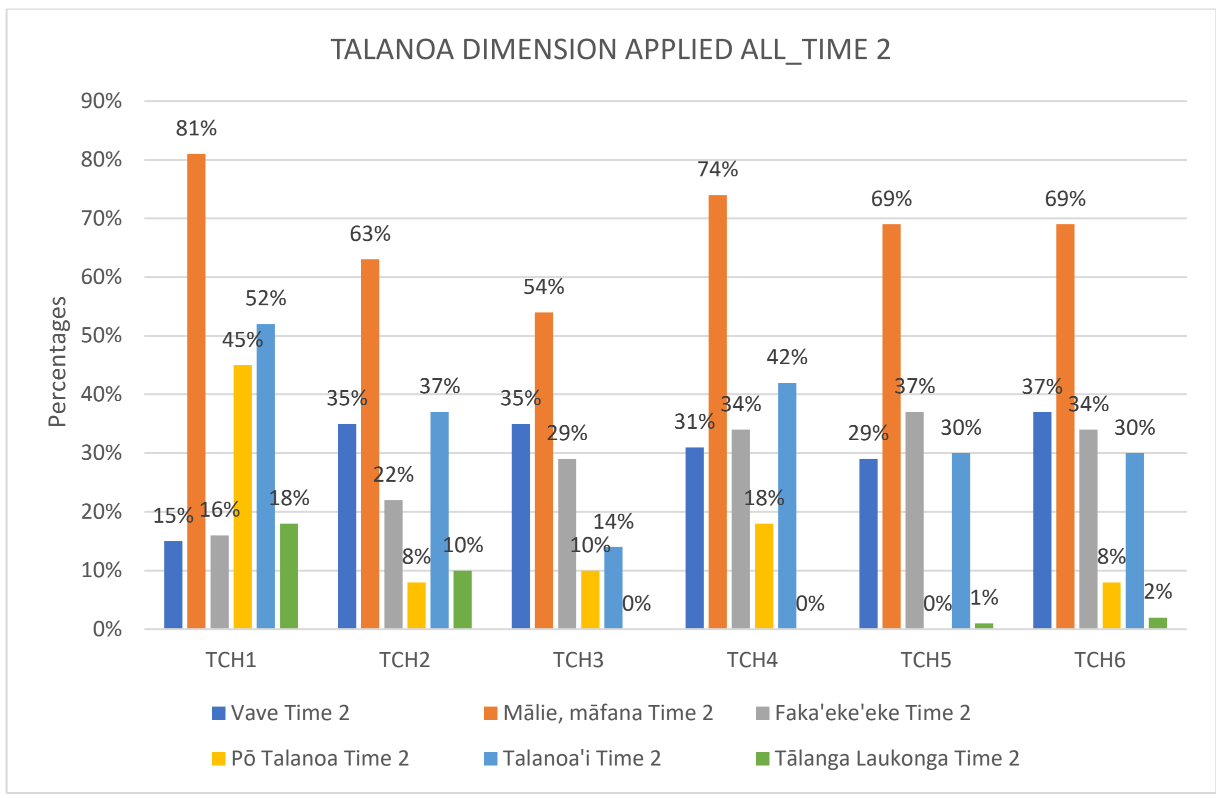


Figure 25 shows a reduced range of *vave* (IRE) now between 15% to 35% overall. In Time 1 *vave* was the most coded dimension for 5 out of 6 teachers and ranged between 39% to 72% overall.

The presence of *mālie, māfana* (connecting principle) in Time 2 ranged between 54% and 81% and ranked as the highest overall dimension teachers and students engaged in post-intervention. This is identified as a major shift in "repertoire" and subsequently there will be detailed close analyses of classroom transcripts linked to this dimension shift later in the chapter. By contrast there was a range between 28% and 50% in Time 1 *mālie, māfana* overall.

Faka'eke'eke (questions) were present in all six transcripts in Time 2 between 16% and 37% and showed a small reduction in use from Time 1 where the range of applied *faka'eke'eke* were between 21% and 37%.

Pō Talanoa (connection through ownership) was much more visible in Time 2 in 5 out of 6 classrooms and showed this occurred between 8% to 45% overall (controlled by students) contrasted with the Time 1 range of between 2%-23% overall.

Talanoa'i dimensions were present in all six transcripts at a range between 14% to 52% which is significant by contrast with Time 1 where only 3 out of 6 transcripts had applied talanoa'i at a range between 3% and 24% overall.

Where no teachers' Time 1 transcripts contained the final PDIT dimension of *tālanga laukonga*, in Time 2 instances occurred in 4 out of 6 transcripts with a very small range of between 1% to 18% overall.

Each of the six Talanoa dimensions are further elaborated and detailed in the following sections. These sections compared the shift in dimensions that occurred between Time 1 and Time 2 and offer evidence to support these shifts. The following reports the enacted quality of speech acts through the lens of the cultural framing of Talanoa using dimensions and sub-dimensions provided in the PDIT.

Finding 2. Reduced Overall Frequency of Vave in All Classrooms

The essence of vave as a reminder was short, clipped rote and recitation type talk. Figure 26 contrasts Time 1 and Time 2 data revealing a reduction of vave for all, by close to half in the transcripts of TCH2, TCH3, TCH4, TCH5 & TCH6 with TCH1 who shifted by close to two thirds.

Figure 26

Percentage Comparison of Vave for All Teachers and Students in Time 1 and Time 2

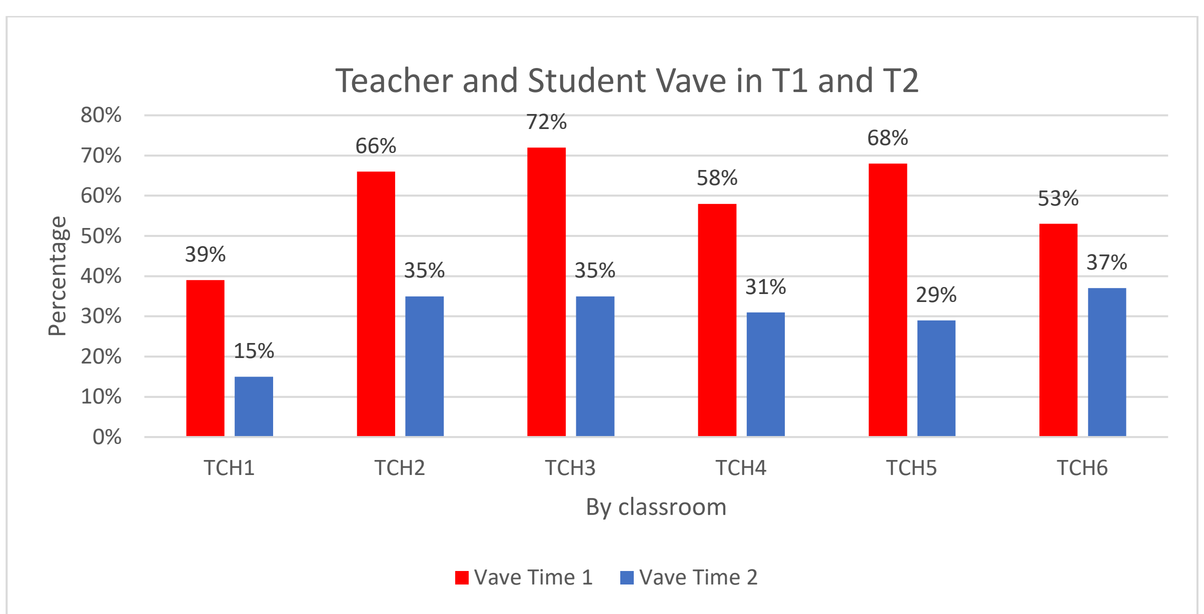
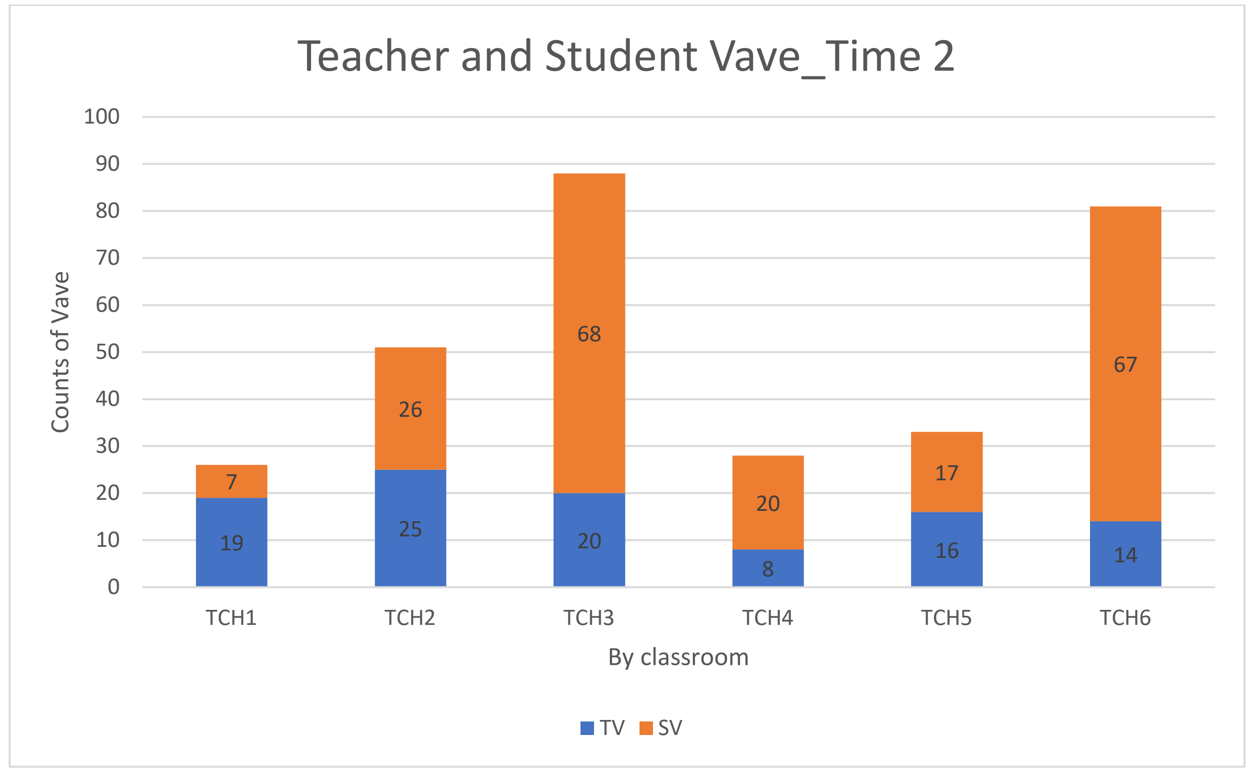


Figure 27 shows frequencies of vave in *Time 2,* for teachers (TV) *and* their students (SV) combined in the single Time 2 transcript. All students engaged in vave at a higher rate than

their teacher (except TCH1). The counts for students ranged between 7 and 68 and for teachers between 8 and 25 applied.

Figure 27

Raw Counts Where Vave Occurred for Teachers and Students in Time 2



Finding 2.1. Vave Examples Are Still Consistently Expressed As Brief, Clipped Engagement in the Discourse

Overall, there were much reduced rates of vave in Time 2. The form in terms of actual speech acts of vave look similar in Time 2. One example of vave applied is reported in Table 46 to remind the reader of how vave appeared in the discussion.

Again, a highlight of the unique PDIT is that one speech act may have multiple codes applied. For example, in Table 46, the teacher speech act "*Don't worry I get it wrong sometimes*" is both TV (vave) and TMMT (mālie, māfana). To further clarify the coding, TV applied here due to its short closed evaluative exchange, but simultaneously TMMT applied for the personal connection as the teacher placed themselves in a vulnerable position and admitted getting "*it wrong"* sometimes and thus the applied mālie, māfana.

Table 46

Example of Coded Vave in the Transcript of TCH2 in Time 2

Speaker	Speech act	Talanoa coding applied
TCH2	Okay cool oh yep	TV
S1	Miss you know the fossil	SV/SMMT
TCH2	Fossil fuels	TV
S2	Fossil fuels	SV
TCH2	Don't worry I get it wrong sometimes	TV/TMMT

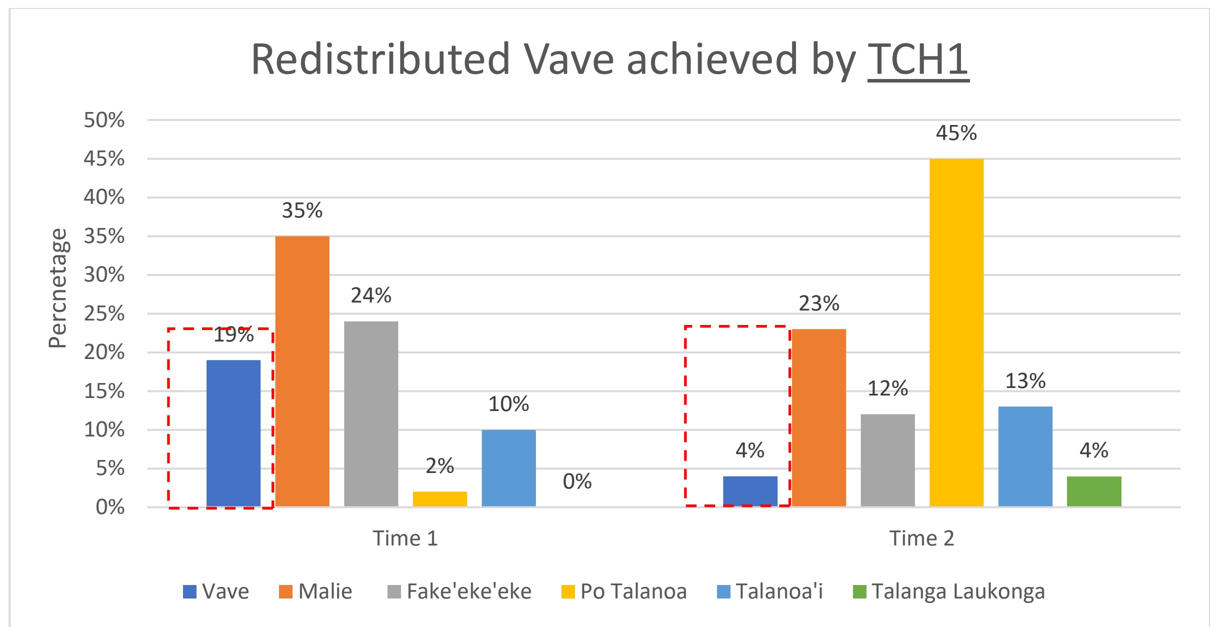
Finding 2.2. Reduced Vave Associated With a Positive Increased Shift in Talk Repertoire for Teachers and Their Students Across Other PDIT Dimensions

The data represented in Figures 28-31 shows the reduced rate of applied vave, for these teachers and students and illustrated a *redistribution* across other dimensions in PDIT. I draw on TCH1 who worked with Year 7 to 8 (11-12-year-olds) and TCH4 who worked with new entrant learners (5-6-year-olds) to contrast the similar patterns of redistribution across 2 different year level groups. All teacher's data showed similar shifts in Time 2 where vave reduced and redistributed as seen in Appendix O.

In Figure 28 for TCH1, it is clear to see the reduction of teacher vave from 19% in Time 1 to just 4% in Time 2. The presence of tālanga laukonga for this teacher is also significant given the absence of this dimension in Time 1.

Figure 28

Vave Dimension Redistributed From Time 1 to Time 2 for TCH1



For students (ST1) of TCH1 the reduced vave shown in Figure 29 at 20% in Time 1, reduced to 11% in Time 2. Another significant shift for these students, as shown in Figure 29 was mālie, māfana with increased applied coding from 15% in Time 1 to 58% engagement in Time 2. Highly significant for both teacher and student overall are the improved applied coding for pō talanoa from 2% to 45%, talanoa'i from 14% to 39% and tālanga laukonga, 0% to 14%, of import the latter two engaged in more by the students than their teacher.

Figure 29

Vave Dimension Redistributed From Time 1 to Time 2 for Students of TCH1

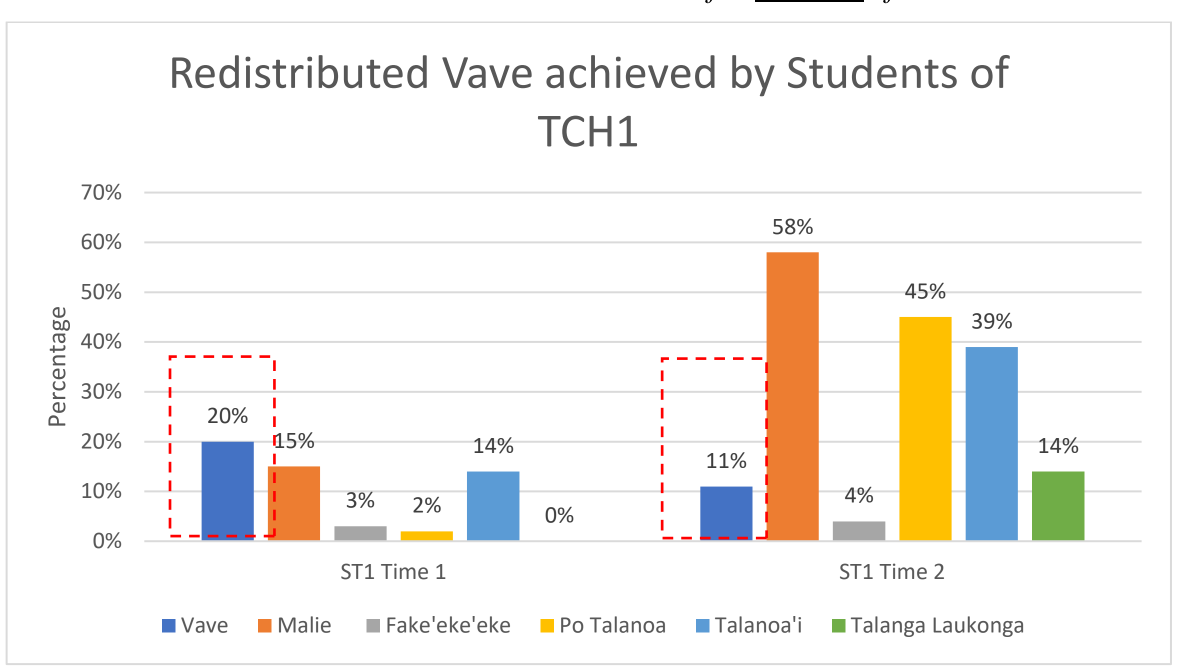


Figure 30 and Figure 31 shows shift with regards to the reduced vave from 30% to 9% for the teacher (TCH4) and from 30% to 22% for the students (ST4). Like TCH1's students, the coding in Time 2 for these young students that applied the code mālie māfana shifted from 3% to 48%; faka'eke'eke, stayed the same; pō talanoa from 0% to 18%, talanoa'i from 0% to 25%. The only dimensions not applied at both Time 1 and Time 2 were tālanga laukonga the highest dimension in PDIT and considerably the most challenging to achieve overall.

In sum, and of import is that both a junior and a senior classroom discussion, in Time 2 showed reduced vave with noticeable redistribution of this dimension across the PDIT dimensions and particularly visible for students.

Figure 30

Vave Dimension Redistributed from Time 1 to Time 2 for TCH4

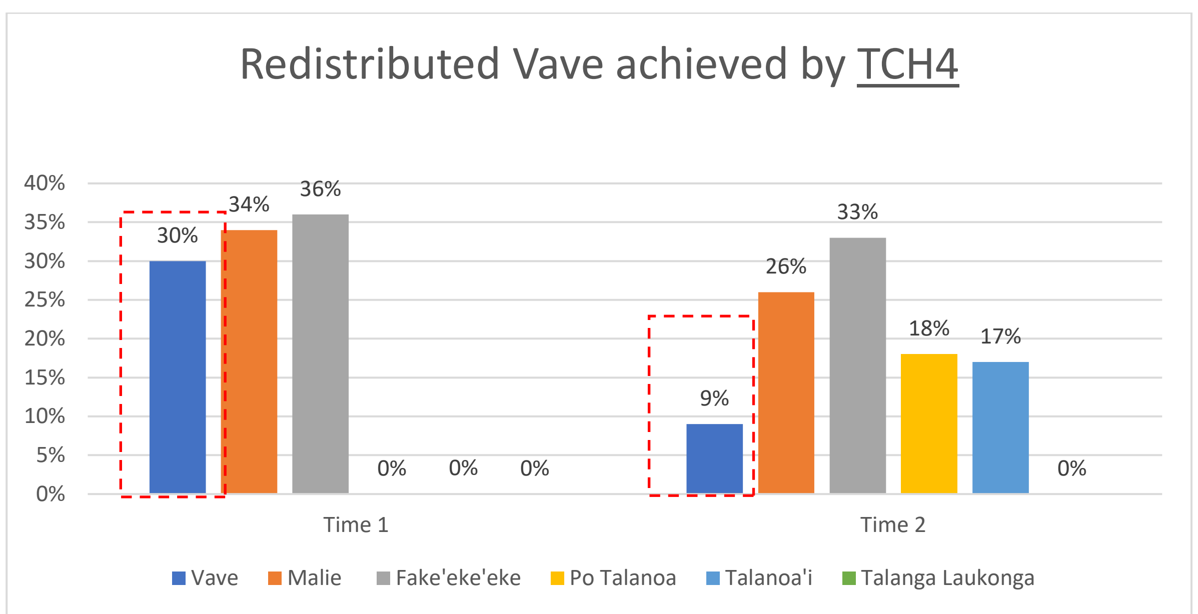
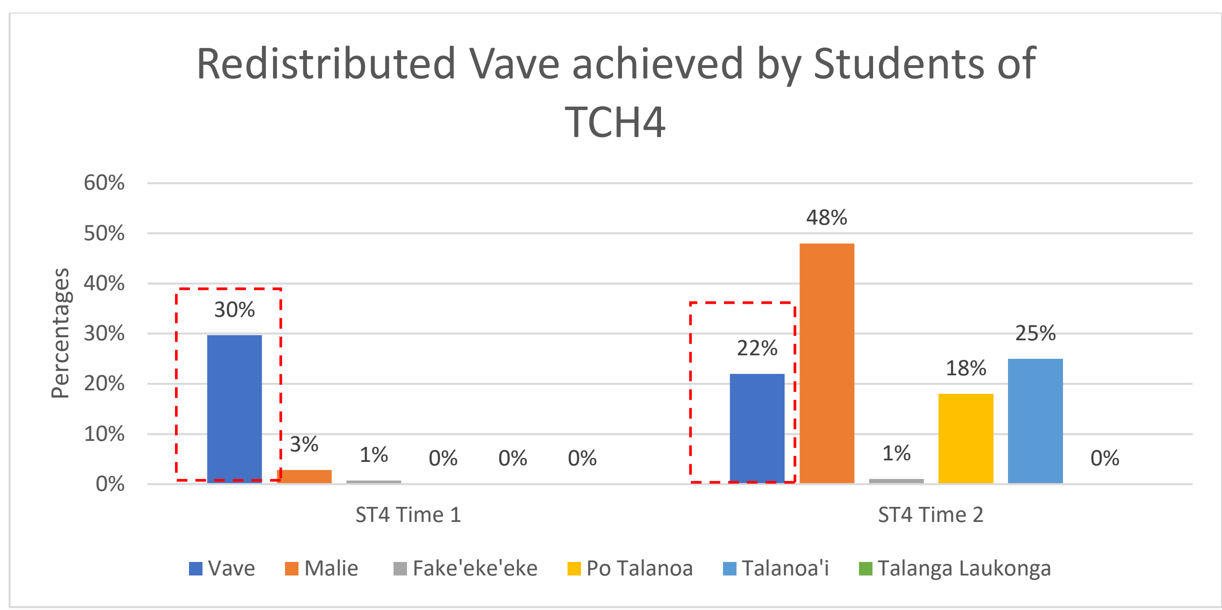


Figure 31

Vave Dimension Redistributed From Time 1 to Time 2 for <u>Students</u> of TCH4



Finding 3. Positive Shifts for All in the Mālie Māfana Dimension

As a reminder, mālie māfana is a pattern in which teacher and students connect to aspects, time, space, text, task, behaviours, humour and culture in the discussion.

Figure 32 illustrates that mālie māfana occurred in the Time 2 between 54%-81% overall and were the highest dimension across all six transcripts. In Time 1 mālie māfana occurred at high rates also between 28% to 50%.

Figure 32

Percentage comparison of Mālie Māfana Frequency for all Teachers and Students in Time 1 and Time 2

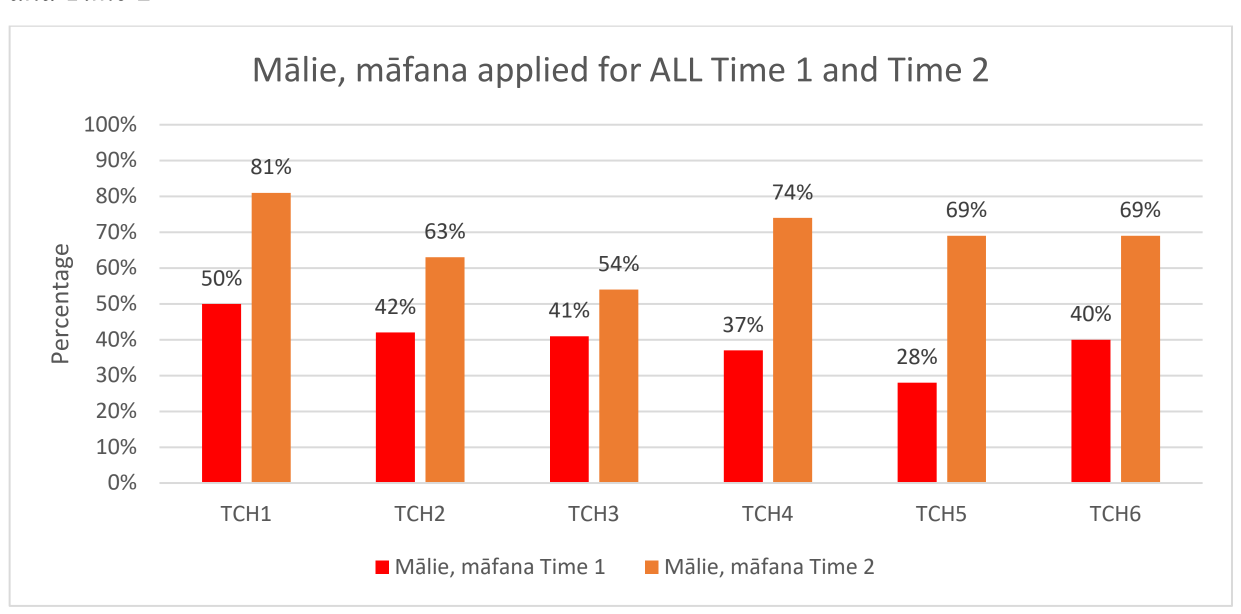
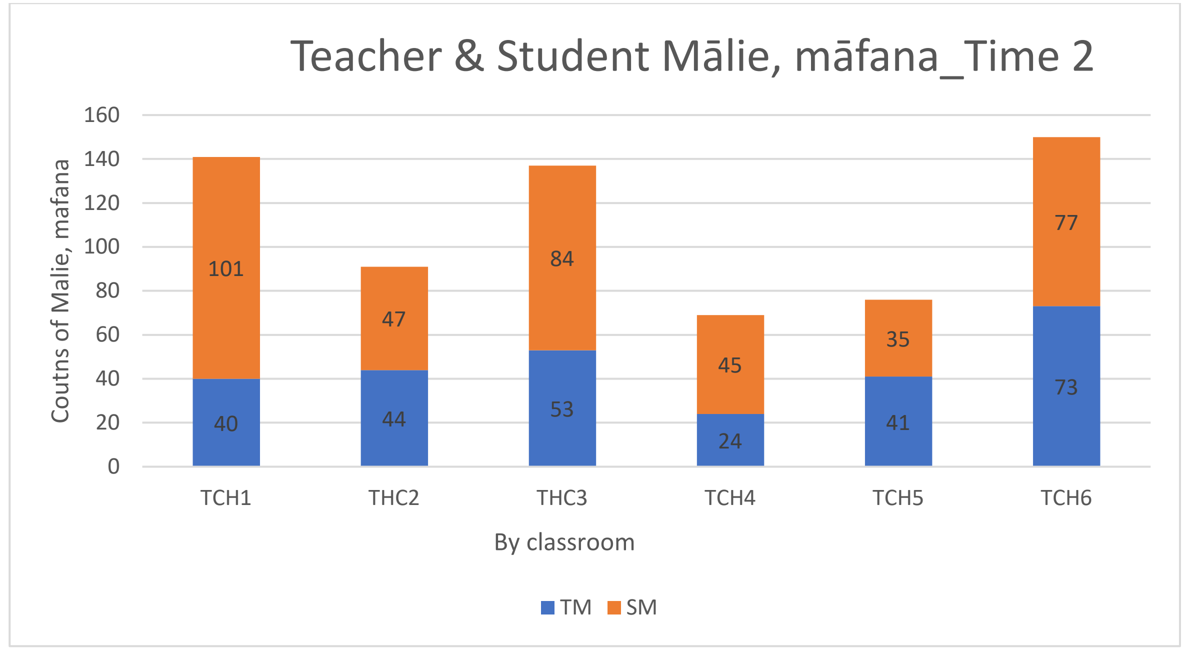


Figure 33 shows frequencies of mālie, māfana in Time 2 for teachers (TM) *and* their students (SV) and shows that students over teachers engaged in the applied principles of the dimension more with the exception being students of TCH5.

Figure 33

Raw Counts Where Mālie, Māfana Occurred for Teachers and Students Time 2



Finding 3.1. Connection to Text/Task Were the Most Prevalent Nested-Code Applied

While the above figures are useful as an overall snapshot of mālie māfana, it is the nested coding within each Talanoa dimension that added essential details and are illuminated next. The examples of mālie, māfana provide evidence of connecting or referring to the text and or task, albeit transitory. The claim here that was considered in the development process of PDIT and reviewing the literature both Eurocentric and Pacific argues that engaging in mālie māfana was a necessary condition to achieve higher order discourse engagement in faka'eke'eke, pō talanoa, talanoa'i and even tālanga laukonga.

The shift that is most visible in Figure 33 shows a developing student repertoire, given that mālie māfana occurred more frequently for 5 out of the 6 transcripts and for students more than teachers. The exception in Figure 33 was TCH5, whose students engaged fewer times than the teacher by six occurrences in total.

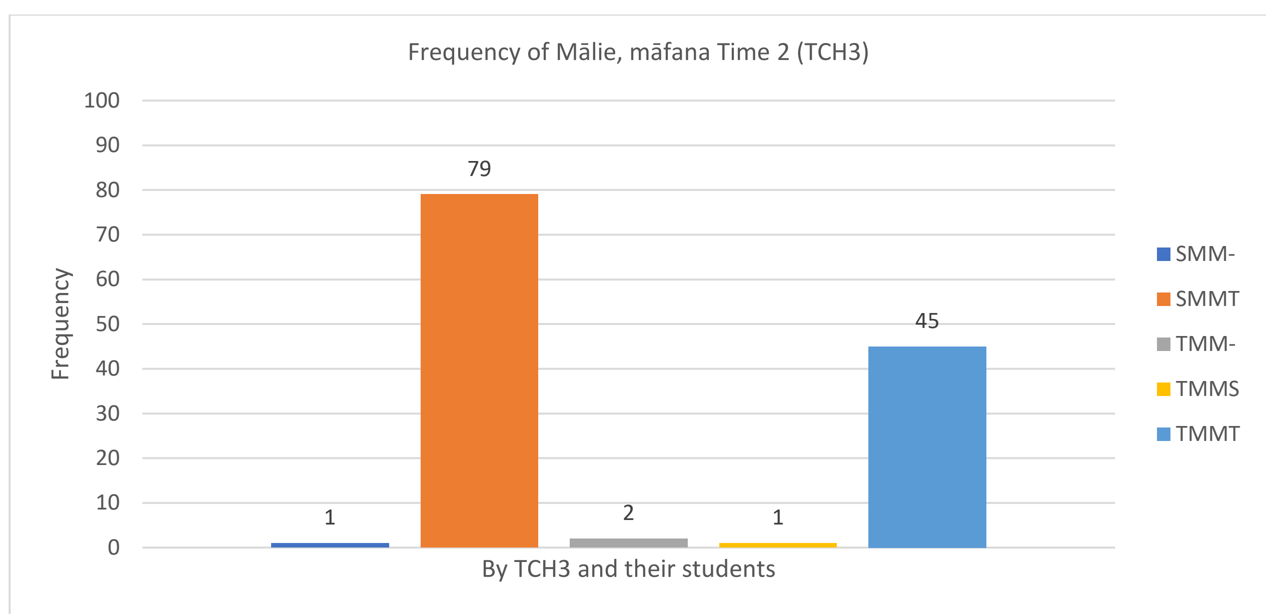
Time 2 data now showed the SMMT (students connecting text/task in the discourse) occurred most frequent, highlighting students positively engaging the text/task. TMMT was also frequently coded and is categorised as teacher connecting by telling or explaining with direct reference to text and or task in the discourse. Time 2 analyses as shown next highlighted text

prominence through shift in frequency of the nested coding SMMT and TMMT and given these are literacy discussions was an essential finding.

The next series of figures and tables presents data on the nested codes that make up mālie māfana for TCH3 and TCH6, and their students. These two teachers were selected to give the reader contrast of a range of learners aged 7-8- year-olds (TCH6) and 9-10-year-olds (TCH3)

Figure 34

Mālie Māfana Nested Coding Distribution for TCH3 and Students in Their Time 2 Discussion



In Figure 34 the code SMMT occurred 79 times and TMMT at 45 highlighting students over teacher frequency of this type of 'connecting' talk in Time 2. Complementary to Figure 34, Table 47 shows examples from the transcript that illustrated where students are connecting to text and task in the discourse and where TMMT occurred for the teacher. The speech act in Table 47 signalled for the student, connection to both text used and task overall (SMMT) and an example of building on previous student discourse (SS) as well as capturing overall the consecutive student-to-student-to-student turns, thus pō talanoa applied also. The teacher responded in an evaluative and connected manner (TMMT) and with a final question (TF-).

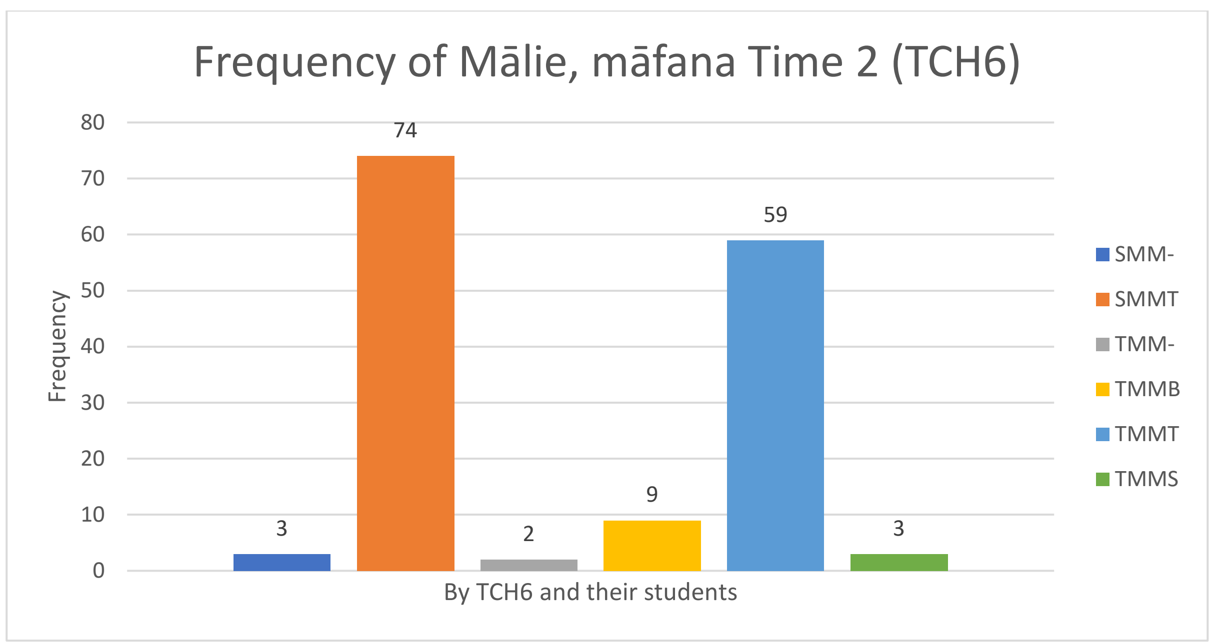
Table 47

Example of Coded Mālie, Māfana in the Transcript of TCH3 in Time 2

Speaker	Speech act	Talanoa codes applied
S1	For doing incredible things	SMMT/PTS
S2	Like being the first person to climb Mt Everest	SMMT/PTS/SS
S1	They're native to our country	SMMT/PTS/SS
TCH3	Thank you, native animals to NZ and what kind of animals are there on our notes?	TMMT/TF-

Figure 35

Mālie Māfana Nested Coding Distribution for TCH6 and Students in Their Time 2 Discussion



Similarly, in Figure 35, the coding of SMMT occurred 74 times and TMMT 59 times. For this teacher (TCH6), there were still markers of behaviour modification and instructing in the discourse (TMMB) and disconnecting (TMM-) though much fewer overall than in Time 1. Subsequently, for the students, some speech acts were constitutive of disconnecting principles (SMM-) and interestingly these occurred in the exact frequency as Time 1.

Complementing Figure 35 is Table 48 that shows speech acts where mālie māfana occurred and again, highlight how one speech act can apply multiple codes. In this episode, TMMT is visible marked by encouragement to engage by the teacher through both open and closed

questions. SMMT is illustrated in student response based on what they discovered about the content with the final student adding on from the previous, with a new idea thus the code SMMT *and* SS applied.

Table 48

Example of Coded Mālie, Māfana in the Transcript of TCH6 in Time 2

Speaker	Speech act	Talanoa codes applied
TCH6	We just started, remember we had 3 questions. What were the 3 questions? What are the problems	TMMS/TF-
S1	What are the problems? What should we do now?	SMMT
TCH6	And what is being	TV
S2	Done	SV
TCH6	Alright let's go around and let's see if we can get some of these problems. Lauryn what did you find?	TMMT/TF+
S3	I found that we can pick up rubbish around our beaches	SMMT
T	Okay what did you find, what problems?	TMMT/TF+
S4	We can save the world by doing	SMMT/SS

Results pertaining to the specific codes of TMMT and SMMT in Time 2 suggest that not only are texts and resources and task more visible as planned for by teachers, but students have connected this Talanoa dimension more than their teacher with the exception of TCH5 though in Time 2 TCH5's students connected to text more than in Time 1. Of import is the fact that TCH5 used only the one text in their final discussion whilst all others provided two or more.

Next, I outline shifts in teacher and student faka'eke'eke or questions in the Time 2.

Finding 4. Faka'eke'eke in Time 2 Showed Minimal Shift in Use Overall

Figure 36 shows that faka'eke'eke occurred between 16% to 37% overall of the Time 2 discussions compared to a range between 21% to 37% overall in Time 1 illustrating limited shift.

Figure 36

Percentage Comparison of Faka'eke'eke for All Teachers and Students from Time 1 to Time 2

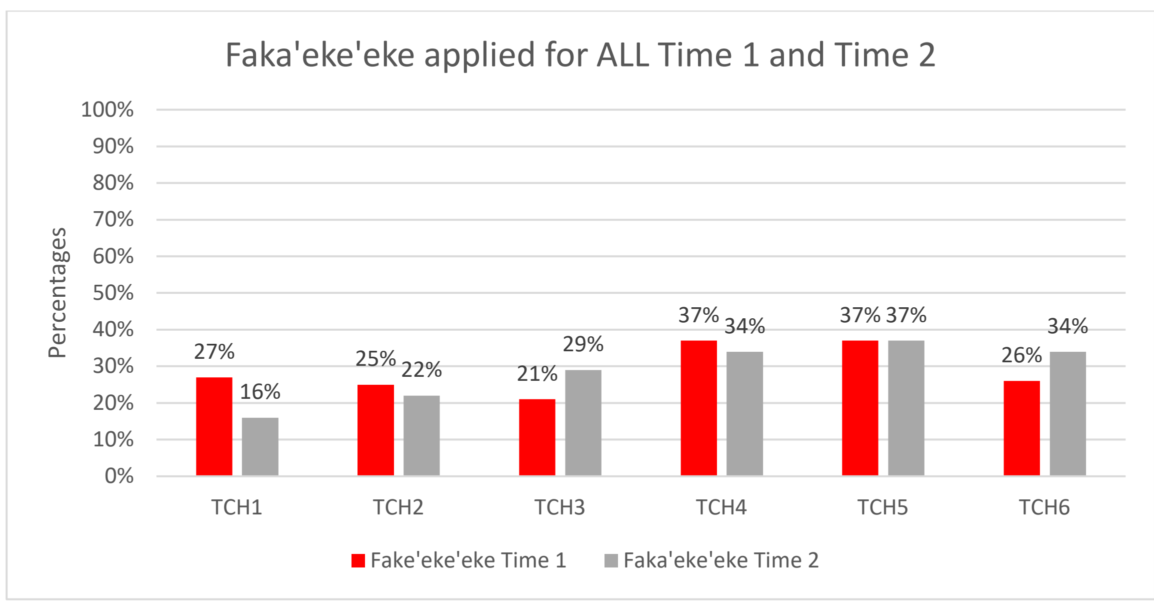


Figure 37 reveals the actual raw count volume of questions posed and who had raised these in the discourse in Time 2. For the teachers (TF), questions ranged between 21 and 71 in their final transcript. For students (SF), questions ranged between 1 and 9. In contrast with Time 1, teachers overall are asking fewer questions, but this is also true of students' questions in Time 2.

Figure 37

Raw Counts Where Faka'eke'eke Occurred for Teachers and Students in Time 2

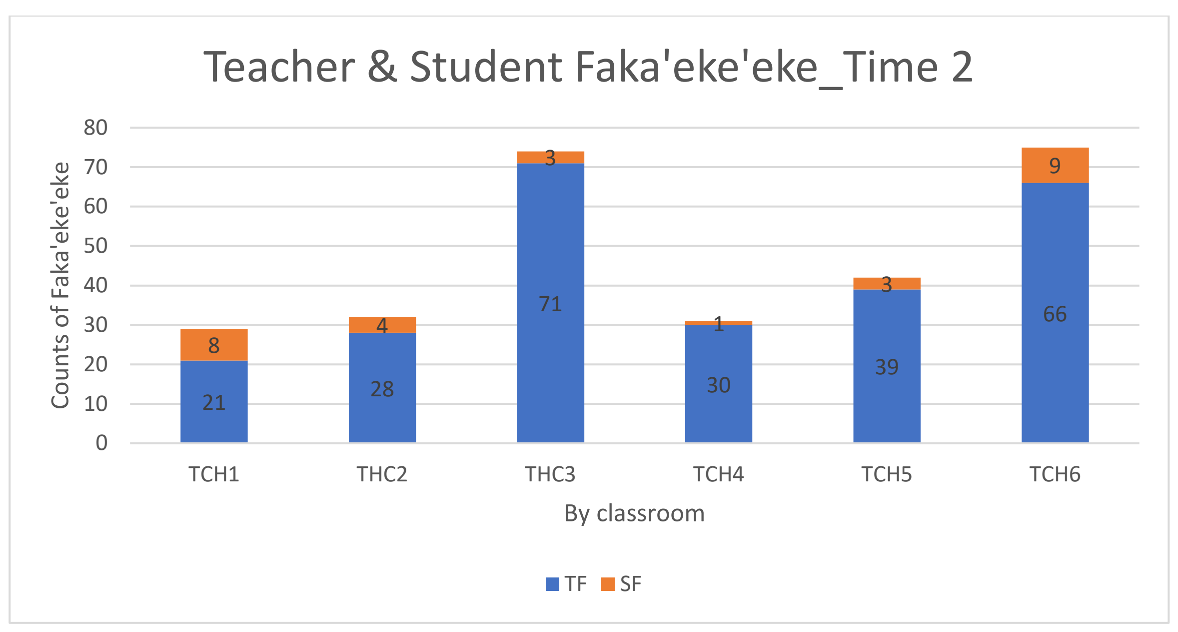


Table 49 further breaks down the questions by type either open or closed. These data showed that contrasted to Time 1 (T1 in Table 49), 4 out of 6 teachers asked more *open* questions in Time 2 (T2 in Table 49) and 5 out of 6 teachers asked less questions overall. Students in Time 2 asked a total of 27 questions, 17 open and 10 closed, compared to Time 1 where students asked a total of 38 questions; however, of these, only 3 were open, with 35 closed.

Table 49

Total Number of Student and Teacher Faka'eke'eke in Time 1 and Time 2

Total number & type of questions posed	TCH1		TCH2		TCH3		TCH4		TCH5		TCH6	
	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2	T1	T2
Teacher totals	79	21	35	28	30	71	51	30	90	39	47	66
Closed	41	6	34	11	29	43	51	20	72	20	34	23
Open	38	15	1	17	1	28	0	10	18	19	13	43
Student totals	10	8	1	4	2	3	1	1	6	3	18	9
Closed	10	7	1	2	2	2	1	1	5	3	16	3
Open	0	1	0	2	0	1	0	0	1	0	2	6

Finding 4.1 Using More Than One Question at a Time Continued to Constrain the Discussion

As mentioned previously the segmenting of questions supported our understanding of TOT and at the same time advanced our knowledge of faka'eke'eke or questioning a well-known discourse strategy. Time 2 data showed evidence, similar to Time 1 where teachers continued to use *more than one question* at a time as reported next.

Example 1: Multiple questions in one speech act

TCH1: *So possibly, what were the effects? – I want you to think about, what were the maybe effects on the rest of the community? what might have they done with it differently, what are your thoughts about it, what would you have changed? If you could say one thing to the Tongan community – not saying that what they did was wrong, which is what you need to think about, what would you sort of advice to them that or for next time when it happens, because remember it wasn't just the Tongan team, there was how many countries in the world cup?*

S: *Like 20*

This first example is from within TOT that included a total of five questions. The open question within that could have served as essential for uptake by the student, potentially opening up a dialogic exchange, is precisely where the teacher asked "*what advice you could give*?" However, this was a lost opportunity where the student instead, replied only to the final closed question.

Example 2: Three questions posed and only the final one responded to

TCH3: *What do you think these people, why might they be on our notes? You've said they're famous. Why might they be on our notes? Famous for what maybe*

S: *For doing incredible things*"

The above example illustrated a total of three questions posed by the teacher in one speech act. The question marker "why might" offered critical student uptake potential, yet it is quickly covered over with other less impactful questioning techniques resulting in a student response to the last questions posed only.

Example 3

TCH5: *Logan you said he might be jealous because someone else got new boots. Why do you say that? What made you say that?*
S: Ummm (no further response)

Example 3 again had potential but did become a point of confusing dialogic space and possibly even closed dialogic uptake given that the two questions posed by the teacher fundamentally ask the same thing but used different question markers "*why*" and "*what*" that created an unwillingness to enter the discussion.

To summarise, a very small shift in terms of faka'eke'eke was achieved overall. The potential such a strategy has for uptake and higher order thinking was the reason for such close analysis. Given students were shown to have decreased questions posed overall in the discourse is somewhat balanced through increased open questions posed but is a moderate shift overall.

Finding 5. Pō Talanoa Repertoire Has Improved for Most

Figure 38 shows that 5 out of the 6 classroom discussions in Time 2 illustrated pō talanoa compared with 3 out of 6 classrooms in Time 1. As a reminder, pō talanoa is when students take control of the talk based on connection to the text/task/lesson. O*wnership* in and through the discussion that supports advancement in student agency, thinking and knowledge were criteria for coding this dimension and recognised by 3 (or more) consecutive student turns.

Figure 38

Percentage Comparison of Student Pō Talanoa from Time 1 to Time 2

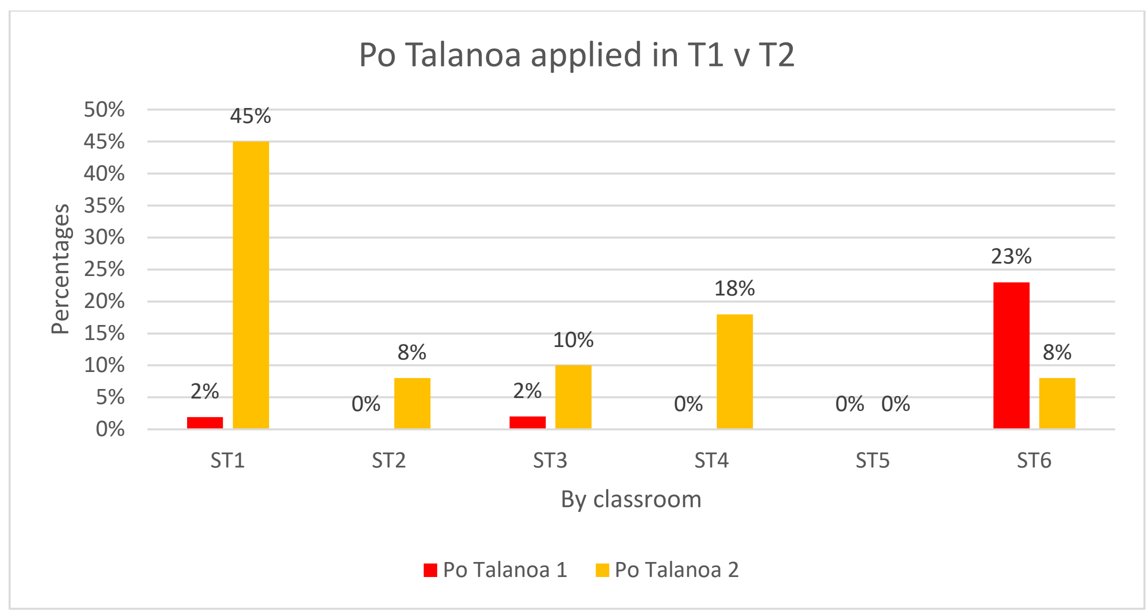
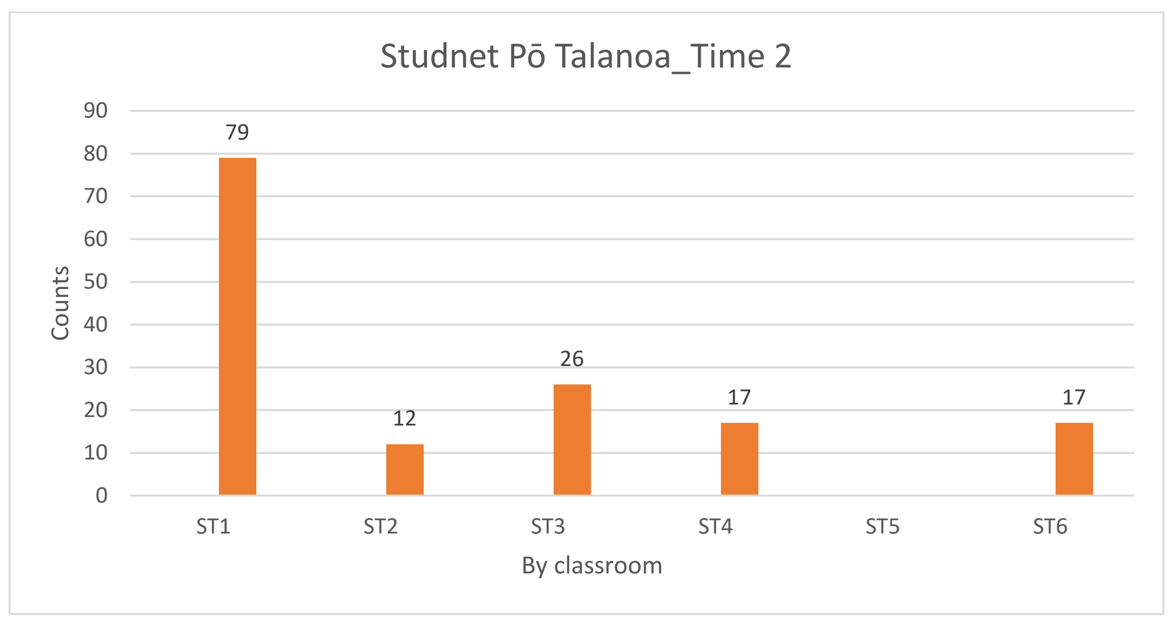


Figure 39 shows that the ST1 students (of TCH1) achieved the highest PTS (pō talanoa student) of 79 counts, with a small range between 12-26 occurrences for TCH2, TCH3, TCH4 and TCH5. There were no PTS counts recorded in the final discussion for TCH5 and their students.

Figure 39

Raw Counts Where Student Pō Talanoa Occurred in Time 2 Discussions



Finding 5.1 Pō Talanoa in Situ Promoted Connection Through Student Authority

In Time 2 and for TCH5, there were no times that pō talanoa occurred which is the same finding for this teacher in Time 1. The range for all other teachers pō talanoa in Time 2 was between 12 to 79 counts.

Table 50 shows examples of how pō talanoa occurred for TCH1's students. Table 51 shows examples of how pō talanoa occurred with TCH4's students and then finally how pō talanoa occurred for TCH6's students (see Table 52)

For TCH6's (7-8-year-olds) students pō talanoa in particular, indicated a large drop over the two timepoints and thus is further explored below. TCH4 (5-6-year-olds) were included to again show contrast of much younger learners pō talanoa with the older students in TCH1's (11-12-year-olds) classroom.

The longest string of student to student speech episodes was found in TCH1's class and is reported in Table 50. For TCH1, 45% of their overall discussion were coded pō talanoa. The most extended speech episode (PTS; Pō Talanoa Student) totaled a string of 13 consecutive student to student turns *before* the teacher entered. The lesson goal was to consider the celebrations of sports teams participating in the Rugby League World Cup (2017), their supporters and develop a persuasive argument from students' perspective on the events. Resources provided for the discussion were a set of texts, both print and digital, which were introduced in a staggered approach throughout the lesson. The examples in Table 50 showed consecutive student turns that are uninterrupted by the teacher. These students showed that they were able to collaboratively build on from each other's contributions in the discussion, which aligned to engagement in talanoa'i (reported next). For example, students began this episode by using an I statement and stating their positions (features of tālanga laukonga) and reaction to the video of a news clip text, followed by discussion with reasons by another interlocutor and a plea to "*calm down*" albeit clipped. These are further followed by multiple ideas and perspectives on the event by students that continued in a collaborative manner highlighting a cumulative speech episode, within the wider discussion and lead entirely by students.

Table 50

Example of Student Pō Talanoa in the Transcript of TCH1 in Time 2

Transcript excerpt of Pō Talanoa
S1 I think both sides are overboard, Samoa and Tonga because of what the video showed of the Samoans smashing the Tongan (inaudible) just because they have flags.
S2 I agree with what she said because (inaudible) violence between both teams are needed to
S1 Just calm down because we're all Polynesian
S2 Yeah cos Samoa could have handled it better
S1 But they decided to fight
S3 Like Samoans can do better than that like we were taught respect
S1 They decided to fight
S3 So we're as bad as Tonga
S4 We're bad cos like we chose to continue it, chose to like see the attention
S5 And then it led to violence
S4 You could have just ignored it but yeahs
S1 It's just a flag, if you're Tongan then you're Polynesian, if you're Samoan, then you're Polynesian
S2 And like it's just a game
S3 But then at the same time they're supporting their culture
T Yep that's true

TCH4 had 17 pō talanoa instances applied at 18% of their overall classroom transcript in Time 2. In Table 51, additional speech acts are included before pō talanoa begins to provide context. The longest pō talanoa for TCH4's students were just four turns. TCH4 provided multiple levels of texts, visual, print, and digital to resource the discussion. The overall aim of this lesson was to consider how plausible it was for some animals to be hybrid and furthermore how and why based on genetics.

Table 51 shows the speech episode included a review of norms for discussion and directly linked to the intervention. In these turns, noticeable elaborated responses by students illustrated how they could build on and add to the initial interlocutor's statement on rules. Adding "responsibility" reasoning and the importance of listening and talking to each other

advances the collaborative features that are culturally embedded within the pō talanoa dimension. In the second short episode example there is modest effort to make a claim, e.g., "It's not true" which lead to a further moderate attempt to elaborate the initial claim, illustrated in the final PTS example. Given the age of the learners in Table 51 (5-6-year-olds) and that in Time 1 pō talanoa did not occur at all for TCH4 and their students, suggests, this shift, whilst small, is indeed a positive one.

Table 51

Example of Student Pō Talanoa in the Transcript of TCH4 in Time 2

Transcript excerpt of Pō Talanoa
T Okay so we are going to just quickly talk about the rules for talk and so I hope you know the rules for talk.
***ALL** Yes*
T Okay it's your turn
S1 Um like all of us not talking, it's one person have to talk or another person has to talk and we have to listen to the person that's talking
S2 A person has to talk, they will be responsible and they will listen to the teacher if the teacher talks and they
S3 Will be talking to each other
S1 They will be talking to each other and it can (inaudible)
Also:
***S4** The elephant is bigger than the butterfly but they can't fly*
T Is that a real hybrid animal?
S2 It's not true
S3 It's not true
S2 It's a butterfly and elephant and it's not true because a butterfly is little and a elephant is big because it's more bigger than a butterfly.

Finally, for TCH6 there was a considerable decrease in pō talanoa from Time 1 of 52 PTS to Time 2 of 17 PTS. The main reason for the high instances of pō talanoa in Time 1 was due to a third of the lesson and discussion conducted as role plays led by students, thus capturing many speech acts that have three or more consecutive student-to-student-to-student turns.

There were, however, concerns in Time 1 of the dialogicity of these speech events identified after close analysis as mostly performative.

Table 52 shows that TCH6 had 17 examples of pō talanoa applied at 8% overall. TCH6 resourced their Time 2 lesson with multiple texts both print and digital and allowed opportunity for students to engage in the set of texts and research text sources independently, prior to the discussion that linked a series of teacher research questions. While less performative than in Time 1, these short episodes that follow in Table 52 show moderate attempts by students to make a claim that another student added to again with a moderate level of reasoning and elaboration. The final turn refuted both but with very limited reasoning. What all the pō talanoa examples have illustrated thus far are the developing repertoire of *students* in the discourse for high order engagement.

Table 52

Example of Student Pō Talanoa in the Transcript of TCH6 in Time 2

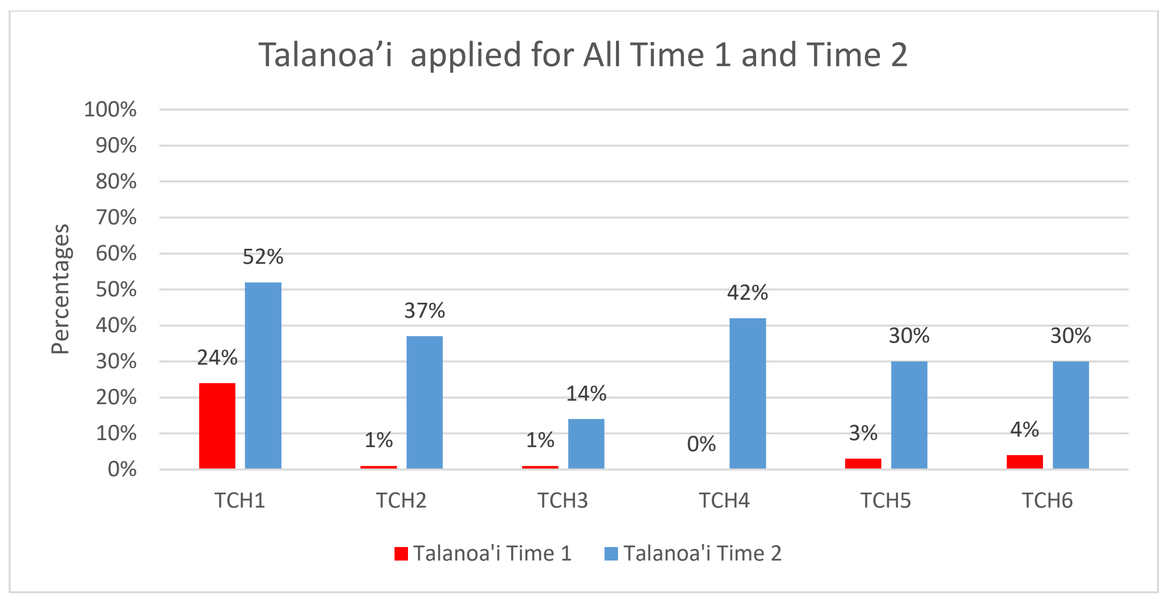
Transcript excerpt of Pō Talanoa
S1 What did he say?
S4 Miss it must be the naughty kids was throwing in the sea
S5 It's like street kids, they throw rubbish around and people have to come and clean the rubbish you know those people that go around the streets and pick up those rubbish off those roller things and they like press the button and they put behind their back and then there's a rubbish bin behind them.
S6 I disagree with you because I don't think that naughty kids like don't come around and do that.

Finding 6. Talanoa'i Repertoire Is Visible in More Classroom Discussions Than Previously

The dimension of talanoa'i emphasised more dialogic elements than those dimensions reported on thus far but does in fact rely on them. Figure 40 shows that all six teachers and their students engaged in this level of talk and by contrast to Time 1 illustrated a positive development of both the engagement in and progress towards improved talk repertoire for all albeit moderate. Figure 40 shows that talanoa'i occurred in the transcripts at a range of between 14% to 52% overall in Time 2 compared with 1% to 24% overall in Time 1.

Figure 40

Percentage Comparison of Talanoa'i for All Teachers and Students from Time 1 to Time 2



Finding 6.1 Talanoa'i Shifts for TCH4's Students Suggest Younger Students Can Engage Such Higher Order Talk Dimensions

The next set of figures and tables illustrate how talanoa'i were applied again using contrasting year levels TCH4 (New Entrant, 5–6-year-olds) TCH5 (Year 5 & 6, 9-10-year-olds) and TCH6 (Year 3 & 4, 7-8-year-olds). The fine-grained analyses again become a vital feature to be able to accurately report what specific PDIT dimensions were engaged for both teacher and students within talanoa'i.

Figure 41

Talanoa'i Nested Coding Distribution for TCH4 and Their Students in Time 2

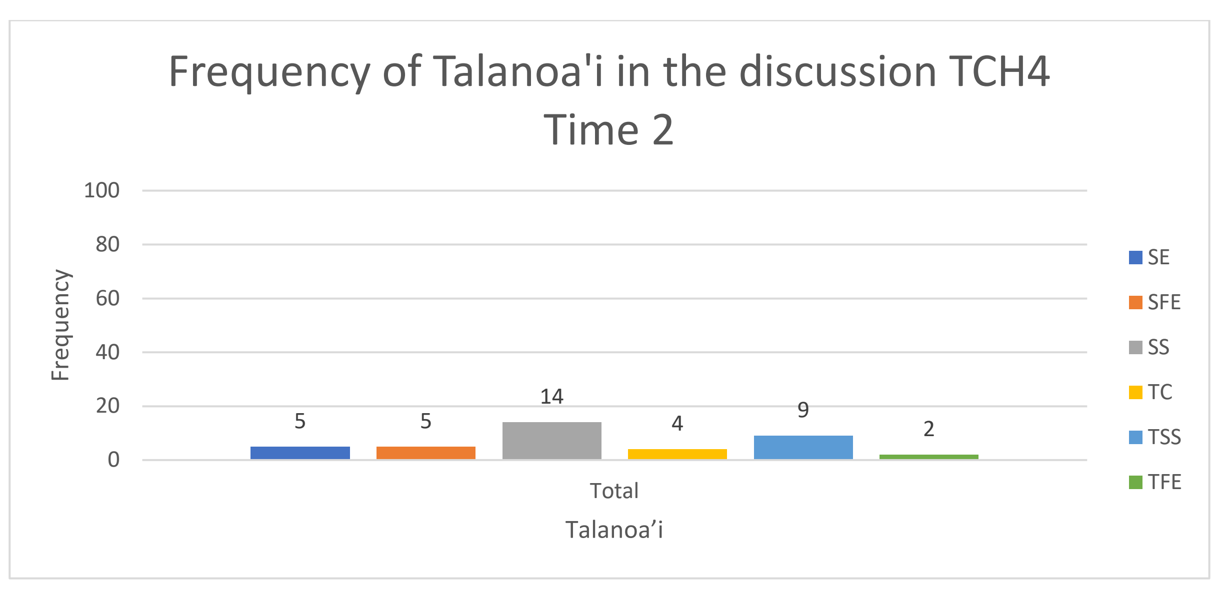


Figure 41 illustrates the nested coding that constitutes talanoa'i that occurred in TCH4's Time 2 discussion, and shows, though not at the same frequency nor necessarily in high numbers, that six out of ten nested codes were engaged. For TCH4 and their students talanoa'i did however make up 42% of the overall transcript, 26% applied for students, and 16% applied talanoa'i for their teacher. These findings are moderate overall but the illustration that follows (Table 53) gives a clear indication of the sequences in this discussion that showed a positive trend towards more dialogic elements.

In Table 53, students illustrate talk patterns that were elaborated (SE) active in the uptake of another's idea (SS) and active in direct response to teacher feedback (SFE). The deliberate teacher prompting of students other than the one involved TSS supported an increase in the contribution. Further discourse prompts by the teacher promoted a cumulative effect that operated to generate new ideas. Again, this is a most striking finding for this teacher (TCH4) and particularly their students, as talanoa'i was not present *at all* in Time 1.

Table 53 illustrates a short speech act (2 minutes and 51 seconds) that sat within the overall final discussion for TCH4 and their students that was 9 mins and 43 seconds in total.

Table 53

Example of Coded Talanoa'i in the Transcript of TCH4 in Time 2

Speaker	Speech act	Talanoa coding applied
S2	I think (inaudible) is not true because a butterfly, it's little and an elephant is bigger	SMMT, SE
T	What do you think Wayne?	TMMT/TF+/TSS
S1	I think his ears are butterflies and the elephant has a butterfly ear and I think it can't fly	SMMT, SFE
T	Quentin what do you think about this hybrid animal? Is it possible or is it not possible and I wonder why?	TMMT, TF+, TC
S4	Well Elephant's don't fly	SMMT, PTS/SFE
S1	It's not possible	SMMT, PTS
S4	The elephant is not possible	SMMT, PTS
T	Why do you think it's not possible? Tom what do you think about this?	TMMT, TF+, TSS

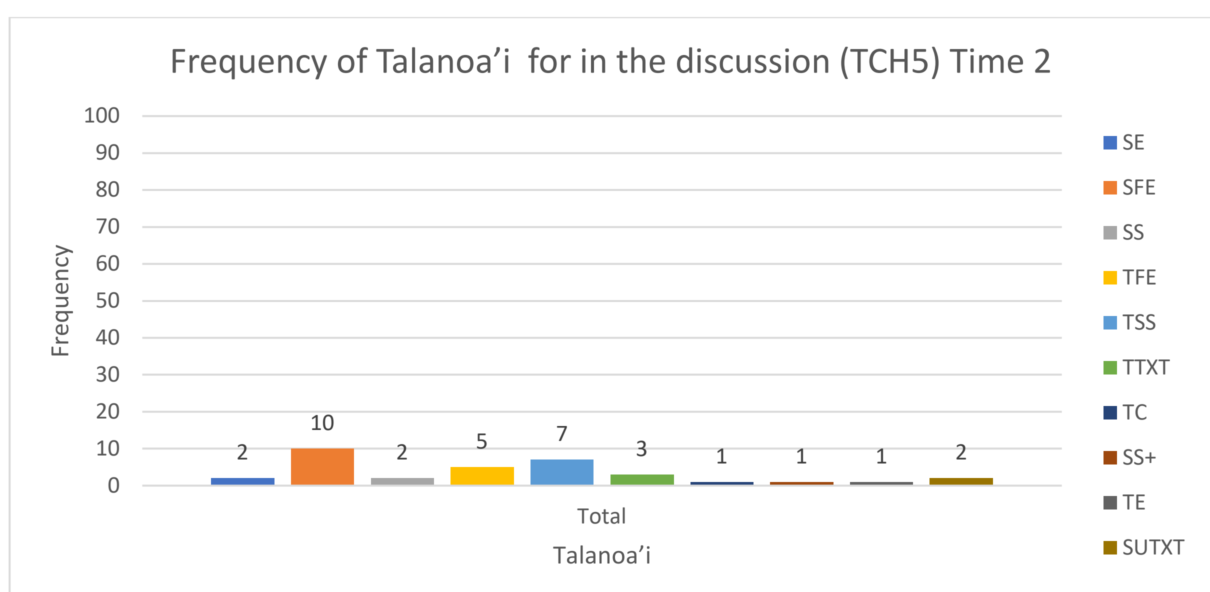
S3	The elephant is bigger (bigger whispered by another) in the world	SMMT
S4	The elephant is bigger than the butterfly but they can't fly	SMMT, SS
T	Is that a real hybrid animal?	TMMT, TF-
S2	NO It's not true	SV, SMMT, PTS
S3	It's not true	SV, SMMT, PTS
S2	It's a butterfly and elephant and it's not true because a butterfly is little and a elephant is big because it's more bigger than a butterfly.	SMMT, PTS, SE
S1	Butterfly is small and the elephant is bigger	SMMT, PTS
T	Quentin	TMMT/TSS
S3	The elephant doesn't have wings but he ears	SMMT/SS
T	Yeah, are they from the same genetics?	TMMT/TF-/TC
ALL	No	SV
S1	Not same genetics because it's not hybrid	SMMT/SFE
S2	Yep It's not the same genetics because they're from the same genetics because it's more little one than the elephant because it's changed	SMMT/SS

Finding 6.2 Talanoa'i Illustrated Shifts in Students Active Response to Teacher Feedback/Prompt

Figure 42 quantified the applied nested principles of talanoa'i for TCH5 and their students. Talanoa'i for TCH5 made up 30% of their lesson overall, 17% applied codes for students, and 13% applied Talanoa'i for this teacher. The Time 2 lesson for TCH5 showed a 27 % greater presence of this dimension than in Time 1. However, Figure 42 does report a rather moderate level of engagement at talanoa'i for interlocutors when the dimensions are broken down overall but does highlight that all 10 of the nested codes that constitute Talanoa'i occurred.

Figure 42

Talanoa'i Nested Coding Distribution for TCH5 and Their Students in Time 2



For the students Table 54 includes active student response to prompts (SFE) deliberate and active in the uptake of themes in texts (SUTXT). There are promising markers of tālanga laukonga (STLCC) for example "*He doesn't really look angry or jealous but I think he might look a bit annoyed*" a clear indication of the students attempt to combine evidence that had been stated already and an attempt to make a different claim.

For the teacher, their talanoa'i repertoire also expanded. Table 54 shows where the teacher included more active prompts to cumulatively build (TC) on own and/or other ideas in the discourse. There is also an awareness shown by this teacher to actively prompt students other than the dominant interlocutor engaged (TSS).

The following examples again strengthened and highlighted the uniqueness of the coding scheme (one speech act can have multiple codes applied). They provide a close analysis of a short episode from Time 2, where talanoa'i indicators explicitly occurred.

The short speech act (1 minute and 18 seconds) sat within the overall final discussion for TCH5 and their students that was 8 mins and 42 seconds in total.

Table 54

Example of Coded Talanoa'i in the Transcript of TCH5 in Time 2

Speaker	Speech act	Talanoa coding applied
S1	I think by looking at the photo I think it's about a time when someone got jealous because someone got new boots	SMMT/SUTXT
TCH5	Okay and why do you think that?	TMMT/TF+/TFE
S1	Because it looks like the boy in the front is jealous	SMMT/SFE
TOT TCH5	Alright who agrees with Maea? (pause for hands) Who doesn't agree with Maea? Alright Saane you don't agree so why don't you agree with Linda?	TMMT/TF-/TF-/TF+/TSS
S2	Because he looks angry that he doesn't want to walk with them	SMMT/SFE
TCH5	Okay so maybe he doesn't want to walk. Leah you said you disagree so why do you disagree?	TMMT/TF+/TSS/TTLCC
S3	He doesn't really look angry or jealous but I think he might look a bit annoyed	SMMT/SFE/STLCC
TCH5	What tells you he's annoyed?	TMMT/TF-/TC
S3	Because he looks like he's had enough	SMMT/SFE
TCH5	Enough of what?	TMMT/TC
S2	Walking	SV/SMMT
TOT TCH5	Maybe walking. Maea you said he might be jealous because someone else got new boots.	TMMT/TSS
TOT TCH5	Why do you say that?	TF+/TFE
TOT TCH5	What made you say that?	TF+
S1	Umm	SV
TCH5	Dennis, what do you think made her say that?	TMMT/TSS
S4	His facial expression	SMMT/SUTXT
TCH5	His facial expression yep he doesn't look very happy. What else? Toni?	TMMT/TF+/TSS

Finding 6.3 Talanoa'i Illustrated Active Uptake on Another Students Idea

Figure 43 illustrates the nested coding that constitutes talanoa'i that occurred for TCH6 and their students in Time 2. Talanoa'i for TCH6 made up 30% of their lesson overall, 17% applied for students, and 13% applied talanoa'i for this teacher. Figure 43 shows that 8 out of the 10 nested codes that constitute talanoa'i were engaged. The most frequent student talanoa'i applied were SS which is when students were actively taking up and building on another's idea. For this teacher the talanoa'i code engaged the most were the prompts to build cumulatively on and up from ideas in and through the discussion (TC).

Figure 43

Talanoa'i Nested Coding Distribution for TCH6 and Their Students in Time 2

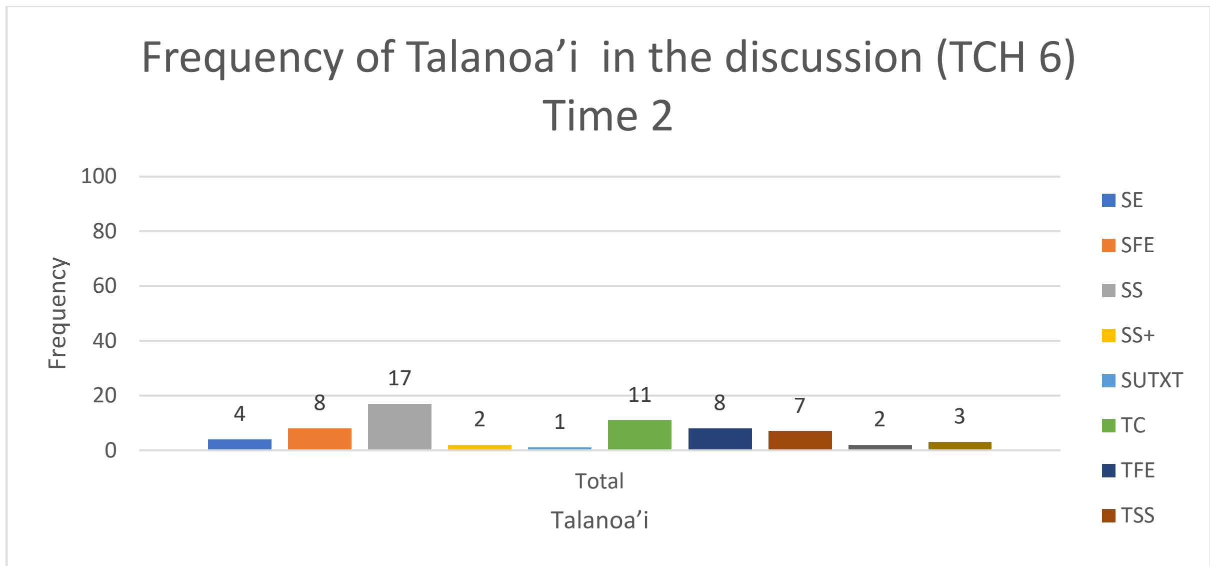


Table 55 shows a short speech act example (1 minute and 39 seconds) that sat within the overall final discussion for TCH6 and their students that was 22 mins and 39 second's total.

Table 55

Example of Coded Talanoa'i in the Transcript of TCH6 in Time 2

Speaker	Speech act	Talanoa coding applied
TCH6	Alright let's come back to what we did. Ivan I know that you had a complete list of problems. What were some of the problems that you found?	TMMS,TF-,TSS
S6	I found at how the plastic bags, how they oh people litter and	SMMT, SFE

	then it goes to the sea and then it gets sea animals oh	
TCH6	Yeah okay keep going love it's good. What happens to the sea animals?	TMM+, TF+, TC
S6	They get trapped from the plastic bags	SMMT, PTS, TFE
S1	Oh they eat the plastic bags	SMMT, PTS, SS
S2	They die and they eat the rubbish in the sea	SMMT, PTS, SS
TCH6	And what happens with us?	TMMT/TF-/TC
S6	We eat the fish!	SV/SMMT
TCH6	We eat the fish so that's a brilliant problem you've given me. Has anybody else got a problem that you've found? Anything? So Jacob remembered the plastic bags. Yes.	TMMT/TF+/TC
S3	Um the people have been throwing rubbish around at the beach and …	SMMT/SS
TCH6	Sam?	TSS
S4	The plastic goes into the water, they break into little pieces and the little fish start eating them	SMMT/SE
TCH6	Who thinks that's a big problem?	TMMT/TE
S6	Not me, I don't eat fish cos I eat sardines	SMMT/SFE

As mentioned previously, an essential design that the intervention focused on were the deliberate selection of texts resource planned to actively support interlocutors in and through the discussion. The transcript examples shown in Tables 53-55 show that mālie, māfana (connecting) also occurred and often developed *into* talanoa'i. This amplifies the overall framing of PDIT and these examples of multiple codes applied, signify the service each dimension offers the other whilst simultaneously acknowledges the recursive dynamics between interlocutors in the discourse. Resources designed and used in the above examples

provided multiple visual, print, and digital modes at varying levels of difficulty. Examples of connections to these resources that provided learners with text properties with which to employ in the discussion. However, the exception is TCH5 who only employed one text in their final discussion but still managed to achieve talanoa'i (Figure 40). What may also be attributed to this however could be directly related to the culture of talk established by TCH5 as well as the vastly reduced vave and sustained high frequency of mālie, māfana.

To sum up, while the episodes reported on so far that illustrated talanoa'i hold promise, the shift overall is moderate for most, suggesting that much more work is required that would consistently increase dialogic talk interactions within this dimension. A positive trend that has emerged, highlighted that *students* in Time 2 discussions are shown to engage in more talk at the talanoa'i level than their *teachers*, true also for mālie, māfana and a fascinating outcome particularly where developing talk repertoire for both teachers and their Pasifika learners can be achieved.

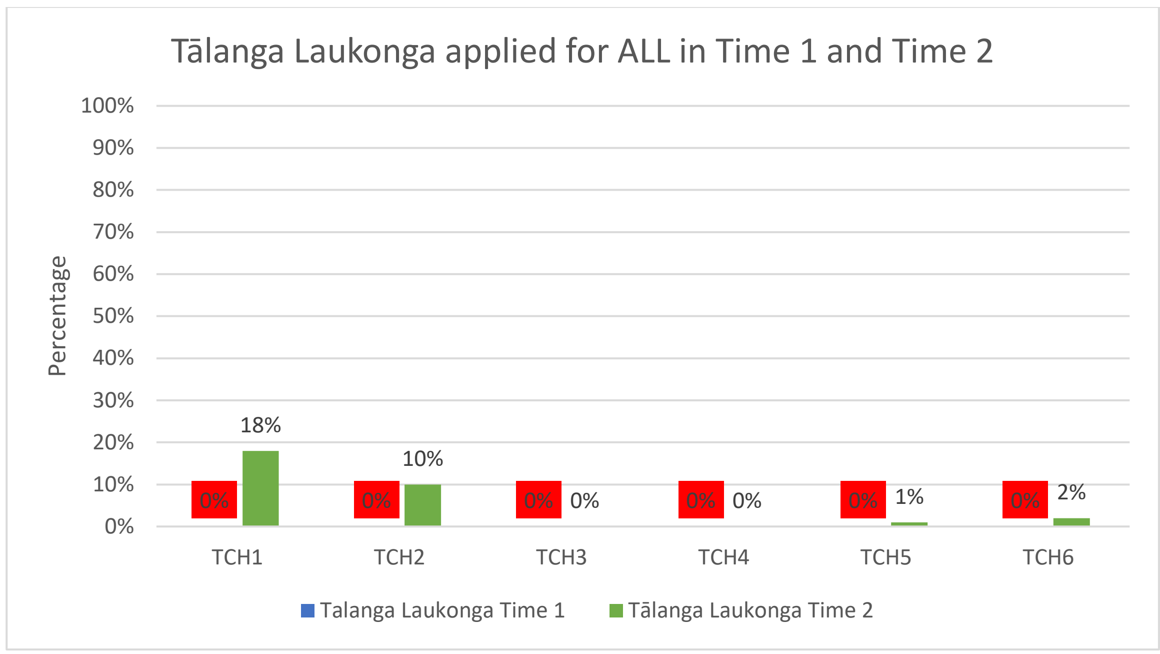
Finding 7. Tālanga Laukonga Repertoire Achieved but at a Very Modest Level Overall

Across all Time 1 transcripts, there were *no speech acts* in the discourse that applied tālanga laukonga. This dimension is categorised as talk by interlocutors that is deliberate, dynamic, able to sustain to build towards extended thinking and knowledge. By far, the most challenging dimension to achieve. In Time 2, there were only 4 out of 6 transcripts with applied tālanga laukonga, and of these, 2 showed very moderate shift, and 2 showed shift but at a very low percentage rate of between 1-2% overall, as seen in Figure 44.

The next series of figures and tables provide evidence that illustrate tālanga laukonga and thus crucial for the development of teacher and student dialogic repertoire. Once more, the phased approach to improve dialogic pedagogy is becoming more visible, notably where the intervention acted as the catalyst for change in classroom talk at this level. Like the patterns revealed in the previous analyses, *students* in Time 2 discussions are shown to engage in more talk at the tālanga laukonga sub-dimension levels than their *teachers*. This coheres with findings already reported in this chapter, in particular, the increase in talk turns for students, and decreased TOT. Similarly, the reduction of vave increase in mālie, māfana, and increase overall in pō talanoa strengthened this final dimension and the possibility of its enactment.

Figure 44

Percentage Comparison of Tālanga Laukonga for All Teachers and Students from Time 1 to Time 2



Two teachers best exemplify this level of talk TCH1 (Year 7 & 8,11-12-year-olds) and TCH2 (Y 4 & 5, 8-9-year-olds) and are used to illustrate this dimension next. Both of these teachers also had positive shifts in talanoa'i.

Finding 7.1 Tālanga Laukonga Illustrated Moderate Shifts in Student Uptake of Own Perspective and Others' Perspectives in the Discourse

Figure 45 quantified the applied nested principles of tālanga laukonga for TCH1 and their students. Tālanga laukonga for TCH1 made up 18% of their lesson overall, 14% applied for students, and 4% applied for this teacher. While applied tālanga laukonga is limited to only 18% overall, this is still promising given it was 0% overall in Time 1. Tālanga laukonga, as a reminder, is talk, which illustrated deliberate and active invitation to explore perspectives and positions in the discussion. Figure 45 shows that 9 of the 10 nested principles that constitute tālanga laukonga are engaged, 14% for students and 4% for the teacher. For students, this was mostly through the discourse move that showed uptake in their own perspective (STLOP) or providing an alternative claim (STLCC). For the teacher, talk prompts most visible in this dimension were the prompts to elaborate with reasoning (TTLCEE) though these occurred only a few times overall. Interestingly TCH1 employed all 5 of the teacher tālanga laukonga nested principles to engage their students at this level.

Figure 45

Tālanga Laukonga Nested Coding Distribution for TCH1 and Their Students in Time 2

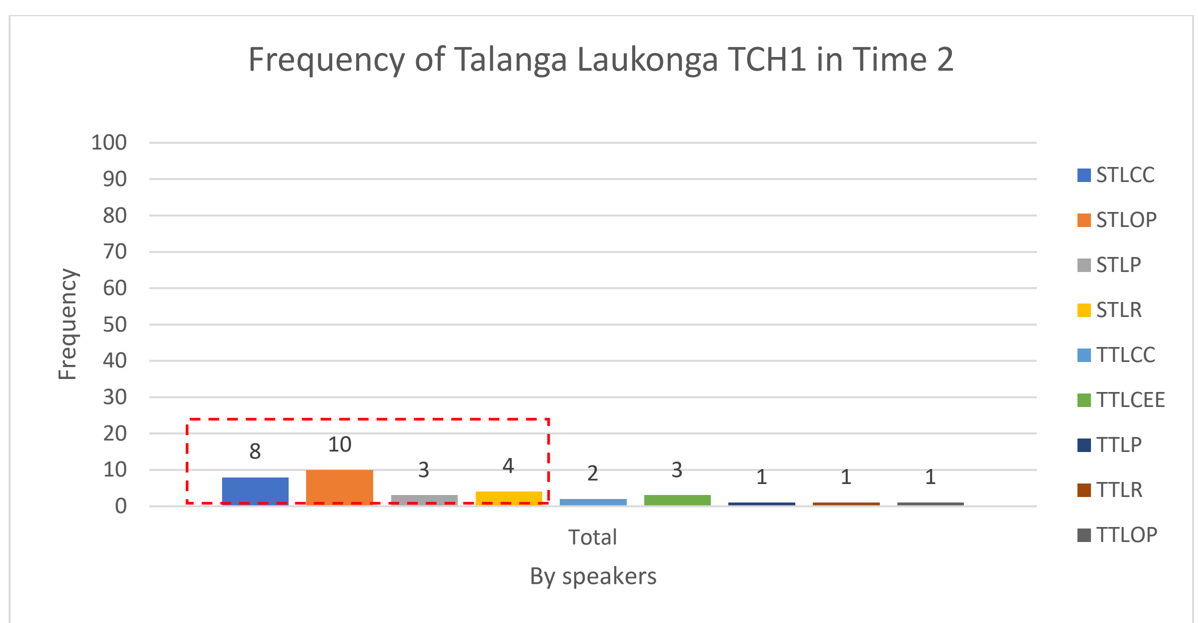


Table 56 illustrates a short speech act (3 minutes and 7 seconds) that sat within the overall final discussion for TCH1 and their students that was 22 mins and 26 seconds in total. Although the example begins with TOT illustrated in the segmented TCH1 turns, this manifested for interlocutors into applied talanoa'i and then tālanga laukonga which also showed here that the former is often a condition of the latter.

Table 56

Example of Coded Tālanga Laukonga in the Transcript of TCH1 in Time 2

Speaker	Speech act	Talanoa coding applied
TCH1	What are your thoughts or feelings about this when you see this photo and I'm sure you've seen it on the streets as well? And thinking about what we're talking about today, is it good support, patriotism or is it over the top, too much?	TMMT/TF+/TTXT/TTLP
TCH1	So who wants to make a start?	TF-
TCH1	I'll give you a bit of time to get your thoughts together, prepare something and then as listeners, it's our right to listen, it's our obligation to question, add on…	TMMS/TF+/ TFE
TCH1	and I might show you a little bit of a clip … okay who wants to go, who wants to say, who's got something to say about this?	TMMT/TF+

S1	I think it's cool how they're doing that, it's cool showing the, it's um I just think it's cool that they're like showing pride of their culture	SMMT/ SFE/ STLOP
T	By, what were they doing, they were?	TF-
S1	By cheering all night and partying and doing a parade	SMMT, SFE
T	Remember it's not about the person, it's about the comment	TMMT/TTXT
S2	They were showing good patriotism, they were showing good pride in their team	SMMT/PTS/SS
S3	But Also, it's like they're disturbing the peace, yep that's all I want to say	SMMT/PTS/SS/STLCC
S4	I think it's great that they showed pride in their culture but they're kind of being inconsiderate what like, [saying] shut up man, like what we do like for example they blocked off Mangere Town Centre when we wanted to eat	SMMT/PTS/SS/STLCC
S5	LONG PAUSE Ah they got overboard when they burnt the flags	SMMT/PTS/SS
S6	Yeah that was a disgrace to other countries, our ancestors. We pretty much did nothing, it's just that Samoans	SMMT/PTS/SS/STLCC
S7	Yeah like we were both getting cocky and then afterwards they burnt	SMMT/PTS/SS
S8	They weren't showing good sportsmanship	SMMT/PTS/SS
S9	Yup and isn't that illegal like getting out of your car?	SMMT/PTS/SF-/SS
S10	Yep like OTT	SMMT/PTS
T	Maybe it wasn't?	TF+
	And they jumped one of the Samoan guys at Otahuhu	SMMT/SS
T	So when you're talking about their support and someone already mentioned maybe they were being a bit disrespectful and inconsiderate, could they have shown their support in a different way	TMMT/TF+/TC/TTLOP
S1	Yep in a responsible way	SMMT/TFE

Though limited, an example of where tālanga laukonga were applied can be seen is in the statement in Table 56 from S2 *'They were showing good patriotism, they were showing good pride in their team'* subsequently built on from previous turns. This was followed by S3 "*But also, it's like they're disturbing the peace, yep that's all I want to say"* illustrating an economical approach at adding to the discussion. Tālanga laukonga however is mobilised

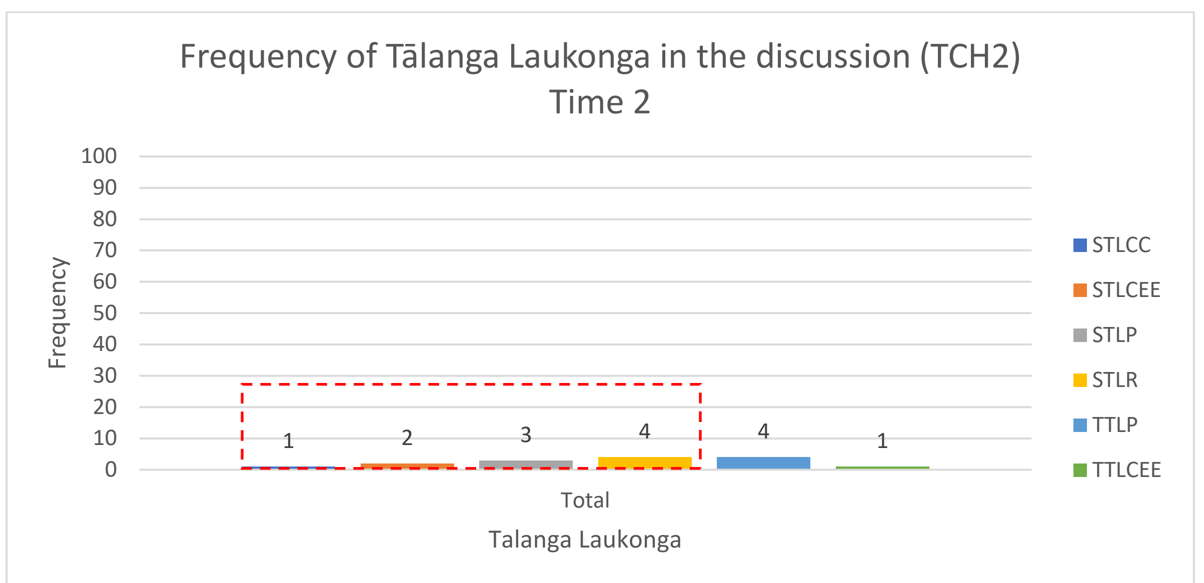
through the enacted uptake by S4 *"I think it's great that they showed pride in their culture but they're kind of being inconsiderate what like,[saying] shut up man, like what we do like for example they blocked off Mangere Town Centre when we wanted to eat."* The impact of which illustrated sustained advancement of knowledge as these students worked to value each other's contributions, whilst adding their own arguments or point of view, simultaneously combining evidence to make attempts to counter claim.

Finding 7.2 Tālanga Laukonga Illustrated Moderate Shifts in Students' Uptake of Reasoning and Elaborated, Extended Response in the Discourse

Figure 46 quantified the applied nested principles of tālanga laukonga for TCH2 and their students. Tālanga laukonga for TCH2 made up 10% of their lesson overall, 7% applied codes for students, and 3% applied for this teacher. While applied tālanga laukonga is limited to only 7% overall for TCH2 with 6 out of 10 principles that constitute this level of talk evident, this again is still promising given it was 0% in Time 1.

Figure 46

Tālanga Laukonga Nested Coding Distribution for TCH2 and Their Students in Time 2



Students, in particular, engaged tālanga laukonga through taking a position (STLP), and critical reasoning for their positions are provided (STLR). Similarly, the teachers prompt for positioning (TTLP) is the principle most engaged by the teacher within this dimension.

Again, speech acts are not mutually exclusive, meaning one speech act can have multiple codes, the following example included principles of talanoa'i and tālanga laukonga, again the former required to achieve the latter in this example.

Table 57 illustrates a short speech act (4 mins and 2 seconds) that sat within the overall final Time 2 discussion for TCH2 and their students that was 27 mins and 5 seconds overall.

Table 57

Example of Coded Tālanga Laukonga in the Transcript of TCH2 in Time 2

Speaker	Speech act	Talanoa coding applied
S2	I think this is image, what I can see is I can see a world that is a big, it's beautiful, it has big air you can breathe in but what I can see in the other image I can see like, what I feel is a like I think a world that is burning and I feel is like people hate each other but like this world it looks like friendship, friends and that. That one I think is dangerous and no one wants to go there	SMMT, PTS, SE/SUTXT/STLR
S3	I think the world, the left part is like peaceful and it's like friendly and there's like a lot of oxygen you breathe in and water and on the other side it looks like when people are digging down for coal they get more hotter and the hot comes out and there's like fire and hotness.	SMT, PTS, SS, SE, STLR
S4	I think this is what the Earth looks like now, that's what it will look like	SMMT, PTS, SS
TCH2	OK	TV
S5	I think on the left side it's what it looks like now and the right side it looks, that's what it looks like if we use too much gas and fossil fuels.	SMMT, SE, STLR
TCH2	Yep so fossil fuels. So you think that fossil fuels have caused this, this side?	TMMT, TF-
S5	Yes	SV
TCH2	Okay what makes you think that fossil fuels have caused this?	TF+, TFE
S1	I think they release chemicals are bad for the environment and turning the world into that place.	SMMT, SFE
TCH2	So the chemicals are bad for the environment?	TF-, TC
S3	No but you know how there are some good chemicals and bad? I think there were bad chemicals that were released into the environment.	SMMT, PTS, SFE

S2	I think that the chemicals that they put in like the plants and trees um they can destroy it and some people they just test it if it will but then maybe another day all our tress will die and they won't have any oxygen so that's why we shouldn't try, make anything that you just need um fossil fuels or something.	SMMT, PTS, SS, STLCEE
S3	I think the fossil fuels caused that because I think it like attacked our oxygen and our oxygen is gone and the trees and the water.	SMMT, PTS, SS, STLR
TCH2	Cool do you still want to build on that or talk about the smoke that's coming out here, like what comes from the smoke? What do the fossil fuels produce through smoke?	TMMT, TF-, TC

Noticeable in Table 57 are interlocutors who are engaged in multiple nested principles of both talanoa'i and tālanga laukonga. In the opening line, S3 deliberately engaged the visual text and proceeded to use it as a thinking tool to elaborate and provide reasoning for their position statement. The immediate response by S4 highlighted active uptake in the ideas presented, illustrated a level of sustained collaborative effort (PTS), provided an elaborated response, with reasons that expanded on ideas of the previous speaker e.g., *peaceful and oxygen versus coal and fire.*

In order to apply tālanga laukonga, elements of sustained knowledge advancement, disagreement/agreement with reason and combining evidence are enacted. For this teacher, there are some promising discourse prompts that highly value 'thinking' *Okay what makes* ***you think*** *that fossil fuels have caused this?* And cumulative knowledge production prompts, "*Cool do you still want to build on that or talk about the smoke that's coming out here, like what comes from the smoke? What do the fossil fuels produce through smoke.*" to support student engagement that would seek further evidence in support of their claims.

To summarise, given the overall engagement in this dimension is low it is important to report the intervention design principles that impacted positively and opened this level of dialogic discussion albeit at very modest rates overall.

As previously mentioned, the content for both of the above discussions were well resourced and exemplary in design. TCH1 and TCH2 in Time 2 designed an exceptional set of texts that provided interlocutors in these Time 2 discussions, increased opportunity to engage high order concepts and ideas subsequently enacting, talanoa'i and then moderately in tālanga laukonga.

Highly visible and consistent for both TCH1 and TCH2 were community membership episodes, that also applied talanoa'i and tālanga laukonga and subsequently resulted in effective norms that established a culture of talk.

Finally, while the episodes that illustrated tālanga laukonga hold promise, the shift overall as illustrated is still very small. To prevent the discourse that reaches this dimension reverting to recycling identified as problematic in Time 1, much more work that uses a phased approach to solve such issues is required.

The next section reports on student and teacher beliefs on classroom talk with contrasts highlighted between Time 1 and Time 2 and that again link directly to the major findings reported on in Part 1 and 2 above.

Findings Part 3

Semi-structured Student Interview Findings Time 2

Findings reported in the previous chapter showed how teachers had embraced the co-design. These design approaches have given rise to student and teacher responses in the sections following. Student's Time 2 interview findings are organised around beliefs about rules and resources. Teacher's Time 2 interview results are similarly organised but added teacher insights on the PDIT framing and sustainability of Talanoa as dialogic pedagogy beyond this study.

For clarity, student voice reported here are identified as ST1, all students in the class of TCH1 or ST2 all students in the class of TCH2 etc.

Finding 1. Shifts in Student Beliefs on Who Talks the Most

Of the 24 students interviewed, 20 believed that either themselves or their friends/peers in post-intervention discussions talked the most. Four students however, all from the same class, reported that their teacher "*still talks a lot*" (ST6). Corroborated only in so far as word counts that favoured these student's teacher.

The remaining 20 students did signal that their voices were most frequently heard which may account for greater participation overall, for instance, *"So, what I think is that everyone talked the most, there wasn't a big group, she [teacher] was speaking less!"* (ST2).

Finding 2. Shift in Rules for Talking and Discussions

All teacher participants planned and conducted discussions and activities to facilitate the co-construction of community membership norms for classroom discussion. These ground rules

activities occurred *before* the final Time 2 literacy discussion. Table 58 reports all relevant responses from students that specifically reference the shared rules they co-constructed and used in Time 2.

The following statement captured the consensus of these processes by one student who stated, *"Because we made up the rules and we were the ones who made them up so we need thinking and then we could tell why we had those rules and what type of rules they are and why we need them* (ST2).

The emphasis on 'we' in the above statement addresses the decision to conduct this discussion in a co-constructive manner and further acknowledges the shift in responsibility and authority, for example, "*we made them up*" "*we need thinking*," "*why we need them*" all of which were qualifiers that support this process overall.

Another critical student self-report statement by this same student, "*Yeah but then we were thinking, and we crossed out some of the rules because we didn't think they were that good anymore*. *So since we made up those rules and it's better"* (ST2). This statement epitomises the reasoning behind focusing on developing norms in this particular way. The student offering is powerful and illustrative of their evaluative capability, *"yeah but then we were thinking and we crossed out some of the rules because we didn't think they are good anymore*." Furthermore, student agency is elevated given their right to remove rules that did not serve the collective but moreover this was because it was now an 'option' on the table and supported by this teacher else it would not have been so stated. A definitive departure from how rules were conceived of in Time 1. The concluding part of the statement further empowered the student collective and suggested that this time discussions, *because* of these new rules were improved.

In Table 58 students' responses are organised under the same three categories as the profiling phase, "cognitive," "social/behavioural" and "authoritative." The most frequent student responses were characteristically social and behavioural, (N=29), for example, *"Well everyone gets a turn to say their idea."* Responses of an authoritative nature e.g. "*You have to put your hand up"* totaled N=10 responses. The most significant shift was the frequency of student response associated with cognitive markers e.g. "*Like you extend it [talk] so it expands our knowledge,"* which totaled N=19 compared with only N=2 in the profiling phase.

The notion of bidding and nomination, "*Put your hands up when you talk"* (see Table 58), is still quite pervasive. The total number of student responses organised under authoritative were

N=10, which is similar in frequency as in profiling, suggesting there is still some level of teacher authoritative control evident in the discussion.

Table 58

Student Collective Responses to Perceived Rules in Their Classrooms for Having a Discussion in Time 2

Cognitive (n=19)	Social & behavioural (n=29)	Authoritative (n=10)
"Um like ask *questions* if you don't understand" (ST1) "Like you *extend* it [talk] so it *expands* our *knowledge"* (ST1) "It's important cos like if you don't collaborate you wouldn't *know stuff* that other people have" (ST1) "Obligation like for example like our obligation is to listen to the person speaking and *get some ideas*" (ST1) "Think" (ST2) "Participate, so they know what's going on in the discussion" (ST1) "You can clarify" (ST2) "Sometimes you always have to be prepared to think" (ST2) "You have to think before you say something" (ST4) "Everybody's idea is okay" (ST5) "And have good questions" (ST4) "Because sometimes if someone's finished talking and nobody else is telling	"Because um, it is important for um people to like um listen to what other people have to say" (ST2) "Listen and communicate" (ST2) "We had you should listen to other people's ideas then you will get more ideas" (ST3) "If you're not sure of something just ask the person" (ST1) "Making sure the girls and the boys get equal turns" (ST2) "Can't talk when somebody else is talking" (ST2) "No and our other rule is there are no wrong answers" (ST5) "That we all got a turn not just some people" (ST2) "Work in a group and discuss" (ST5) "When somebody is talking you have to listen and if you didn't understand you have to repeat it" (ST2)	"We could choose like we had to stick our hand up or like that out and we just point at them and they got to speak" (ST2) "You have to put your hand up if you questions" (ST4) "Put your hands up when you talk" (ST5) "Don't disagree" (ST2) "Miss asks you questions and you have to answer those questions" (ST3) "I normally put my hand up before Miss asks the question" (ST6) "So that you can focus on the teacher and learning on what she is talking about" (ST6) "Listen because if you're not listening you have to go to the listening chair" (ST6) "Everyone must talk" (ST1) "Speak loud" (ST4)

you can just say something *like I don't agree with that or I agree* with that so keep the decisions and discussions going" (ST5) "And sometimes the kids ask questions" (ST6) "And to collaborate cos then you might just have one like answer and you need other people to help you with more answers" (ST2) "Think about the person's *questions* and then try to think of an answer" (ST2) "You need to be ready to speak" (ST2) "Prepared to think" (ST2) "We could learn more rules and speak more about complicated things" (ST2) "Ask questions" (ST5)	"People have to take turns to talk" (ST1) "And one person has to talk and if they get stuck they pass it over" (ST4) "Not to talk over anyone" (ST5) "Don't talk over means when someone's talking and then you just disrupt, and you start talking" (ST5) "It meant like don't talk too much so that everybody gets a chance to say" (ST5) "Include each other" (ST5) "Well everyone gets a turn to say their idea" (ST5) "Don't speak when someone else is speaking" (ST5) "Don't talk, like don't talk louder than the person that's talking" (ST5) "Like when you take too long to speak cos people might have ideas to share, cos some people might still have ideas and you have to write your ideas down" (ST5) "Wait time" (ST6) "Oh listen" (ST6) "Re-voice It's like if someone is talking and then if the teacher asks us if the other person could say what the other person said" (ST6) "It's to give the person time to think about their answer	

	and the other people have to wait instead of calling out" (ST6)	
	"Treat everyone the same" (ST6)	
	"We learnt about being responsible" (ST6)	
	"You have to stay on task and don't get off track" (ST2)	
	"Confidence you have to have confidence that's really hard" (ST1)	
	"To be treated civilly" (ST1)	

Finding 3. Student Awareness of and Critical Engagement With Resources

Students were asked about their perceptions of the resources used in the discussion for two reasons. The first was to gauge whether the student could offer detail on the way the teachers approached and resourced the discussion. The second reason was to ascertain whether the resources had supported learning.

To be clear, the approach to the co-design in the previous chapter 6 was not simply about offering *more text resources*. The intervention (*Phase 2*) focused on resourcing the final discussion in a deliberate critical manner that would ensure students were acutely aware of the multi-text approach, given they were required to engage these resources then enact in and through discussion their shared thinking with their teacher.

Teachers resourced the final lesson with multi-text sets that bore a resemblance to the examples provided by the effective teacher (TCH1) identified in profiling (see Appendix K). One student's recollection of this new approach to resourcing stated,

"It also helped us with, it helped us like, it helped our brain to know more about the story and like it helped us more so we like knew some things before we actually got into the story" (ST5).

The same student elaborated on further critical engagement with resources and reported,

> *For me I think that was one of the stories I did most because there was a boy in the picture with a face that could have been jealous, anger, bored and stuff like that so I kept asking questions like I'm not sure what the face he's showing* (ST5)

Finding 4. Multi-text Resourcing Aided Long-Term Recall for 5–6-Year-Olds

Students across all six classrooms recalled critical learnings in their interviews that took place between 6 to 37 days post the final discussion with their teachers. A surprising finding was that of the youngest of student participants (5–6-year-olds) who, upon questioning, were able to recall key content learning, long after the event of their final discussion (37 days). These findings suggested a particularly productive discussion occurred connected to high-level multi-text resource provisions, which impacted positively on long-term memory. When prompted, these students (ST4) recollected the following items from their Time 2 discussion with their teacher:

"*It's so there were different animals and could be different countries"*

"A bird and a tiger can't define cos it's not the same"

"A tiger and a lion"

"Um zebra horse"

"There is black stripes in the legs and then they have the donkey and it's all brown"

"They're big the Liger"

"The elephant can't fly cos that doesn't go together cos the animal"

"*It was hard about the different animals and we tried to remember about the names"*

"*Cross breed and hybrid animals, if they're not the same then they can't go to the country"*

"If another animal if it's little and another animal is big it can't be cross breed because it's another animal is big"

The researcher did not attempt to correct (grammatically) any of the above recalled points shared above. None the less, these 5–6-year-olds recalled specific content discussed in the final post-intervention lesson. Noticeable was recall of the technical language used *"crossbreed' and "hybrid animals."*

The findings here showed a fundamental shift from Time 1, which reported student ideas *about* the power of talk to Time 2 interviews that revealed through self-report on enacted and engaged power of talk to support learning.

Further evidence on recall of key learnings post-intervention is reported on next.

The group of 7–8-year-olds students (ST6) also recalled multiple learnings 8 days after their post-intervention discussion that refenced direct association to the multi-text resources provided and as follows;

"You write about the picture but you have to say it in your own words and ideas"

"Sorting the problems out"

"Because before we used to throw rubbish on the floor but Miss has been teaching us about sustainability to look after our planet, to not throw rubbish or else our Earth will get warmer"

"She gave us some information and some text and some books"

"The books that she gave us was all about rubbish to save our world"

"It showed how to look after our Earth and stuff, throwing rubbing on the floor, leaving our Earth untidy and instead of leaving our Earth untidy she gave us a book about how to look after our planet"

"So she gave us a picture like this country, there was lots of rubbish in the sea and this deep, deep water that's all down there and then one person went all the way down there and they saw heaps of rubbish all the way down and then they came and washed onto the Island"

"Ah cos so we already know about it and then we read the story and then we saw the pictures so we knew what happened"

"To help us write about it Sustainability"

"They were just questions"

"It helped us by talking to the next to the person"

Finding 5. Multi-text Resourcing Aided Long-Term recall for 9–12-Year-Olds

A different set of interviewees (9–10-year-olds) stated in some detail learnings from engaging the multi-text set resources and 13 days post the discussion, recalling, *"It was because the picture actually had like a lot of detail in it. So there was a part, so there was a world where there's lightening and fires happening. The other bit was fresh and new with trees"* (ST2).

A different 9–10-year-old student recalled peer to peer learning resulted from discussion utilising multi-text resources, "*I learnt more from my classroom mate Simon. Well Simon did like, once he looked at the picture and it was like half bad and half good, he thought the bad*

side was like hell and the good side was Heaven. Yeah like good and bad people" (ST2). Engaging multi-text resources promoted student collaboration, critical perspective taking and highlighted student appreciation of ideas other than their own.

Older respondents (11–12-year-olds) also reported how resourcing supported storying 20 days post their discussion, for example*, "it helps cos like we can communicate more better, cos like we've all seen it [video resource]and we just like to tell stories about it"* (ST1).

Uptake on student story contributions also promoted multiple perspectives as reported by another student, "*You can see where another person's coming from. Cos like um you could experience it in like your life and you've gotta like know every scenario like what could have happened like yep"* (ST1).

These same students engaged in a dialogic discussion about how two different cultural groups celebrated the Rugby League World Cup win, one student stated their position*, "That the Samoans could have like responded in a different way but then they did the same thing then it caused more violence."* (ST1).

We can conclude at this point that multi-text resourcing impacted student talk repertoire evidenced by the depth of elaboration and understanding recollected above. Long-term memory was advanced in the student self-reports and suggested that where Time 2 discussions were dialogic recall would be impacted positively.

A limitation of findings post-intervention for students however was the absence of explicit reference to dimensions in the PDIT. These were however implicitly visible in student responses thus far. Prominence of PDIT was explicit in the teacher interview data specifically and are reported next.

Semi-structured Teacher Interview Findings Time 2

The introductory passage that follows is taken from one teacher who grappled with the overall process but showed by her comments a real determination to make change. The fact that this teacher admitted openly to doing retakes of her post-intervention recording highlighted two vital learnings; i) that this teacher actually wanted to do a good job of the post-intervention discussion and ii)that she was conscious and critically aware the first two she had already tried were not effective which, iii) clearly illustrated much greater clarity around what constituted dialogic pedagogy.

> *Yes I got myself wound up on one of them, I think it was the second money one where I was trying to get them to look at the Tongan notes and why they still had notes and why we had coins and I was going around in circles and I thought to myself, why am I doing this I don't understand, and I gave them a question and I said you don't understand do you and they said no, and I said nor do I so we had to go back and had to re-word my question to say, and I said what about coins, who's been overseas, what do you do with, you can't take coins to the bank and change them, maybe they use notes cos you can take them back to the bank or they haven't got enough money to make them you know* (TCH3)

The post-intervention interviews with all six teachers highlighted shifts. Similar to the student voice findings teacher beliefs are organised around the big three findings rules, resources and repertoire.

Additionally, the final section provided teacher perspective on the usefulness and impact of the Talanoa framework used to drive understanding of how talk occurred in the classroom for and with their Pasifika learners.

Finding 6. Teacher Shift Where Talk Rules Are Engaged

Teacher beliefs on what counts as rules or norms for community membership and the processes by which they are established have undergone a fundamental pedagogical shift from Time 1 to Time 2. That is, while the rules developed were a combined effort between interlocutors, given the prevalence of authority, in Time 1, acceptance of such would not be genuine without teacher's sincere embrace of the process.

The enactment in situ of these Time 2 ground rules engendered higher authority by the learners. Subsequently, teachers had come to know (through the intervention) and then agree to design their own approach prior to, their final classroom discussions. As shown in Part 1 and 2 of this chapter this connection to the analysis processes showed not only greater participation but fundamentally a more prolific educational responsibility to the learning, that sought to achieve greater dialogic discourse overall.

There was a consensus among all teachers that the messages provided by their students, explored in the PvATA part of the intervention would be less effective in producing the desired literacy learning given they were articulated by their students to foster teacher authority over student agency.

Finding 7. Teachers as Problem Solvers and Designers

One teacher grappled with the challenge of *how* to approach the development of community membership rules for talk with their students and connected similar principles from a different curriculum area,

> *I found that hard in the beginning and I thought oh how am I going to do this cos in [maths] you put down a problem and they discuss how to solve it so I thought oh why not put a picture in and see what they think and they can compare it and yeah, it was quite cool to see that you could actually use that for literacy as well*

and also

> *I decided to just put a picture in front of them and then ask them what they think of what's going on and they were able to tell me heaps from just looking at the pictures* (TCH5)

Subsequently the rules for this class were developed through engaging in the process described here.

As mentioned in Phase 2, Chapter 6, all teachers in the study carried out the co-construction of rules with their students prior to the final instructional literacy discussion. When explicitly asked about the *process* as it pertained to their Time 2 discussion, there was overwhelming agreement in favour of the practicality and impact of these rules. One teacher stated:

> *Developing them was really good, the kids knew it, they knew what they wanted already; it was having those ground rules set and making them feel comfortable like you say to enter the discussion, participate and continue, not just here's my piece, that's it* (TCH4)

Another suggested that the rules were helpful overall. However, the reality is that things can still move away from the intended goals of a lesson, for example,

> *It was a lot better because there was more structure to it in terms of having the discussion rules established and ensuring that everyone spoke and that they had to explain, they couldn't just give me a word. I said because and then I tried to use question starters as prompts for them. I mean at times it went haywire but I think overall it was a lot better* (TCH3)

Another teacher spoke directly to the negotiation and co-construction of the rules in place for talk.

I thought it was quite good cos it was quite specific with what they were. I mean I got them to come up with them but then I sort of shaped it into those ones. I think it's important for them to know that talk is important there are some ground rules around it for it to work. They might, I'm not too sure if they referred to them [in the final discussion] but definitely know some of them did. Just the respect that was required and I put in a rights and obligations from them, like the rights of a speaker and a listener and obligations stuff like if you're talking you're obligated to speak nice and clear enough to be able to hear and things like that (TCH1)

A further illustration of shift is offered by one teacher who reported on the clarity of shared partnership in the discussion. This next statement primarily addressed student self-report on authority (see Table 58). Also illuminated are this teacher's reconciliation on bidding and nomination to be less pervasive in favour of elevating student responsibility in and through the discourse.

Probably they had to have that understanding of what was expected in the discussion. It will take them a while to get the hang of it so instead of putting their hand up, I'm wanting to work on this is that when one person stops the other person can talk. So it's, you know how we have this culture of putting hand up, you talk, you choose. Where one person stops then the next person talks. Yeah then it comes to be like a responsible, you're a listener, you wait and you look and you're conscious of when you need to start and it's hard with the little ones. I'm going to give it a go (TCH4)

The features of these co-constructed ground rules are optimistic. However, for one teacher there were still moments where control reverted to the teacher, "*They [students] know what they are[rules] they're very clear about it but at the moment it's still driven by me a little bit, you know, that re-voicing, did you hear that, what did she say. And then children use it."* (TCH6).

Finding 8. Teacher Shifts in Beliefs on Resourcing Talk

The following reports from the teacher participants highlighted the strengths of the resourcing and design. All six teachers offered beliefs on resourcing that enhanced tālanga laukonga. One pointed out that while the approach of planning to provide multiple texts, was different, the discourse enacted, highlighted successes previously believed not possible,

Ah yes it would be, I probably would not have 3 different types of texts for one lesson, I might have a text that I would read yeah but not so much of discussion before that

> *like I would focus on that as much not what I'm doing. It's different from what I used to. Which was pretty high pitched but I thought well I can break it down but I had to break it down, we had lots of talk about what is hybrid, what is cross breed, we talked about genetics and they were saying oh if they belong to different countries and then I had to go, I know what she was trying to say but it was introducing the word genetics and it was pretty very interesting, they understood the concept and I gave examples, that was the best thing.* (TCH4)

Finding 9. Dynamic Features of Multi-Text Resource Development

Teachers described in detail the process of *selecting texts* to support their approach to the final post- intervention discussions. One teacher reported trepidation about the high level of some texts in their designs, and stated,

> *I thought oh I'm on the wrong track, I was like oh this text is too much for them, do you think I should be choosing it but having said that, after the workshop and everything I thought well I have to take risk like if you don't take any risk you don't grow. Yes and it has helped with the different types of text as well like visual, so we used visual, we used I read a text to them, they looked at a picture, there were like 3 different types of text to scaffold and also their prior knowledge about animals, they brought in that and then I had also because we were talking about hybrid animals like one of them mentioned that oh we can have Samoan and Tongan parents and that means you are half Samoan and half Tongan. They could link that to people.* (TCH4)

There were no restrictions on the number of texts teachers could use in their co-design which allowed for another key dynamic, variety, as reported, "*Yeah it's really good because it's all about getting different types of text and it's not just one thing and that's it, we stop and we limit ourselves"* (TCH1).

High expectations as a foundation feature were also considered in the design of multi-text resources,

> *Yes definitely cos I can already see that, I mean this I never expected to introduce something like this at this level and the text that I had was way pitched to say maybe Y5s and 6s; However, when I broke it down, I read to them and we had a discussion about it so it does work. It does work. So firstly is choosing topics that is of interest, students interest and having part of the concept, it is possible and then maybe take it to writing cos you can link your writing to your concept and I think it is possible and*

we could work on those lines to say that yes we need 3 different types of text, having more exposure to those concepts before you actually kind of start writing (TCH3)

Another characteristic of the multi-text set approach design required teachers to engage with the texts first before open access to the students. Building teachers content knowledge while creating the multi-texts was a positive feature, as one teacher stated,

Yeah definitely cos I'm watching the videos and I'm like oh nah that will confuse them, oh that's made it clearer for me, it may not appeal to them but I'll throw it in in case it appeals to them. This is really basic, they may want to just watch a quick video instead of sitting there watching a 5 minute one cos they prefer 30 seconds so I'll put this one in but it did help me really refine my thinking you know like I had this, my thinking was really broad and more resources that came through I was like oh here I am yeah. So I used what they knew and I made like 2 or 3 slides with just loads of information they could access and it was videos so one said viewing, you could view this text and listen to it and something else, it was through YouTube videos, another one was just an image from YouTube, I mean from google that had yeah, and had it have been just one YouTube video I shared we would never have got that because it would have just been like here's hydro power, talk about, now what about the effect of, you know, we wouldn't have come up with that (TCH2)

When prompted further for a response on the impact this type of approach would have on achievement the same teacher was in favourable agreement,

I do think so because then they've got that thinking and the reasoning because they own it, it's their own thinking, they've had to reason so you've got that critical thinking there. When it comes to say writing a report they have that information there and if they had to apply that into, I mean if they were writing a narrative then they could be like oh that's right fossil fuels have this, that could be my problem and that's within the story, it's yeah, I do think they take ownership of their thinking that way (TCH2)

Finally, a needs-based feature to text selection was commented on:

I think I'm making it more specific to the need or the level and it doesn't matter if it's the lower level or a higher level as long as they've got access and it's gotta be some sort of, for my kids, a visual access, either a video or a book or something they can actually look at (TCH1)

Visual dynamics as part of a balanced multi-text set approach (see *Phase 2*) are appropriate though caution is necessary. A dialogic discussion can support innovative, critical thinking but should not replace forms of extended reading and writing entirely.

Finding 10. Greater Clarity on the Role of the Teacher in the Discourse

The role of the teacher in the discourse has been impacted by this study. There was unmistakable clarity for the teachers on their position and how vital their role was for students to be able to access broad learning, for example,

> *Well you can't take anything for granted and I was conscious that I didn't want to talk but I felt that I was still leading the discussion and I'd love to get to the point where I wasn't leading the discussion, they were leading the discussion. I know that I've talked less, definitely talked less and I ensured that everyone had a talk so I didn't have one child talking more than everyone else put together. So there were those 2 things and yeah, so not taking for granted that they don't know anything about our topic because they actually do. It's quite wide ranging what they do know and sometimes it's how I question as to how I'm gonna bring that out and how I can use it down the track with them* (TCH3)

Furthermore*, "More of a focus on what they know, really big focus on what they know and allowing them more scope about what they want to learn about so yeah, that's a big one for them, giving them some student agency"* (TCH3). This is further evidence of a positive change in roles from teacher control of knowledge, to much higher 'student agency' in the development and discovery of knowledge through the discourse.

Finding 11. Developing Teacher's Cultural Awareness Through Pacific Dialogic Indicator Tool (PDIT)

Given that the contents of the PDIT introduced several teacher's to culturally underpinned discourse activities through Talanoa, it was essential to ask about the impact these new understandings had on teachers' planning and enactment overall.

The dexterity of PDIT as both analytical framework and as a pedagogical scaffold tool are made visible here. Teachers, as part of the intervention, were encouraged to use indicators of tālanga laukonga (aim-high notion) within the framework to support and then plan for improved dialogic discussions with a small group of students in Time 2. This pedagogical shift is captured in previous reporting on the actual classroom observations and next in these interview reports by teachers.

All six teachers strongly agreed that the framework was indeed practical and for one teacher increased cultural awareness of terms,

> *Yeah it's really simple and easy because even though I'm Pacifica I don't really have that Talanoa understanding but looking at the framework and I'm like oh yeah the warm fuzzies, of course we all get that and actually some people forget that and that's why the conversation doesn't go but having it, you know you had the But then you explained it in English. For me, that then helped me to relate to my students as well so I thought of course I didn't think of that and I think there are a lot like me who are plastic But having this framework helped and because it's for our Pacifica it helped with my thinking like yep that's how they do it and using the language cos I just to throw it in right at the beginning of the term thinking I've got heaps of time, still ran out of time but we instead of talking buddies we had Talanoa buddies And straight away one of the boys was oh Miss that's talking I'm like yeah like conversation aye or we have discussion and he's like yeah just talking so at least he got that; ownership of Talanoa even though teacher did not have that much knowledge of it the kids do* (TCH2)

For some, the terms were challenging, the next teacher shared a powerful statement of change that also showed how she began to reconcile the discomfort she felt as a professional with actual needs of her students, but also as direct response to what teachers offer in and through the discourse, and expressed,

> *I got confused with the terms, but I knew that I needed to change. I understood that part, I just got confused with the words and so I knew that I can understand the reasoning why and I think if I got more used to the terms etc. I could really get into that but I knew I needed to change and so that was at the heart of what I did. I knew I had to have more input from my students, and I needed to have more resources etc. and I needed to be listening to what they were saying and responding directly to what they were saying. Yeah and they did appreciate that, you know they found it hard too but I think if I went and asked them how did that really go for you, I would get a good response and that's all I can ask for* (TCH3)

Another teacher explained the need for more time for Talanoa to reach its full potential,

> *The whole class and I don't want to detract or side track you, the whole class has moved ahead. You've been in my room, you've seen what I've been working on.*

> *Reaching the level of your Talanoa group that age is not an easy thing to do. So that's the laying the foundations to move towards your Talanoa and if I had had them for another year I could have brought them up there so glimpses of Talanoa* (TCH6)

When prompted for what teachers felt were their biggest learnings linked to PDIT one teacher responded,

> *Would be you unpacking the framework and going through that and talking with us about it. I would say it was my transcript and looking at it myself but it wasn't until later I actually looked at it properly and had I looked at it that day it would have been that but I have told anyone and everyone like it's unbelievable what you get out of seeing a transcript, in a transcript cos you, there's no hiding like oh I think I said this, it's yeah and the reflection that comes from it but it would be, yeah knowing the framework, hearing the experiences from the other teachers, so it wasn't just me cos it would have been oh that's X School but this is X school, totally different school, teachers I've never met before and I walked in and expected to see all Pacifica teachers and we were like, oh damn, cool you know, and so that was really good and then the other one would be the activity we did and seeing the groupings Yeah from the student voice as well and the rules that they had come up with and I saw some I knew had come from mine but yeah interesting it actually fits in with this one from another school* (TCH2)

Specific formative potentiality of the PDIT was remarked on by one teacher,

> *Cos it kind of uses your structure and you know, okay I'm here, what do I do to go to the next level and without having that I probably would not think on those lines. I thought maybe oh, I really thought oh is that text appropriate, is it pitched to their level and I thought oh well look if I want to have rich discussions I probably have to break out of that. Mm you don't want to challenge them too much saying they can't do it but I thought, even if you pitch it there, [tālanga laukonga] you break it down, they are capable of understanding* (TCH1)

Finding 12. Sustainability Beyond the Study

Finally, for some teachers in the study they have taken the patterns related to repertoire, rules, and resources and negotiated these with groups of students who were not in the final Time 2, post-intervention group, for example,

> *Yes we've done it with 2 groups And I'm thinking I will carry on doing it with the new ones as well introduce so they have an understanding, they may not get it straight away, it's kind of if they keep with it, re-visiting their expectations I'm sure it will kind of then come to like all my 33 kids will know it. At the moment there will be like 10* (TCH3)

Factors that are likely to address sustainable dialogic teaching or at least strengthen this seem partly due to transformative thinking from teachers in the study.

Enjoyment factors for the child may also positively factor in sustaining the approaches beyond the study, for example one teacher stated,

> *It has been great and they're really wanting to be part of the discussion which I would not probably, they wouldn't come and ask me can we have that lesson again because for them it's like oh this is really special because they get to talk and they get to do, which is out of the ordinary you know, something which they never expected cos they normally expect oh reader which is pitched to their level so maybe it's not something out of the blue which I found that they were really wanting to talk about it and wanting to be part of the discussion which I felt was oh it has* (TCH4)

Similarly, sustainability notions where being able to conceive of the potential in other learning areas such as,

> *Yeah, actually I know it is cos it has changed the shape already in the classroom and it would be I guess, I could see it being applied maybe in like I've done it through same inquiry and then it would trickle into the other like reading and tying in with your text box writing instead of just me having that vocab in this, they'll be so used to having a range of different things that if I have it all up there okay so conjunctions can be identified within a YouTube video where you're viewing, it's not just this picture with a sentence underneath and then they'll start to become aware of that as well* (TCH2)

Summary of Time 2 Student and Teacher Interview Findings

In sum the student beliefs post-intervention showed explicit awareness of how talk was now positioned to support their learning and illustrated a level of comprehension about their roles in the discussion. Moreover, teacher and student self-report on ground rules highlighted shift on where and how rules are derived that would allow greater productivity in the discourse. Student recall of the content of their final discussion illustrated sustained high order thinking

through changes in the process of the discussion, the rules and strategic resources. These shifts self-reported are corroborated in the classroom observations as well.

Teachers interviews revealed greater awareness of dialogic pedagogy through the major foci of resourcing and rules to enhance the dimension of the PDIT. These reflections were honest reviews of the processes engaged and in the words of one of the teachers "*that is all I can ask for*".

The next and final chapter brings together all the major findings reported across the three phases in light of the literature reviewed and directly responds to the research questions through the final Discussion.

CHAPTER EIGHT – DISCUSSION

Introduction

A large body of evidence supports using deliberate dialogic approaches to positively change discourse practices in the classroom (Alexander, 2006; Mercer, 1995, 2003; Nystrand, 2006; Skidmore, 2000; Wells, 1999; Wegerif, 2013). The central claim in the dialogic field is that talk enhances thinking and advances knowledge through discussions. The sociocultural perspective employed in this study aligns with dialogic theory, which strongly suggests the positive influence that social, cultural, historical aspects have on the shared creation of knowledges in the context of the classroom discourse.

The present study was situated in the "dynamic" space of classrooms where the potential for rich sociocultural discourse interactions is commonly restricted. It examined whether productive discourse that is culturally located could be privileged. This study showed that positive changes in high-level talk repertoire could occur, by modifying teacher instructional discourse practice through a design that drew on combined Pacific and Eurocentric talk principles.

Whilst positive shifts were achieved, findings also signal the complexity of shifting towards dialogic pedagogy and, in this study, employing the newly introduced PDIT framework to amplify the cultural underpinnings made visible through the tool. The demanding aspects of attaining dialogic heights in the classroom required teachers to notice their talk patterns and respond through a self-designed intervention. Although the evidence was positive, modest shifts in the higher indicators of talk repertoire highlight the continued challenge of implementing such an approach.

The development and successful application of the PDIT coding frame offers a unique perspective to understanding classroom talk that draws largely on the writings of Tongan academic Vaioleti (2006, 2013, 2016). The coding frame has been successfully used firstly, as an analytic tool to code classroom talk and subsequently as a lens with which to further understand and interpret the instructional discourse spaces occupied by teachers and their Pasifika students.

This study was designed to address the following key research question;

How can teachers design and employ dialogic processes that are appropriate and effective discourse forms for Pasifika learners in English medium literacy contexts?

Several sub-questions supported the main question and were;

1. *Can a tool that codes classroom talk be developed, that has distinct culturally meaningful underpinnings to enable responsive teacher and student talk patterns in the classroom?*
2. *What are the current patterns of talk in classrooms with high Pasifika populations?*
3. *What culturally appropriate protocols for talk can be established in classrooms with high Pasifika populations?*
4. *What resources can be used to support dialogue in classrooms with high Pasifika populations?*

This chapter responds to these questions through discussion of the findings and highlights key contributions to the literature reviewed. To draw implications for practice I present a summary of the two analyses conducted in phases one to three.

Summary of Results

Phase 1 – Pre-Intervention Summary (Time 1)

The study showed that in classroom literacy discussions prior to the intervention it was the teacher who spoke more words. In addition to speaking more words, teachers were also observed to be have far more turns overall in the discussion than their learners. This established a profile of the relative contribution patterns from both teachers and students which an intervention needed to respond to.

A phenomenon that was prevalent pre-intervention was labelled as *teacher over talk* (TOT). This talk behaviour by teachers featured an overly long speech act that had multiple functions related to the overarching literacy content and in some cases, there were also multiple teacher questions posed at once before another interlocutor entered the discussion. It was noted that the average length of utterance by students immediately following a TOT was constrained.

Related to the low average length of response to *teacher over talk* was the high rate of responses by students that contained only one word, making it challenging to propel discourse forward in a more dialogic manner. On the other hand, it was very rare to have captured and recorded instances of talk from teachers consisting of just one word.

Finally, reports by students in this phase overwhelmingly reported that rules in the classroom, acknowledged the teacher's dominance over theirs with few social and even fewer rules of a

cognitive nature recalled and referenced. This was in contrast, however, to these students' perceptions about the actual power talk had to support learning.

Transcripts analysed using the PDIT tool highlighted a prevalence of vave (IRE) patterning across all six teachers which was consistent with patterns of one-word response. Like the established dialogic research base, teachers had more turns, spoke more words and displayed high frequency of over talk (TOT), thus there was potential for achieving greater frequency of more complex dialogic patterns such as talanoa'i and tālanga laukonga. However, these teachers' turns also missed vital opportunities in the Talanoa to connect and sustain the mālie, māfana dimension that potentially mobilised higher order dialogic dimensions, for example, pō talanoa, talanoa'i and tālanga laukonga.

Phase 2 – Intervention Summary

A series of reflective exercises undertaken at a teacher workshop session proved catalytic.

The PDIT tool was specifically designed in accordance with a design-based inquiry approach that was culturally compatible. The Pacific Dialogic Indicator Tool (PDIT) made a unique contribution to the dialogic body of knowledge and was shown in this study, to provide culturally responsive information about talk patterns for critical interpretation with teachers. Additionally, the dimensions that made up the PDIT were used to build an expanded view of how talk might best be engaged. This was achieved when using the specifically Pacific lens the tool offered to enhance both teacher and student dialogic repertoire. The practice of using the PDIT dimensions in this way highlighted the multi-dimensional influence of the tool beyond a coding frame. Moreover, coding classroom talk in this way extended the boundaries of analysis from the well-researched Eurocentric framing and added to the existing body of work on dialogic pedagogy but specifically privileged a culturally validated extension of theories of talk, coding talk in the classroom through well-known and valued culturally sustained language practices.

The design features of the intervention phase positioned the teacher as researcher. Central to the overall intervention processes were four key areas that formed the basis of changing teachers beliefs and practices; teachers' critical reflection on their and their students' dialogic repertoire using the PDIT; critical examination of student voice responses that reported on rules, and critical reflection on key instructional resources used and the corresponding type of talk these resources promoted.

While many studies closely engineer the designs and resources that teachers can use for the intervention this was purposefully in contrast within the design of this study. The rationale was that the researcher felt teachers needed to have a level of agency over design selection of materials and resources that they and their students would readily access and that were appropriate to the both context and learning content. This calibration was best determined by the teacher not the researcher. However, underpinning the processes of deliberate planning and resourcing and designing an approach, teachers utilised the varied levels of collegial support, alongside the principles of the tālanga laukonga dimension that offered an aim-high support notion when *planning* to be dialogic.

Phase 3 – Post-Intervention Summary (Time 2)

There was no change in the balance of words for speakers overall in the discussion transcripts and these data showed that this still favoured all teachers. However, turns in the discussion were now considerably in favour of the students. Additionally, there were positive changes in the frequency of one-word response by student, now radically reduced across all six classrooms.

Another important finding post-intervention was the greatly reduced TOT that showed teachers' architecture of discourse invited greater engagement and thus contribution amongst all interlocutors that did not emphasise teachers over talk.

Transcript analysis post-intervention also showed increased repertoire of PDIT talk types for both students and teachers. An unanticipated finding was that students engaged these cultural talk dimensions through their post-intervention discussions, more frequently than their teachers.

Following the intervention, vave (IRE) patterns reduced and mālie, māfana became the most frequent dimension engaged by both the teachers and their Pasifika students.

Faka'eke'eke (questioning) shifted for the teachers only in that teachers began to ask more open questions than closed. Students however did not engage in this particular strategy in the discussion showing only slight change post-intervention. This finding will be further discussed in sections on teacher resourcing.

A much more visible frequency of pō talanoa in the transcripts was noticeable, meaning students held the floor for longer uninterrupted periods in the discussions than previously.

Notably, detectable but modest positive shifts occurred in the frequency of talanoa'i, now visible in all six teachers' transcripts. Tālanga laukonga dimensions were are also present, but

again only a very modest shift and found only in four out of six teachers' Time 2 transcripts. Given there were no recorded instances of this dimension in Time 1, the shift is arguably substantial as it signals possibilities for mobilising talk that would enhance more productive outcomes if used.

Teachers' design of the community membership discussions resulted in sets of co-constructed rules that focused more on cognitive elements over authoritative rules for talk. Resources selected by teacher's post-intervention were based on multiple challenging texts of mixed modes.

In sum, the results showed that the design research process which used the culturally validated PIDT impacted on the dialogic repertoires of both teachers and their Pasifika students. Whilst only modest shifts were demonstrated in the higher order dimensions of tālanga laukonga these findings were promising given their total absence in early *Phase 1* transcripts.

As a result, three major implications can be drawn. The significance of;(1) *a design-based process for changing discourse patterns in which teachers as researchers and designers engaging in critical reflection of theirs and their Pasifika students' talk repertoire;(2) deliberate co-construction of ground rules or classroom norms for talk which addressed the culture of the classroom; and (3) elevating expectations in the process of deliberate design and resource selection for instruction.* The conclusion of the research is that these implications combined, promoted much greater range and forms of discourse for not only the teachers in this study but their Pasifika students also.

To preface these implications, I begin with the affordances of the newly conceptualised PDIT that noted a cultural intersection of complementary frameworks for coding and analysis. The study's interconnected elements are explained next to further advance understanding of how shifts in talk repertoire occurred, afforded by these analyses and that signalled effective talk-based pedagogies for and with Pasifika students in a New Zealand classroom context.

Affordances of the Pacific Dialogic Indicator Tool (PDIT)

One key feature of this study was the development of the PDIT model designed specifically for this study to address the research question, *Can a tool that codes classroom talk, be developed, that has distinct culturally meaningful underpinnings to enable responsive teacher and student talk patterns in the classroom?* Whilst the question is essentially binary, and the answer responds in the affirmative, a more expanded view is necessary. This is because this

study has shown that the establishment of this model contributed a complementary framework to the existing body of Eurocentric dialogic coding frameworks. More specifically it has provided a way to conceptualise talk maintaining a culturally robust and reliable lens. To be able to use such a tool in a reliable manner it was the researcher's intention to seek cultural validation of the tool's dimensions with those experts that were qualified to do so, and this process is discussed next.

Cultural Validation for Reliability

The process of validation of the PDIT framework was lengthy, from initial conceptualisation to reconceptualising to validation to and testing the tool indicators through an interrater exercise for accuracy and usability. Through this process the PDIT tool has contributed a unique frame which allowed insight into talk indicators that were able to be conceived of first as cultural language dimensions using Talanoa (Vaioleti, 2006, 2013), and second, that could be aligned with more Eurocentric analytic frames (Hennessy et al., 2016, Reznitskaya, 2012) thus proving compatibility.

The PDIT was used to report findings, for example how achieving higher order dimensions of pō talanoa, talanoa'i and tālanga laukonga were associated with, i) understanding how to enact lower frequency of vave in and through the discussion and ii) understanding the cultural essence to support increased frequency of mālie, māfana. The fluidity of the dimensions as they were reconceptualised, promoted each *individua*l layer of the PDIT but, more notably, illuminated how these domains *interacted and interrelated*, in service of each other, through the reciprocating recursive dynamic of classroom talk. That is, at the operational level, the codes and nested codes were not mutually exclusive, one speech act in the discourse could achieve multiple functions. This was an important feature of the PDIT and in this study given the prevalence *of teacher over talk*, allowed the opportunity to uncover often hidden dialogic elements within. As an aside, if no other shift besides the much lowered frequency of vave occurred, this by itself was a profound finding. Given the research identifying the prevalence of IRE patterning (Mehan, 1998) similar to vave, as the default mode of teacher talk, then enactment of much lowered frequency of this pattern was necessary but as will be discussed further on, not sufficient for sustaining thinking and advancement of knowledges through discourse.

Cultural Intersections

Through the PDIT tool's development a cultural language of analysis was normalised whilst still being able to accurately articulate talk-based practices in English medium contexts. By

establishing this model, which drew on a broad understanding of the literature in both Pacific (Vaioleti, 2006) and Eurocentric (Alexander, 2017) worlds combined, a dialogic pedagogy could be envisaged within a framework that privileged the cultural practice of Talanoa.

Where Eurocentric coding might have been just as useful on its own (Hennessy et al., 2016; Mercer, 2007; Reznitskaya, 2012), the responsive value of undertaking the development and then validation of the tool highlighted the nature of cultural discourse patterns acknowledging and valuing the layers of Talanoa as Pacific specific resources to draw on. Using PDIT elevated teaching and learning processes for and with these teachers and their Pasifika students in ways that aligned with the responsive principles promoted by Airini et al. (2010) who acknowledged a cumulative notion that builds on past knowledges, in this case the key academic authorship around Talanoa whilst creating new approaches that seeks, "*to advance research and policy knowledge and understanding and positive educational outcomes for Pasifika education research stakeholders" (p.26).*

Arguably, the PDIT tool has extended the boundaries of the more Eurocentric approach to analysing and coding discourse (Hennessy et al., 2016; Mercer, 2007; Reynolds, 2017; Reznitskaya, 2012; Soter et al., 2008; Wilkinson et al., 2017) and is shown to be mutually informative offering a potentially powerful enhancement which in essence delivers what Thaman (1992) encouraged as "*looking towards the source*" (p. 10) in order to unlock the unfamiliar.

Through this key notion of looking towards the well-established cultural practice of Talanoa, the PDIT development enabled a process of weaving elements from Eurocentric framing of talk across to combine and conceptualise analytic framing to understand discourse patterns from a Pasifika reference point.

This process served as a further affordance albeit an unintended one at the start of the research. To illuminate, the dimensions as reconceptualised for coding, held the potential to break down any negative cultural stereotypes and assumptions. Meaning, for the teachers in this study, there was little to no room for recourse to assume that their Pasifika learners were not able to engage in high-level talk. Indeed, the dimensions of the tool set high expectations for thinking through talk, for example, through talanoa'i and tālanga laukonga dimensions. This affirmed what Suaalii-Sauni and Fulu-Aiolupotea (2014) claimed, that use of Pacific references and terminology that carry validated cultural value means that there is a prospect for greater relevance and utility that would enable its potential longevity. The literature

reviewed (Chapter 2 & 3) concluded that being dialogic was not inconsistent with a Pacific world view and the intersection of worlds has been demonstrated with the PDIT development and affordances showing that it was possible to build complementary frameworks that do not diminish the underlying epistemology of either. As Kim and Wilkinson (2019) concluded, "It is culture that gives talk the power that it has, and at the same time, it is talk that constitutes power" (p. 83). This study through the development of PDIT has in fact given "culture" a seat at the table in the analysis of discourse-based approaches to instruction and pedagogy for teachers and their Pasifika learners.

PDIT Is Complementary With Multiple Analytic Approaches

Bringing together two distinct analyses enabled a mutually informed perspective thereby broadened thinking and positively impacted on teachers' specific intervention response.

An example of the richness of the complementary analyses are the findings on one-word response (Chapter 5) by students which were measured in two ways, counting one-word responses overall and then corroborated with the analyses of and frequency of vave. Whilst the frequency count alone was cause for a closer look, this would not have necessarily been enough to actively and or collaboratively solve anything. The combined analyses allowed a more elaborate interpretation and then understanding of talk. The PDIT tool captured talk through a culturally validated frame and thus measured optimal interactions linked to Talanoa. Alexander's (2006) dialogic principles aligned with a Pacific world view in particular his first three of supportive, collective and reciprocal. The final two, cumulative and purposeful aligned more closely with the final two dimensions tālanga laukonga and talanoa'i in the PDIT. The argument presented here showed that the approaches to analysis used in this study were complementary in nature thereby strengthening the key decision to use both.

Positive Implications Where Connecting and Reciprocity Are Elevated in the Discussion Through PDIT

Reciprocity, highly valued in the wider Pasifika community (Coxon et al., 2002, MOE, 2018) seeks to invite genuine connection. The PDIT model (see Figure 3) presented two specific indicators, mālie, māfana and pō talanoa, that have contributed in a unique way to the coding and analysis of instructional discourse, that maintained the cultural essence underpinning of these two dimensions.

Both mālie, māfana and pō talanoa shared a similar thread of connecting, a principle that was shown to shift positively over timepoints for most teachers and their students in this study. Moreover, mālie, māfana were uniquely reconceptualised in the development process but

importantly validated by cultural experts. This "connecting" notion is a feature that is not as specifically elevated in Eurocentric framing of discourse analysis, although is admittedly present in dialogic coding frameworks that maintain an emphasis on sociocultural perspectives. (Alexander,2006; Mercer, 2007). The PDIT dimensions, māile, māfana, if taken up, presented opportunities to connect and reciprocate in the discourse, and are shown in this study to act as the potential lever for more cognitive exchanges.

The attention paid to connectivity are distinct and purposeful. We know from research (Chu et al., 2013; Coxon et al., 2002) that it is those connections and values of reciprocity, from a Pasifika perspective, that enhanced learning. In this study, mālie māfana worked to connect learners. Reciprocity emerged as the lever that proved to elevate shift for student talk. The mālie māfana analyses during literacy discourse demonstrated the opportunity for a dialogic opening and became a core feature upon which other forms of discourse could be achieved. Reciprocity, shown in uptake by students, thus reduced the need for one dominant interlocutor and attended to an invitation to connect in the discourse and contribute. In Time 1 the uptake of mālie māfana patterns signalled connection (by the teacher mostly) meaning talk that connected initially but was not built on or reciprocated and so did not advance.

When the balance shifted in Time 2 that allowed students to connect and engage in the nested principles in this dimension, to the text, task, past shared learning and humour, harnessed the power of talk, for transformation. Aligned with this notion, Manu'atu (2000) reported that, *"transformation occurs when pedagogy, language, teachers and context are connected and where mālie is allowed to move within and across the learning experience towards greater understanding, curiosity and insight*" (p.78).

Notions of the features of pō talanoa emerge here. In this dimension the connecting principles lead to shared authority, and attention to such principles in the coding framework itself, was shown to impact on students' contribution and level of authority over their learning.

Pō Talanoa As Shared Authority in the Discourse

Students were the only participants that could contribute to the coded pō talanoa repertoire indicator, as it was determined by the number of student to student interactions or strings in the discourse of three or more (PTS; Pō Talanoa Student). The provision of room in the PDIT exclusively for such student speech acts highlighted for teachers the essence of what constituted the dimension, that of shifting the locus of control and authority to the student. Soter et al. (2008) identified a similar phenomenon, reporting three signature elements as being linked to more dialogic outcomes of which one of these *is "when students hold the floor*

for extended periods of time" (p. 373). The presence of this dimension in the Time 2 discussions (8-45%) compared with Time 1 (2%-23%) suggests that the students were capable of "holding the floor". For the teachers in this study, "handing over" talk to their students contributed to this shift and resulted in pō talanoa occurring in five out of the six Time 2 (post-intervention) classroom discussions.

There is a caution here however, that is linked to the extent that student strings of talk did not extend to tālanga laukonga in three classrooms and showed variable shifts of talanoa'i dimensions in Time 2. This pointed to the need for a *changed role* of the teacher from an instructional perspective. That is, while students' discussion were improving, the teacher is still required to be active, in particular, as they are best positioned to notice where to propel the discussion forward, where there are decided stuck points and if there needed to be a change in direction or resources added or amplified. This caution aligns closely to Vaioleti (2013) who stated, "*The Talanoa will end when it loses its mālie or starts to revisit areas covered already, since then it is probably that no more new points will be added to those that have been co-constructed"* (p. 23). The implications for teachers and their Pasifika students' ongoing critical awareness of discussion points that have been "revisited" is a necessary condition required to build up and on from pō talanoa through to talanoa'i and tālanga laukonga.

The study's next three key implications outlined in the introduction, developing a culture of talk; deliberate design and resource for instruction; and teachers as researchers through design-based methodology; are discussed next, in light of the wider corpus of research reviewed and the theoretical perspective the study employed.

Deliberate Developments to Make Visible a Culture of Talk

In this study a clear implication for change was found in establishing a culture of talk in the classroom. Teachers' expectations of their Pasifika learners in discourse has also been positively impacted. This is evidenced by the responsive and agentic designs by the participating teachers that centred on a culture of talk. The concerted and combined efforts to redesign rules in this study, ensured both teachers and their Pasifika students would be better positioned in the discourse to confidently contribute to their learning, where talk was the medium. This line of thinking will be further considered next and subsequent implications for teachers, students and future learning communities are discussed also.

Components of Developing a Culture of Talk

The literature illustrating the importance of developing ground rules is extensive (Cazden, 2001; Lee, 2011; Mercer & Dawes, 2010; Phillipson & Wegerif, 2016; Reznitskaya & Wilkinson, 2017). These researchers pointed to issues in the classroom that impeded speakers' rights and that linked to silence markers, issues over power and authority and when an imbalance is unchecked may contribute to diminished expectations for students to engage in productive discourse overall. As Cazden (2001) highlighted, "*teachers have the role-given right to speak at any time and to any person; they can fill any silence or interrupt any speaker; they can speak to a student anywhere in the room and in any volume or tone of voice. No one has the right to object"* (p. 82). Consistent with the research reviewed, teachers in this study, particularly in Time 1, were also found to have ultimate authority in classroom discourse as measured in their talk patterns and further corroborated in findings reported by students who perceived their teachers to be in charge of who could talk. Teachers confirmed, through self-report, that they were the ones "doing all of the talking". Where classroom environments emphasised these patterns and were left unchecked, was associated with a negative impact on students' discourse. In Time 1 students' responses were often short, clipped one-word answers and often students were reduced to silence in learning. Collective problem solving that addressed the main research question and acknowledged the need for a more deliberate focus on classroom norms were required.

Components of a Responsive Approach to Problem Solve Authority in the Discourse

In this study, the provision of compelling evidence from student interview data, coupled with transcript data analysis shaped the researcher's response and ultimately the teachers' response to systematically address these patterns of talk and student perspectives on norms in their own contexts. The evidence pointed to a general lack of clarity for both student and teacher about what a culture of talk might constitute in the classroom and moreover what roles each was expected to play.

From a theoretical perspective, sociocultural underpinnings emphasise how teachers leverage their collective student voice to work on the collaboration efforts to design community membership suited to their specific contexts. Whilst Wong (2006) made clear that, "*The forging of community within the classroom as a technique for giving students opportunities that extend beyond those allotted to them in oppressive systems is a complex task because it involves helping students build bridges across conflict-ridden cultural and social differences"* (p. 73), this study addressed this notion through successfully engaging in two distinct

approaches to both counter and extend Wong's notion. The first vital component is related to the privileging and valuing of student voice to make known what talk is like from the receiver's perspective and essentially acted as the "bridge." Secondly the study elevated teacher expectations by giving teachers agency in designing and resourcing their "rules" discussion to address specifically what were conveyed through these data. Both were unique contributions to responding to the identified needs and implications of such required change and are discussed next.

Implications for Students – What Students Offered Must Matter

The student offering here, provided a further layer of practicality to the ways we can advance the development of a culture of talk in future. When collecting student voice there is often an unresolved tension with interpretation, given the researcher's outsider perspective. In this study the deliberate promotion of student "potential" and student "actual" perceptions of talk in the classroom, provided an impetus for change, and importantly a framing of students as capable. These reports pressed teachers to code and analyse their findings and begin comprehending exactly what their students, as a collective were saying. The process "potential *versus* actual talk analysis" (PvATA) privileged the combined students' voice and operated as a support mechanism for these teachers to be able engage in hypothesis building and co-design approaches that sought to include students in the process directly. In doing so teachers and students importantly developed clear and explicit understanding of roles and responsibility in talk-based practice. This invitation to co-design or co-construct a culture of talk aligned with McNaughton (2002), who emphasised, "The strategy of using familiar forms of discourse needs to be seen in the context of the whole classroom system built up by teachers and students" (p. 69). Those proposed talk norms that are aligned with the classroom culture of its community acted as an enabler for improved talk repertoires.

Students Shared Responsibility in the Discussion

The implications of shared co-constructed agreements for talk impact beyond literacy. Shared understandings about what it means to have a discussion in literacy plausibly extend to rules for talk *across* the curriculum. The cognitive impact was best revealed in the data on positive shifts in student talk repertoire. However, for students, through collaborating on a shared set of rules, findings suggest that they were much better positioned to contribute. This repositioning favoured not only increased turns for the student but also increased cognitive demand. For students the outcomes of the exercise into co-constructing ground rules gave them the specific rights to shape these agreements and be positioned as having greater

responsibility. In recognising this responsibility, these student became the authors of their own thinking processes in learning aligned with Barnes' (2008) argument, "Only pupils can work on understanding: teachers can encourage and support but cannot do it for them" (p. 3). Students became more than passive beneficiaries of research and in this study the implications for elevating their voice meant a concerted effort to include them in developing rules that suited their contexts and will be shown in later sections to have benefits on other signature elements required for productive and dialogic talk in the classroom.

Unanticipated Outcomes of Developing a Culture of Talk in the Classroom

A notable contribution albeit limited to a few classrooms, was the notion of evaluation of class rules. As stated by one student in the interview process, "*Yeah but then we were thinking, and we crossed out some of the rules because we didn't think they were that good anymore*." The point made here was unanticipated and implied a further layer could be added to the process by which reviewing and evaluating norms are included. The implications drawn suggest that, as students advanced in their *dialogic repertoire* in classroom discussions, more relevant and cognitively demanding expansions could be considered to the established norms. Rules, therefore, cannot be fixed. Essentially, as students (and teachers) get "better" at talk, rules may be refined and modified. The evaluative element could be the necessary next steps in developing and importantly sustaining a classroom culture of talk. This aligns closely to Phillipson and Wegerif (2016) who validate a 4 C's framework (caring, collaborative, critical and creative) centred on students and teacher's collaboration on ground rules for talk. These authors suggest that leveraging the 4C's in this process, can help to "develop a culture of dialogue in the classroom making accessible all the benefits of dialogic learning" (p. 23). Critical and ongoing review of such benefits linked to norms, could plausibly lead to increased attention to a culture of talk that would adapt to need as dialogue develops.

Implications for Teachers of Pasifika Learners

If an important outcome in education for and with Pasifika is aligned to "a commitment to reducing disparities and improving the achievement of Pacific students in New Zealand" (MOE, 2018, p.4), then teachers must seek ways to deliberately shift the balance of power and authority to ensure Pasifika learners can actively contribute to their learning.

Much of what has been reviewed suggests that protocols need to be in place for more productive talk (Cazden, 2001; Lee, 2001; Michaels & O'Connor, 2012; Phillipson & Wegerif, 2016; Reznitskaya & Wilkinson, 2017). Whilst these studies point to why rules are important, what constitutes rules for talk and how we might go about developing such

protocols in the classroom, what is less clear, though implicit, is whether or not it would be important to establish such *with* students what their beliefs are, as a starting point. The approach in this study has clearly contributed to the dialogic field by deliberately planning and designing an approach that collaborated with students on rules for talk.

Moreover, the findings from the study show that a positive balance was restored, and this can be seen in the shift in student turns distribution and subsequently and positively addressed teacher over talk. Reference to rules (Chapter 6) for five out of six teachers in their Time 2 discussion suggests the co-constructed rules were a valued agreement between interlocutors, signalling a more positive position to allow deeper learning even after the intervention. Comments from teachers and students indicated that the value of, and understanding about, the role of talk protocols changed as a result.

Implications for Future Professional Learning and Development: Particularising for Contextual Complexity

Findings clearly suggest that teachers need to be positioned as close as possible to real data that includes student voice in order to develop optimal classroom conditions for developing a culture of talk from within. Processes for developing community membership and participation protocols are therefore essential to all studies involving Pasifika students and classroom talk. To omit this in any future studies, where discourse, and Pasifika learners are participants, would be antithetical to responsive and effective discourse-based pedagogy that would allow students' own contributions to classroom knowledge.

Specialised PLD that considers as a starting point Pasifika learners' beliefs has shown to benefit both students and teachers in this study. Given the researcher had no input into the design and approach to planning and resourcing of the rule's discussion signals a particular contribution to how PLD might be undertaken in future. Strategically employing the PvATA approach, teachers in this study were shown to have fully transformed the rules task through designs that were completely authentic to their own unique learning contexts.

The process and subsequent product both aligned with dialogic theory and is anchored in the study's sociocultural perspectives. This was not a cookie cutter approach, meaning there were no set approaches mandated by the researcher for exactly how the discussion to co-construct rules would be planned and furthermore how one might resource these discussions. Instead, the results showed a variable array of designs to conduct this discussion, but at the centre was the notion that "teachers know their learners best." While I, as the researcher, had a depth of knowledge on the requisites for community membership or norms, I did not know the learners

as intimately as these teachers. The developing teacher designs were authentic and creative leading to outcomes that truly valued student voice and their contribution to the discourse with their teacher. Moreover, the shape of the intervention that focused on developing a culture of talk allowed these teachers much needed time to consider what guiding protocols for talk would look like. This thinking supported teachers to best conceive of the rules that were established that would then contribute to their final follow up literacy discussion.

Whilst not all teachers' designs or in fact final set of rules as products were the same, this was in itself a unique outcome and student voice post-intervention spoke to the relevance and importance of this process for all who participated. As mentioned, setting norms in place then presented a further challenge whereby the teacher role in the discourse shifted. Thus, PLD provisions should not merely look to import a set of rules from a different context, but take heed of the complexity that comes with developing a culture of talk in the classroom.

The importance of contextual complexity is particularly exemplified in the findings of one particular teacher (TCH1) in this study. Whilst TCH1 was found to reference particularly effective norms and clear messaging for discussion participation in Time 1, these did not come to dialogic fruition in the transcripts for both student and teachers, nor did these students refer to such in their discussion. So rules are necessary but not sufficient. The innovation and design process through the intervention undertaken by TCH1 in Phase 2, illustrated that PLD provisions needs to consider those already effective practitioners and work from the varied and multiple starting points of expertise as required. What is striking however was, given the agency of design, TCH1 again exceeded the researcher's expectations and stepped up their design to capture student contribution to classroom talk that considered students norms that highlighted "*rights and responsibilities*" and demonstrated further a connection to disposition to learn. Bransford and Heldmeyer (1983) suggest, "We could learn a great deal from young children if we could begin to understand what accounts for their enthusiasm for learning, and if we could understand why some individuals seem to maintain such enthusiasm whereas many others do not" (p. 178).

A PLD approach that considers the process of learning from each other using PvATA, first, such through the processes identified in developing a culture of talk, makes clear what engages and disengages learners in the discourse and learning itself. The Time 2 transcripts of all teachers were shown to address the motivational factors by highlighting student belief and student contribution to their knowledge engagement, very worthy reasons for a more particularised approach.

To sum up, this study both aligned to the existing theories on developing protocols in the classroom and extended this through the method by which the development of establishing protocols occurred. This section also addressed the sub-question related to enablers and barriers to effective discourse forms from teachers and their Pasifika students through clear implications and co-constructed efforts to increase enablers to discussion.

The next section discussed support mechanisms provided by teachers in their innovative designs for instruction that were shown to increase dialogic interactions linked specifically to resource selection.

Deliberate Design of Resources for Instructional Discourse in Literacy

Given we know that shifts towards dialogic pedagogy are so difficult to achieve the discussion in this section considers the results from this study, that contributed to answers. In addition the previous components already discussed (cultural templates, cultural norms for talk) encouraged the process to systematically address those deliberately designed materials that were shown to invite thinking and deepen the discourse. The widening of modes as resources for discussion were shown to work as an optimal base and components and implications of this notion are discussed next.

Texts and resourcing in this study as designed by the teachers created multiple discourse openings and aligned with Wells (1999) who argued that "when participants move back and forth between text and talk, using each mode to contextualise the other, and both modes as tools to make sense of the activity in which they are engaged, that we see the most important form of complementary between them" (p. 146). There is ample evidence in this study that illustrated teachers were effective, particularly in Time 2, enabling a complementary nature of text and talk found in the positive shifts of mālie, māfana dimensions that favoured student connections (to text) over their teachers. A particular contribution of an effective multi-mode and multi-text design is exemplified by one of the teachers and that contribution is discussed next.

Key contributor to text designs

During the intervention teachers were introduced to a text resource design approach from TCH1 who was shown to situate multi-text modes in their Time 1 discussion. The opportunity for collegial sharing of this design highlighted a particular strength of the intervention. Notable were both the process and product of this teacher's innovative resource designs that

were context appropriate material deliberately selected as levers for discussion. The process of design and texts selected for TCH1 were revealed in Phase 1 where this teacher signalled,

> "*Something for them to really, to maybe really look deeply and to notice what they can see there I have done it, like we do it quite often when we do writing and I'll given them sort of like a springboard with a picture or a photo or a little short video for them to get thinking about that I think the kids are used to, cause that's the way I do it, how I do it in my class so they're used to that way so if they don't have that little what do you call it – motivational thing or thing to scaffold them with their talk they do get a little bit lost but they still get it I think they'd be able to find an image and stuff but whether it'd be the best sort of image because you've got to be – cause when I choose them I'm thinking about them you know, what can they relate to, what have they got experience with and things like that"*

Resource design components, such as those exemplary texts of TCH1 were in fact taken up post-intervention. Most teachers' creative resource designs for their final discussion also considered the final "purposeful" principle by Alexander (2017) that which specifically links deliberate planning teachers undertake, in order to be able to *enact* dialogic teaching. Uptake of this collegial sharing from the intervention is illustrated next.

Uptake by Teachers to Widen Their Text Resource Base

The example shown in the findings of TCH4 (*Phase 2*) in particular was a multi-text set design that sat well above the curriculum reading age of the learners in the group (5–6-year-olds) aligned to the notion that "the only 'good learning' is that which is in advance of development" (Vygotsky, 1978, p. 34). For this teacher, the new approach to resourcing was in itself a shift to their usual way of "doing" literacy, highlighted by the insightful comments made during the post-intervention interview where initially, this teacher felt they might have been *"on the wrong track"* thinking that the text set they had designed might have been "too much for them" [students]. But soon realised that,

> *after the workshop and everything I thought well I have to take risk like if you don't take any risk you don't grow. Yes and it has helped with the different types of text as well like visual, so we used visual, we used I read a text to them, they looked at a picture, there were like 3 different types of text to scaffold and also their prior knowledge about animals, they brought in that and then I had also because we were talking about hybrid animals like one of them mentioned that oh we can have Samoan*

and Tongan parents and that means you are half Samoan and half Tongan. They could link that to people.

This high-level approach innovatively designed for deliberate use with a small group post-intervention aligns to the complementary notion of text and talk (Barnes, 1976; Wells,1990; Wilson & Oldehaver, 2017). TCH4 also signalled two further and distinct interpretations. The first is the idea of *taking a risk for change*. This teacher's self-report data suggested an element of needing to break "the mould" to usual approaches to resourcing instructional literacy, if dialogic discussions in their classrooms were to be achieved.

Secondly, the multi-texts were selected that could activate prior knowledge but advanced in ways that students were able to make links to their worlds thus making sense of the content of the lesson applied to their own contexts and a goal of being more dialogic. That meant the lesson was predominantly a meaning making one and less about decoding, though the latter is no less important.

A third element for the students of TCH4 suggested in their final discussion an increase in "referencing text" a nested principle found in the mālie, māfana dimension showing shift from mostly teacher to mostly student connection. This flip was consistent for all teachers in the study (see Chapter 7). Whilst these results could have been achieved with a focus on a single text, the fact that at the point the final discussion was carried out, that rules had been established and the dimensions of tālanga laukonga were acknowledged, can be attributed to the positive outcomes seen using this resource design process for discussions

One final point attributed to TCH4's uptake of this text design can be linked to their students' long-term recall, post-dialogic discussion of key content in the lesson, that employed the new text design approach. Nystrand (2006) reported that, "Students recalled their readings better, understood them in more depth, and responded more fully to the aesthetic elements of literature than did students in more typical, monologically organized classes where the default mode of instruction is some combination of lecture, recitation and seatwork" (p. 400). The latter of which described to some extent, TCH4's Time 1 discussion. Given the signature elements outlined post-intervention, for TCH4, "risk for change," "use of multi texts" and increased "student reference to text," indicated greater opportunity for dialogic enactment for this teacher and increased dialogic engagement for their students positively impacting the recall of content 37 days after the Time 2 discussion with their teacher.

Challenges in Extending Text Boundaries

The deliberateness in the resourcing of talk will again begin to redefine the teacher's role in the discourse-based pedagogy. Given the multi-text sets approach were not provided by the researcher, a level of agency, innovation and creation was encouraged. These traits in designing text sets required knowledge building of text content for each teacher, which could very well have increased awareness of text themes, with which to facilitate engagement with the deeper more conceptual ideas and content of their multi-text set design. Aligned with the inherent complexities in teachers' design of resources for talk is as Alexander (2001) argued, that, *"Classroom talk is nested within, depends upon, and speaks to teachers' handling of learning tasks, activities, time, space, relationships, pupil groupings, planning, assessment lesson structure, the curriculum, and the unspoken routines, rules and rituals that bind students and teachers together in a more or less conscious endeavour"* (p. 325). So, it is not simply more texts, it is, knowledge of learner combined with knowledge of ideas in texts (Reznitskaya, 2012) aligned with lesson aims that widen the possible channels for discourse to occur.

Another aspect of crucial importance where text resources and dialogic pedagogy are concerned is the notion presented in the indicator fake'eke'eke. Given this study only measured open or closed types of questioning linked to the content of discussion, may have limited our understanding of the design of the central questions or the "big question" that initiate the entry and thus the more probable depth of discussion. The latter is in fact where the challenge lies. Whilst there was not necessarily a focus on developing the "big question" with these teachers, what was imperative in the process of rethinking the approach to resources used were the aim-high notion of the components found in tālanga laukonga which equated essentially to thinking big.

Redefining the boundaries in design further indicated where the skills and knowledge by the teacher should connect. Whilst a simple resource was provided to support these teachers' designs linked to the indicators in PDIT, it was in the demonstrable acts by these teachers who took up the challenge, marrying their selected resources with an intention for learning using the framework itself. One example was seen in TCH2 who in Time 1 selected as their learning intention, *"How to structure correctly a compound sentence*" versus their Time 2 learning intention of *"Take a position on a statement or visual and explain what you think and why ok?"* and illustrated key elements of the tālanga laukonga nested principles for example, positioning, (TTLP or STLP) and were expertly matched to the specific resourcing

privileged by this teacher for engagement in a discussion (see Appendix M). Whilst structuring of a compound sentence required cognition it is the shift in the complexity of cognition from a procedural learning focus to a more reflective one and highlighted the contrast of demand. Linked to the increased complexity of learning intended are the text resources designed for this teacher's final discussion that required more close reading prior to the discussion that would at the very least increase threshold knowledge with which students could then engage.

As Lee (2001) highlighted for productive discourse a level of prior knowledge "enhances the quality of interpretations" (p. 101). That the teachers in this study planned to use a multi-text set approach to first connect (mālie, māfana) aligns to activation of prior knowledge of text engagement and provided key entry points into the discussion.

Of course, one text, like one well-formed provocation or question (Dillon, 1984) should in fact be enough to sustain a productive discussion. The need to explore using more than one text however was in response to predominantly single text use (with the exception of TCH1) in Time 1 that did not bear productive discussion and where the instructional approaches with the single text were shown to follow typical reading or writing instructional format (Lefstein, 2008) and even for TCH1, did not produce the desired dialogic impact. So, the texts selected as resource to be used in the Time 2 discussions were shown to have a direct bearing on the quality of the discussion itself.

Implications for Students Connecting to the Text Resources

For the students in the study there is a direct impact of the approach to resourcing by their teachers linked to their awareness of the texts in use and thus greater opportunity for connection and reference to the texts. As noted in Chapter 7, not only did mālie, māfana shift but the nested principles that sit within this dimension showed a dramatic flip in authoritative discourse, moving from higher teacher frequency to higher *student* frequency.

Student silence markers reduced

The implications in Time 2 for the student is that by having access to, in most cases more than one text or artefact in the discussion, they were able to more frequently reference the text in some way thus the positive increase in mālie, māfana. A further interpretation given the multi-text approach enabled students increased threshold knowledges to support their reasoning and thinking in the discussion. Furthermore, the mālie, māfana dimension aligned to dialogic

principles showing, "that affective connections between readers and text appear to play a role in generating discourse that elicits high-level comprehension and critical-analytic responses in text-based discussion" (Soter et al., 2008, p. 373). The arguments made already related to the significance of the mālie māfana principles, further approximated the way forward. Remarkably, not only did increased reference to text/task (SMMT & TMMT) occur at frequency in favour of the student but so too did more frequent engagement by students over their teachers in the higher order dimensions of PDIT. Where these patterns were found to have occurred in this study aligned to the notion of "transcending energies," (Manu'atu, 2000) and thus this energy in the discourse, linked explicitly to resources for talk, began to mobilise the pedagogical site from one of connection to higher order talk dimensions found in the PDIT. According to Manu'atu (2000) "mālie can only be experienced if we move beyond the surface forms." (p. 77). The deeper connections to text, learning and task in Time 2 contributed significantly to the reduction of student silence markers overall.

Implications for Future Professional Learning and Development in Resourcing

The evidence discussed here suggests that for optimal and productive classroom talk to occur future PLD must position teachers as researchers and be valued in the process for the expertise they already hold. This implication strongly suggests that further programmes with teacher and student would likely benefit from undertaking research in a similar way. This is advanced then with the notion of teachers as designers in which widening the base of their resource designs meant a deep conceptual knowledge was developed in order for more optimal discussion to take place and that the multi-text designs in particular, provided another voice to leverage in the discussion itself.

The known barriers and enablers (sub-question) can also be addressed here given the processes of deliberate and active text selection are more likely to be an enabler in the discussion and where single text may present as a barrier. PLD approaches in future that are cognisant of such may also be aware of and utilise enablers within, where teachers who were shown to be already effective have their approaches privileged to act as further supports in collaborative designs achieving both innovation and creativity but also ownership and agency in planning to resource a discussion. Given the strength of this sharing, future PLD might also focus on what expertise exist in the community first both student and teacher to begin with.

Finally, drawing on the aim-high notion is also an important element. To be able to get teacher designs to work at supports for the discussion, it was aiming high that supported teachers to conceptualise this and used the cultural indicators found in tālanga laukonga. This

suggest that whilst designing the multi-texts were innovative and creative, without a cognitive aim these text sets designs become necessary but not sufficient. Moreover, time for reflecting on the actual versus optimal meant that for these teachers their strengths were harnessed in ways not often included in an off the shelf PLD programme.

What has been discussed thus far suggests that collaborative evidence-based approach that evokes increased focus on textual connections and evidence to improve quality of discussions can strengthen talk repertoire.

The final section will discuss the vehicle through which the processes both this section and previous, were able to emerge, through the decision to employ design-based research and the overarching sociocultural perspective used.

Sociocultural Factors

Sociocultural theory considers significant social, cultural, historical connections, of which "language" is "one of the principal tools for construction of knowledge" (Littleton & Mercer, 2010, p. 272). Both Dialogic theory and Talanoa, have been considered using this sociocultural theory. Moreover, the dialogic approach in a Eurocentric sense was found to be consistent with a Pacific world view and thus has synergy with the cultural orientation that underpins the practice of Talanoa (Vaioleti, 2006, 2013, 2016).

The study has specifically privileged the cultural processes that are found in Talanoa, particularly with the notion that "*knowledge is not considered to be only possessed individually, but also created by and shared among members of communities and the ways in which knowledge is created are seen to be shaped by cultural and historical factors"* (Littleton & Mercer, 2010, p. 271). The application of Talanoa to classroom contexts, I would argue, is a significant contribution that advances sociocultural theory in educational practice, allowing perspectives to prioritise the social and cultural aspects. The contribution acknowledges the need to "treat communication, thinking and learning as related processes shaped by culture" (Mercer, 2007, p. 138). In a similar vein, Vaioleti (2006) explained the Talanoa process, "Is an encounter that will almost always produce a rich mosaic of information" (p. 26). The mosaic of both perspectives, Eurocentric and Pacific, are equally culturally located. It was important therefore to acknowledge the social and cultural aspects applied in this study, rather than to impose frames that are incongruent with a Pasifika world view. The unique cultural framing of the PDIT is discussed next with a specific emphasis on contributions to the study's design approach.

A design-based process for changing talk repertoire

This study has demonstrated the effectiveness of the design-based approach employed (Anderson & Shattuck, 2012; Barab & Squire, 2004; Cobb et al., 2003). The process of lesson redesign responded to the close examination of classroom transcripts by teachers in the study. This exercise was particularly significant, not just as opportunity for reflection of the profile data but as a means to problem solve with these teacher participants, who were positioned as researchers, to address what is known to be a very complex area, resistant to change (Alexander, 2006; Kim & Wilkinson, 2019; Mercer, 2009; Reznitskaya, 2012; Reznitskaya & Wilkinson, 2015; Wegerif, 2013).

Consistent with DBR, teachers in this study shared data, hypotheses and student voice and began to critically process their talk patterns collaboratively found in their transcripts. These processes are closely aligned with what Barab and Squire (2004) reported, "Design-based research in not so much *an* approach as it is a series of approaches, with the intent of producing new theories, artifacts, and practices that account for and potentially impact learning and teaching in naturalistic settings" (p. 2). Each of the three phases implemented in this study addressed discourse-based practices of teachers and their Pasifika students.

These processes were shown to provide key insights into the design of the intervention, enabling understanding of both practical and theoretical implications. Based on the study's sociocultural positioning, theory was generated through the processes of design, and then explicitly tested through the intervention outcomes. Given that we also know that dialogic pedagogy is fundamentally a change process, the DBR approach provides critical interpretation of not just the outcomes but more importantly the process that impacted outcomes. The intervention was based on using evidence from the local contexts paying close attention to teachers' planning and design elements for testing in small group discussions. This approach supported the creation of theory that built cumulatively from the initial phase through to the final phase.

The intervention process as part of the DBR approach, acted as the catalyst for change toward better enactment of dialogic pedagogy, and also revealed some unique contributions to the DBR approach. Similarly, DBR as shown in this study contributes to dialogic pedagogy and these mutual benefits are discussed next.

Contributions to Design-based Research

We know from research that, "On any one day the teacher makes the difference" (McNaughton, 2011, p. 124). The approach taken relied heavily on the expertise that teachers could bring to the table. By giving teachers a prominent seat at the same table to working alongside the researcher proved catalytic for shift. As Darling-Hammond (1986) noted, the key to sustained and effective pedagogies is encapsulated in the notion of adaptive expertise. The shifts for the teachers in this study were promoted by working collaboratively from their known, their current discourse practices, towards essential unknowns both in terms of Talanoa and dialogic teaching. The intervention collaboration between teachers and researcher made explicit the unknown and resulted in an effective design approach that offered extended support for the complex and cognitively challenging process, that is the shift towards effective discourse-based pedagogy.

The most important contribution to the approach which may conceivably be more widely applicable, were the addition of the cultural dimensions. The co-design process with teachers, was enhanced where the cultural framework of the PDIT was introduced to support the developing response. This then allowed a more targeted intervention that considered Pasifika learners and their world view. The teachers in this study were able to draw on the indicators from within PDIT, including the final dimension tālanga laukonga, highlighting an aim-high approach that illustrated the features of high-level cognitive talk within this dimension and furthermore served as the driver for better dialogic enactment overall.

Whilst the agentic designs by teachers in this study illustrated a pursuit of practical solutions, with an effective overall response, the intervention phase that highlighted noticing of existing patterns was also an important feature. That is because noticing in this study was conducted in conjunction *with* the cultural underpinnings of PDIT that provided the much needed cultural lens. Through this attention teachers were able to make sense of their transcript data to better inform culturally responsive discourse practices for both teacher and their Pasifika students. If noticing relied solely on Eurocentric framing, without enabling such a lens, it may not have had the desired impact. Again, the positioning of teachers as researchers here supported their capability of redesigning to meet specific needs that aligned with their Pasifika learners' needs, front of mind.

The mutual benefits to dialogic pedagogy generally are seen in this study through the processes already discussed. What is further evident is that DBR has contributed to the

dialogic field as a means to elevate a specific targeted and culturally relevant response to address talk in situ. The researcher played little part in the redesign of lessons other than to support the categorical knowledge building of the PDIT for coding talk. Rather than frame the response with a pre-planned package, the cultural underpinning combined with deliberate noticing of own and student voice data through PvATA was the catalyst that underpinned the redesign of teachers own intervention in context. This invited the varied perspectives into problem solving and thus contributed to the potential of design approaches that aim to improve dialogic teaching and learning.

Whilst the approach was specific to these contexts it is conceivable that design-based research that considers a phased and targeted cultural response to the data analysis, may be the most effective response to addressing shift toward more dialogic repertoire in classrooms.

Summary

The discussion elaborated in this chapter has addressed the main research question, "*How can teachers design and employ dialogic processes that are appropriate and effective discourse forms for Pasifika learners in mainstream literacy contexts?"* Framed around specified components that would constitute as process indicators for improved literacy talk in the classroom the following were revealed and discussed in order to respond to both the main and sub-questions of this research and were, affordances of the PDIT; developing a culture of talk; resourcing talk and understanding the varied and complex factors linked to a shift in talk repertoire; through design-based approach. The detailed discussion of each of these components, suggested overall, that, *if* teachers provide the platform to design, collaborate and co-construct the rules of discourse with their students (using PvATA) and design instruction with targeted resources that would widen the resource base to connect with and open up a safe discourse space to engage, *then* there is a strong link to improved student turns, reduced student silence, reduced teacher authority manifest in teacher over talk, greater connection to and engagement in the discussion for students and greater likelihood of achieving higher order productive, dialogic talk. Moreover, drawing on the culturally located design of PDIT the understandings that surrounded the tools development and deployment within the phases of this study, strengthened the dimensions that featured in the developing tool overall and interacted to support teachers and students talk-based practices.

The study has therefore achieved the goals and aims that focused on better enactment of the principles identified in the review linked to the status of Pasifika education, to develop effective discourse-based instruction with teachers and their Pasifika learners.

The next and final section will present the study's limitations, future research and recommendations and conclusion.

Limitations of the Study

The dilemma that is left somewhat unanswered in this study is one of sustainability and whether the positive patterns identified would be further improved and sustained beyond the scope of the study. Promising results, in particular the teacher interviews suggest that this is plausible (see Chapter 7). This limitation accounts for the situated nature of the study that offered generalised findings but the underlying assumption that addressed the issues in classroom talk where teachers designed interventions and practice to suit their localised contexts, suggests such approaches could be effective and thus have longer lasting impact. It is not known if the same factors presented in this study would act as enabler or barrier in different contexts.

The contribution of the newly reconceptualised PDIT that drew on the work of Vaioleti (2006, 2013, 2016) whilst unique, presents some limitations but potential opportunity also. The issues that arise are that whilst the tool was validated by cultural experts in Tonga and with Pasifika academics in New Zealand, this developing tool is open to further critique from both Eurocentric and Pacific scholars given the small scale of the research itself with which to test the tool. The researcher welcomes such critique as the endeavour is to contribute to the wider field of dialogic pedagogy and Pasifika education, in a critically robust, valid and reliable manner through the cultural practice of Talanoa in the mainstream, English medium classroom.

Some limitations linked to analysis for example segmenting speech acts for more manageable coding may present as a limitation. This is an important methodological argument. In particular it raises the question on the decided unit of analysis (Searle, 1969; Wells & Arauz, 2006) that allowed the study to look closely at patterns of not only what teachers said but paid equal attention, using PDIT dimensions to understand how talk manifested in the classroom space for the students also. Whilst this fine-grained segmenting (Hennessy et al., 2016) provided a more complete understanding of interaction for all interlocutors, the segmenting

approach, like the developing design of PDIT, is intended to be further critiqued and refined to ensure it can consistently respond to critical discourse features across other education sites.

The overall shift in talk repertoire may arguably be linked to the small group configuration. The value in this study placed on what students reported, meant that the decision was to run the final discussion as a small group. However the distribution patterning was somewhat similar. For students in Time 2, whilst all voices were heard, the dominance of between one to three students were maintained so presents as a limitation. Again the argument here may not need to be whether to have small or whole class configurations, rather it is the deliberate planning and multi-text approach with high expectations driven through established norms for discourse or in this case developing a culture of talk to suit context that will count. The distribution issue that persisted, will need to be addressed but may only be done through a collaborative problem solving approach to this issue on a much larger scale that specifically tests for this.

If we return to the argument of the significance of the indicators of PDIT to provide interlocutors with discourse support that impact talk repertoire, what can also be argued here are further limitations. These are linked to indicators within talanoa'i and tālanga laukonga, within which there are five student and five teacher indicators. However, not all were engaged to their full potential nor were they engaged as frequently as other dimensions. This may have been attributed to the gradual move out of the discussion by the teachers as evidenced by the reduction of TOT in Time 2. So, further exploring how less frequently coded indicators and nested dimensions in PDIT might serve the discussion may also be a required next step.

Attention in the intervention to cover multiple aspects impacted on fully comprehending the newly conceptualised PDIT framing and presents as a limitation. This is made obvious in the lack of data captured by *students* apprenticing any of the language used within the tool thus comprehension and connection to the cultural dimensions by students was limited. This issue does point to the lack of ongoing classroom-based support for the newly reconceptualised Talanoa dimensions, limited in this study to the teacher workshop. So, a necessary next step would be to provide more direct support for both student and teacher understanding of Talanoa.

Where the resourcing components have been discussed one notable exclusion to the texts and resources designed and planned by each teacher, are specific processes whereby students could have contributed. However this does point to an obvious next step. This study was

predominantly focused on teachers' deliberate planning and resourcing for their students based on their intimate understanding of their learners in their context. The clear impact of this approach to *resourcing the discussion* for students are seen in students referencing texts with greater confidence in Time 2 due to these being readily at hand and focused on reaching desired dialogic impact. The potential of even greater connection to texts in the discussion, that have been deliberately selected by students then is promising.

The design approach (Anderson & Shattuck, 2012; Barab & Squire, 2004; Cobb et al., 2003) whilst argued as necessary due to the pragmatic nature of the study, is less statistically generalisable meaning if there was an attempt to scale up the design this could be met with a new set of challenges, some identified here and some not. One primary aim of design research is in the iterative nature of the approach. Whilst there were three phases there is certainly a need to offer more iterations over a longer period of time, that might present further insight into the limitations already addressed to this point.

One final limitation of this study was the decision not to collect and or analyse national or standardised student achievement data as a measure which could be used to corroborate if the positive talk shifts and gains are represented in improved student literacy achievement outcomes. The goal was to focus on in situ discursive practice and shift located here firstly. The potential future next steps, however, are provided in such a noticeable limitation.

Future Research and Recommendations

The following recommendations are additional to those already inferred in the limitations. As a reminder these were; including student achievement data as a way of corroborating shift in classroom talk, including students in the planning and design of text resources and further critical exploration in future studies of the indicators in PDIT less frequently achieved in this study.

Another key recommendation would be to advance practical and theoretical outcomes highlighted in the study and consider these components as a basis for a set of design principles for upscaled research and for professional learning and development at a much larger scale. Such a national project in Aotearoa, New Zealand, would essentially be a large scale "temperature test" of talk patterns, to gain greater insight into how Pasifika students and their teachers are engaging in "dialogic" approaches in classrooms nationally. Given the large scale and comparative international projects that have been conducted (Alexander, 2006;

Mercer et al., 2019; Phillipson & Wegerif, 2016) suggests a study of such scale in New Zealand would be feasible.

A particular area of interest to further advance would be to capitalise on the contributions from the junior primary classroom teachers and their Pasifika students in this study and given our understanding of patterns of discourse for learning at school entry in New Zealand are limited. Such a project would provide the researcher an opportunity to further test the usability and effectiveness of PDIT as a coding tool. It would also provide an opportunity to test PvATA the potential versus actual talk analysis of student voice given what students contributed in this study, was shown to be fundamental. Both frameworks have proven to be significant tools in this study, that supported a highly responsive investigation into talk patterns so testing with a much larger cohort would be an appropriate next step.

Future research might also consider including students in the same "teacher as researcher" approach to analyse *transcript data*. Such an exercise would offer an opportunity to support "student as researcher" and in particular students' categorical knowledge building of PDIT promoting the richness of the cultural dimensions and practices of Talanoa in situ, which was in fact missing in student interviews. This repositioning may provide much greater student insight into their talk contributions, which talk sequence they consider effective then collective problem solving and ongoing testing phases to refine theirs and their peers and teachers talk patterns for learning.

Conclusion

A useful characterisation of this study, is as Barnes (1976) proposed, "Learning floats on a sea of talk," thus urging a strategic analysis of what *type of talk* is linked to *what type* of learning? Some types, such as those in early phase profiling were problematic. A focus in the discourse on "right answers," claimed Barnes (1976), is to "*arrive without having travelled*." Such a focus renders invisible the varied resources that learners possess, their cultural, social and cognitive sense-making processes, visibly mediated through talk.

If we are serious about attending to the identified needs of Pasifika learners as reviewed and reported throughout this study, then increased teacher and student facility through improved dialogic instruction with cultural underpinnings may work to strengthen capability. Such deliberate attention to these signature elements, can contribute to improved outcomes *across* the *multiple learning spaces* Pasifika occupy both now and in future.

In this study, the adoption of a culturally sustained talk frame, connected to the design approach that sought to validate and privilege student voice and highlighted a deeper awareness of shared expectations and shared responsibility to learning, thinking and knowledge building in classroom discourse. Combined, these key processes have indeed illuminated a dynamic pathway forward, required for success in discourse-based pedagogy for teachers and their Pasifika learners.

REFERENCES

Airini, D., Mila-Schaaf, K., Coxon, E., Mara, D., & Sanga, K. (2010). TEU LE VA—Relationships across research and policy in Pasifika education. *A Collective Approach to Knowledge Generation & Policy Development for Action Towards Pasifika Education Success. Wellington: Ministry of Education, New Zealand.*

Allen, P., & Robertson, J. (2009). 'In order to teach you, I must know you. 'The Pasifika initiative: A professional development project for teachers. *New Zealand Journal of Educational Studies, 44*(2), 47.

Alexander, R. J. (2001). *Culture and pedagogy: International comparisons in primary education*. Oxford: Blackwell.

Alexander, R. (2004). Dialogic teaching and the study of classroom talk. *International Conference Keynote Address, 44*(3), 103-111.

Alexander, R. J. (2006). *Towards dialogic teaching: Rethinking classroom talk* (3rd ed.). Dialogos.

Alexander, R. (2013). *Essays on pedagogy*. Routledge.

Alexander, R. J. (2017). *Towards dialogic teaching: Rethinking classroom talk*. (5th ed). Dialogos.

Alexander, R. (2018). Developing dialogic teaching: Genesis, process, trial. *Research Papers in Education*, *33*(5), 561-598.

Alexander, R. J. (2020). A dialogic teaching companion. London: Routledge

Alton-Lee, A. (2003). *Quality teaching for diverse students in schooling: Best evidence synthesis* Ministry of Education.

Anae, M. (2010). Research for better Pacific schooling in New Zealand: Teu le va–a Samoan perspective. *MAI review*, *1*(1), 25.

Anae, M., Coxon, E., Mara, D., Wendt-Samu, T., & Finau, C. (2001). *Pasifika education research guidelines*. Wellington: Ministry of Education,

Anderson, T., & Shattuck, J. (2012). Design-based research: A decade of progress in education research?. *Educational researcher*, *41*(1), 16-25.

Amituanai-Toloa, M., & McNaughton, S. (2008). Reading comprehension in English for Samoan bilingual students in Samoan classes. *New Zealand Journal of Educational Studies, 43*(1), 5.

Au, K. H. (1998). Social constructivism and the school literacy learning of students of diverse backgrounds. *Journal of Literacy Research, 30*(2), 297-319.

Babad, E. (1993). Teachers' differential behavior. *Educational Psychology Review*, *5*(4), 347-376.

Bakhtin, M. (1981) The dialogic imagination: four essays. Austin: University of Texas Press. (University of Texas Press Slavic series; no. 1)

Bakhtin, M. M. (1986). The problem of speech genres. *Speech genres and other late essays*, *17*(3), 60-102.

Barab, S., & Squire, K. (2004). Design-based research: Putting a stake in the ground. *The Journal of the Learning Sciences, 13*(1), 1-14.

Barnes, D. (1976). From Communication to Curriculum Penguin. *Books: Harmondsworth*.

Barnes, D. (2008). Exploratory talk for learning. In Mercer, N. & Hodgkinson, S., Exploring talk in school (pp. 1–16). London, UK: SageBeck, I. L., McKeowan, M. G., Hamilton, R. L., & Kucan, L. (1997). Questioning the author: An approach for enhancing student engagement with text. Newark, NJ: International Reading Association

Berland, L. K., & Reiser, B. J. (2009). Making sense of argumentation and explanation. *Science Education, 93*(1), 26-55.

Bransford, J. D., & Heldmeyer, K. (1983). Learning from children learning. *Learning in children* (pp. 171-190). Springer.

Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school*. National Academy Press.

Bransford, J. D., & Donovan, M. S. (2004). *How students learn: History in the classroom.* National Academies Press.

Bransford, J., Donovan, S., & Pellegrino, J. W. (1999). *How people learn: Bridging research and practice*. National Academies Press.

Bridges, D. (1979). *Education, democracy and discussion*. Windsor, England, NFER.

Bridges, D. (1987). Discussion and questioning. Questioning Exchange, I,34-37.

Brown, A. L. (1992). Design Experiments: Theoretical and Methodological Challenges Creating Complex Interventions in Classroom Settings. The Journal of the Learning Sciences, 2(2), 141-178.

Brown, A. L., & Palincsar, A. S. (1987). *Reciprocal teaching of comprehension strategies: A natural history of one program for enhancing learning.* Ablex Publishing.

Cazden, C. B. (2001). The language of teaching and learning. *The Language of Teaching and Learning,*

Cazden, C. B., & Beck, S. W. (2003). Classroom discourse. *Handbook of Discourse Processes,* 165-197.

Cheuk, T. (2016). Discourse practices in the new standards: The role of argumentation in common core-era next generation science standards classrooms for English language learners. *Electronic Journal of Science Education, 20*(3)

Chu, C., Glasgow, A., Rimoni, F., Hodis, M., & Meyer, L. H. (2013). *An analysis of recent Pasifika education research literature to inform improved outcomes for Pasifika learners*. Ministry of Education. https://www.educationcounts.govt.nz/publications/pasifika/an-analysis-of-recent-pasifika-education-research-literature-to-inform-and-improve-outcomes-for-pasifika-learners

Cobb, P., Confrey, J., DiSessa, A., Lehrer, R., & Schauble, L. (2003). Design experiments in educational research. *Educational researcher*, *32*(1), 9-13.

Collins, A. (1992). Towards a design science of education. In E. Scanlon & T. O'Shea (Eds.), New directions in educational technology (pp. 15-22). Berlin: Springer.

Coxon, E., Anae, M., Mara, D., Wendt-Samu, T., & Finau, C. (2002). Literature review on Pacific education issues. *Auckland: University of Auckland.*

Creswell, J. W. (1998). Qualitative inquiry and research design: Choosing among five designs.

Crookes, G. (1990). The utterance, and other basic units for second language discourse analysis. *Applied linguistics*, *11*(2), 183-199.

Crooks, T. J. (2002). Educational assessment in New Zealand schools. *Assessment in Education: Principles, Policy & Practice, 9*(2), 237-253.

Crowell, A., & Kuhn, D. (2014). Developing dialogic argumentation skills: A 3-year intervention study. *Journal of Cognition and Development, 15*(2), 363-381.

Darling-Hammond, L. (1986). A proposal for evaluation in the teaching profession. *The Elementary School Journal*, *86*(4), 531-551.

Darling-Hammond, L., & Baratz-Snowden, J. (2007). A good teacher in every classroom: Preparing the highly qualified teachers our children deserve. *Educational Horizons*, *85*(2), 111-132.

Darling-Hammond, L., & McLaughlin, M. W. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan, 76*(8), 597-604.

Denscombe, M. (2008). Communities of practice a research paradigm for the mixed methods approach. *Journal of Mixed Methods Research, 2*(3), 270-283.

The Design-Based Research Collective. (2003). Design-based research: An emerging paradigm in educational inquiry. *Educational Researcher, 32*(1), 5-8.

Denzin, N. K., & Lincoln, Y. S. (2008). *Strategies of qualitative inquiry* (Vol. 2). Sage.

Dewey, J. (1986). Experience and education. *The Educational Forum*, *50*(3), 241-252.

Dickie, J. (2008). Pasifika students, literacy as social practice, and the curriculum. *New Zealand Annual Review of Education, 17*, 107-124.

Dickie, J. (2011). Samoan students documenting their out-of-school literacies: An insider view of conflicting values. *Australian Journal of Language and Literacy. 34*(3), 247.

Dillon, J. T. (1984). Research on questioning and discussion. *Educational Leadership*, *42*(3), 50-56.

Education Review Office. (2012). *Improving education outcomes for Pasifika*. https://www.ero.govt.nz/publications/improving-education-outcomes-for-pacific-learners/

Education Review Office. (2013a). *Accelerating the Progress of Priority Learners in Primary Schools May 2013*. https://www.ero.govt.nz/publications/accelerating-the-progress-of-priority-learners-in-primary-schools/

Education Review Office. (2013b). *Making connections for Pasifika learners' success.* https://www.ero.govt.nz/publications/making-connections-for-pacific-learners-success/

Fa'avae, D., Jones, A., & Manu'atu, L. (2016). Talanoa'i 'A e Talanoa—Talking about Talanoa: Some dilemmas of a novice researcher. *AlterNative: An International Journal of Indigenous Peoples*, *12*(2), 138-150.

Ferguson, P. B., Gorinski, R., Samu, T. W., & Mara, D. L. (2008). *Literature review on the experiences of Pasifika learners in the classroom* Ministry of Education Wellington.

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. *American Psychologist, 34*(10), 906.

Fletcher, J., Parkhill, F., & Faafoi, A. (2008). Influences on Pasifika students' achievement in literacy. *Set: Research Information for Teachers (Wellington)* (1), 4-10.

Fletcher, J., Parkhill, F., Fa'afoi, A., & O'Regan, B. (2009). Pacific students: Teachers and parents voice their perceptions of what provides supports and barriers to Pacific students' achievement in literacy and learning. *Teaching and Teacher education*, *25*(1), 24-33. https://doi.org/10.1016/j.tate.2008.06.002

Freire, P. (1972). Pedagogy of the Oppressed. 1968. *Trans. Myra Bergman Ramos. New York: Herder*.

Gee, J. P. (1986). Units in the production of narrative discourse. Discourse Processes, 9, 391–422.

Gee, J. P. (2001). Reading as situated language: A sociocognitive perspective. *Journal of Adolescent & Adult Literacy,* 714-725.

Gee, J. P. (2004). Situated language and learning: A critique of traditional schooling. London: Routledge.

Gee, J. (2011). How to do discourse analysis: A tool kit. New York: Routledge.

Gutiérrez, K. D., & Rogoff, B. (2003). Cultural ways of learning: Individual traits or repertoires of practice. *Educational Researcher, 32*(5), 19-25.

Halapua, S. (2000). Talanoa process: The case of Fiji. *East West Centre, Hawaii*.

Halapua, S., & Pago, P. (2013, February). Talanoa in building democracy and governance. In *A paper prepared for the Conference of Future Leaders of the Pacific. Pago Pago, American Samoa, February* (pp. 4-7).

Halliday, M. A. (1993). Towards a language-based theory of learning. *Linguistics and Education, 5*(2), 93-116.

Hawk, K., Cowley, E. T., Hill, J., & Sutherland, S. (2002). The importance of the teacher/student relationship for Maori and Pacific students. *Set: Research information for teachers*, *3*, 44-49.

Hennessy, S., Rojas-Drummond, S., Higham, R., Márquez, A. M., Maine, F., Ríos, R. M., & Barrera, M. J. (2016). Developing a coding scheme for analysing classroom dialogue across educational contexts. *Learning, Culture and Social Interaction*, *9*, 16-44. https://doi.org/10.1016/j.lcsi.2015.12.001

Herbel-Eisenmann, B., Drake, C., & Cirillo, M. (2009). "Muddying the clear waters": Teachers' take-up of the linguistic idea of revoicing. *Teaching and Teacher Education, 25*(2), 268-277.

Howe, C., Hennessy, S., Mercer, N., Vrikki, M., & Wheatley, L. (2019). Teacher–Student Dialogue During Classroom Teaching: Does It Really Impact on Student Outcomes? *Journal of the Learning Sciences*, 0(0), 1–51. https://doi.org/10.1080/10508406.2019.1573730

Jesson, R. (2020). Literacy Learning. In *Relationality and Learning in Oceania* (pp. 73-86). Contextualizing Education for Development. Brill Sense.

Johansson-Fua, S. (2020). Motatapu: A Relational Space for Collaborative Research-Practice in Oceanic Education. In S. Johansson-Fua, R. Jesson, R. Spratt, & E. Coxon (Eds.), *Relationality and learning in Oceania*: Contextualizing education for development (pp. 42-56). Brill Sense.

Kim, M. Y., & Wilkinson, I. A. (2019). What is dialogic teaching? Constructing, deconstructing, and reconstructing a pedagogy of classroom talk. *Learning, Culture and Social Interaction*, *21*, 70-86.

Klenner, S., & Sandretto, S. (2011). Planting seeds: Embedding critical literacy into your classroom programme. *New Zealand: NZCER*.

Kuhn, D. (1991). *The skills of argument*. Cambridge University Press.

Kuhn, D., & Crowell, A. (2011). Dialogic argumentation as a vehicle for developing young adolescents' thinking. *Psychological Science, 22*(4), 545-552. doi:10.1177/0956797611402512

Kuhn, L., & Reiser, B. (2006). Structuring activities to foster argumentative discourse. *Annual Meeting of the American Educational Research Association, San Francisco, CA.*

Kumpulainen, K., & Lipponen, L. (2010). Productive interaction as agentic participation in dialogic enquiry. In Littleton, K., & Howe, C. (Eds.) *Educational dialogues: Understanding and promoting productive interaction*. (pp. 48-63). Routledge.

Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal, 32*(3), 465-491.

Lee, C. D. (2001). Is October Brown Chinese? A cultural modeling activity system for underachieving students. *American Educational Research Journal*, *38*(1), 97-141.

Lefstein, A. (2005). Thinking about the technical and the personal in teaching. *Cambridge Journal of Education*, *35*(3), 333-356.

Lefstein, A. (2008). Changing classroom practice through the English National Literacy Strategy: A micro-interactional perspective. *American Educational Research Journal*, *45*(3), 701-737.

Lefstein, A., & Snell, J. (2013). *Better than best practice: Developing teaching and learning through dialogue*. Routledge.

Lehrer, R., & Schauble, L. (2006). Scientific thinking and science literacy. *Handbook of Child Psychology.*

Littleton, K., Mercer, N., Dawes, L., Wegerif, R., Rowe, D., & Sams, C. (2005). Talking and thinking together at Key Stage 1. *Early years*, *25*(2), 167-182.

Littleton, K., & Mercer, N. (2010). The significance of educational dialogues between primary school children. In Littleton, K., & Howe, C. (Eds.) *Educational dialogues: Understanding and promoting productive interaction*. (pp. 271-288). Routledge.

McNaughton, S. (2002). *Meeting of minds*. Learning Media.

McNaughton, S. (2011). *Designing better schools for culturally and linguistically diverse children: A science of performance model for research* Routledge.

McNaughton, S., & Lai, M. K. (2009). A model of school change for culturally and linguistically diverse students in New Zealand: A summary and evidence from systematic replication. *Teaching Education, 20*(1), 55-75.

Manu'atu, L. (2000). Kātoanga Faiva: A pedagogical site for Tongan students. *Educational philosophy and theory*, *32*(1), 73-80. https://doi.org/10.1111/j.1469-5812.2000.tb00434.x

Maua-Hodges, T. (2001). The Tivaevae model: Designing and making of Tivaevae as the framework for research. *Unpublished manuscript*.

Mehan, H. (1979). 'What time is it, Denise?": Asking known information questions in classroom discourse. *Theory into practice*, *18*(4), 285-294. https://doi.org/10.1080/00405847909542846

Mehan, H. (1998). The Study of Social Interaction in Educational Settings: Accomplishments and Unresolved Issues1. *Human development*, *41*(4), 245-269.

Mercer, N. (1995). *The guided construction of knowledge: Talk amongst teachers and learners*. Multilingual matters.

Mercer, N. (2000). Words and Minds: How We Use Language to Think Together. London: Routledge.

Mercer, N. (2003). The educational value of "dialogic talk" in whole-class dialogue. *New Perspectives on Spoken English in the Classroom: Discussion Papers,* 26-37.

Mercer, N. (2007) Sociocultural discourse analysis: analysing classroom talk as a social mode of thinking. *Journal of Applied Linguistics,* 1, 2, 137-168.

Mercer, N. (2009) The analysis of classroom talk: methods and methodologies. British Journal of Educational

Mercer, N., & Dawes, L. (2008). The value of exploratory talk. *Exploring Talk in School,* 55-71.

Mercer, N. & Dawes, L. (2010) Making the most of talk: dialogue in the classroom. *English, Drama, Media, 16*, March, pp. 19-28 London: NATE.

Mercer, N., Hennessy, S., & Warwick, P. (2019). Dialogue, thinking together and digital technology in the classroom: Some educational implications of a continuing line of inquiry. *International Journal of Educational Research*, *97*, 187-199.

Mercer, N., & Hodgkinson, S. (Eds.). (2008). *Exploring talk in school: Inspired by the work of Douglas Barnes*. Sage.

Mercer, N., & Howe, C. (2012). Explaining the dialogic processes of teaching and learning: The value and potential of sociocultural theory. *Learning, Culture and Social Interaction, 1*(1), 12-21.

Mercer, N., & Wegerif, R. (1999). Is 'exploratory talk' productive talk. *Learning with computers: Analyzing productive interaction*, 79-101.

Merritt, M. (1982). Distributing and directing attention in primary classrooms. *Communicating in the classroom*, 223-244

Michaels, S., & O'Connor, C. (2012). Talk science primer. *Cambridge, MA: TERC*.

Michaels, S., O'Connor, C., & Resnick, L. B. (2008). Deliberative discourse idealized and realized: Accountable talk in the classroom and in civic life. *Studies in Philosophy and Education, 27*(4), 283-297.

Ministry of Education. (1993). *The New Zealand Curriculum Framework*. Wellington, New Zealand: Learning Media.

Ministry of Education. (2003). *Effective Literacy Practice*. Wellington, New Zealand: Learning Media.

Ministry of Education. (2007). *The New Zealand Curriculum*. Wellington, New Zealand: Learning Media.

Ministry of Education. (2009). *Reading and Writing Standards for years 1-8.* Wellington, New Zealand: Learning Media.

Ministry of Education. (2010). *Promoting Pacific student achievement schools progress.* https://www.educationcounts.govt.nz/topics/national-education

Ministry of Education (2011). *Pasifika Education Plan Monitoring Report 2009*. Ministry of Education, Wellington

Ministry of Education. (2012a). *Pasifika Education Plan 2013–2017*. Ministry of Education, Wellington. https://www.education.govt.nz/assets/Documents/Ministry/Strategies-and-policies/PasifikaEdPlan2013To2017V2.pdf

Ministry of Education (2012b). *Pasifika Education Research Priorities: Using research to realise our vision for Pasifika*. Ministry of Education, Wellington. https://www.educationcounts.govt.nz/publications/pasifika_education/107996

Ministry of Education. (2016) Pasifika education plan monitoring report. Wellington, New Zealand.

Ministry of Education. (2018) *Tapasā. Cultural competencies framework for teachers of Pasifika learners.* Wellington, New Zealand: Te Tāhuhu o te Mātauranga

Moll, L., Amanti, C., Neff, D., & Gonzalez, N. (2006). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. In *Funds of knowledge* (pp. 83-100). Routledge.

Newell, G. E., Beach, R., Smith, J., & VanDerHeide, J. (2011). Teaching and learning argumentative reading and writing: A review of research. *Reading Research Quarterly*, *46*(3), 273-304.

Niemi, H. (2002). Active learning—a cultural change needed in teacher education and schools. *Teaching and teacher education*, *18*(7), 763-780.

Nussbaum, E. M. (2008). Collaborative discourse, argumentation, and learning: Preface and literature review. *Contemporary Educational Psychology, 33*(3), 345-359.

Nussbaum, E. M., & Schraw, G. (2007). Promoting argument-counterargument integration in students' writing. *The Journal of Experimental Education, 76*(1), 59-92.

Nystrand, M. (2006). Research on the role of classroom discourse as it affects reading comprehension. *Research in the Teaching of English,* 392-412.

Nystrand, M., & Gamoran, A. (1991). Instructional discourse, student engagement, and literature achievement. *Research in the Teaching of English*, 261-290.

Nystrand, M. (with Gamoran, A., Kachur, R., & Prendergast, C.). (1997). *Opening dialogue Understanding the dynamics of language and learning in the English classroom*. New York: Teachers College Press.

Nystrand, M., Wu, L. L., Gamoran, A., Zeiser, S., & Long, D. (2001). Questions in Time: Investigating the Structure and Dynamics of Unfolding Classroom Discourse, Report 14005 from the Center on English Learning and Achievement (CELA). https://doi.org/10.1207/s15326950dp3502_3

Nystrand, M., Wu, L. L., Gamoran, A., Zeiser, S., & Long, D. A. (2003). Questions in time: Investigating the structure and dynamics of unfolding classroom discourse. *Discourse Processes, 35*(2), 135-198.

O'Connor, C., & Michaels, S. (2007). When is dialogue 'Dialogic'? *Human Development, 50*(5), 275-285.

Oakeshott, M. (1959). The voice of poetry in the conversation of mankind: An essay. Bowes & Bowes.

Oldehaver, J. L. (2018). Developing a' Culturally Validated' Dialogic Indicator Tool: A Reconceptualised Analytical Framework Using Talanoa to Code Classroom Talk. *Waikato Journal of Education*, *23*(1), 25-41.

Orsolini, M., & Pontecorvo, C. (1992). Children's talk in classroom discussions. *Cognition and instruction*, *9*(2), 113-136.

Otunuku, M. A. (2011). How can talanoa be used effectively as an indigenous research methodology with Tongan people?. *Pacific-Asian Education*, *23*(2), 43-52.

Parkhill, F., Fletcher, J., & Faafoi, A. (2005). What makes for success? Current literacy practices and the impact of family and community on Pasifika children's literacy learning. *New Zealand Journal of Educational Studies, 40*(1/2), 61.

Patton, M. Q. (2005). Qualitative research. *Encyclopedia of statistics in behavioral science*.

Phillipson, N., & Wegerif, R. (2016). *Dialogic Education: Mastering core concepts through thinking together*. Taylor & Francis.

Phillipson, N., & Wegerif, R. (2019). The Thinking Together Approach to Dialogic Teaching. *Deeper Learning, Dialogic Learning, and Critical Thinking: Research-based Strategies for the Classroom*, 32.

Rapanta, C., & Macagno, F. (2015). Argumentation methods in educational contexts: Introduction to the special issue. *International Journal of Educational Research*.

Reninger, K. B., & Wilkinson, I. A. (2010). Using discussion to promote striving readers' higher level comprehension of literary texts. *Building struggling students' higher level literacy: Practical ideas, powerful solutions*, 57-83.

Resnick, L. B. (1999). Making America smarter. *Education Week Century Series, 18*(40), 38-40.

Resnick, L. B., & Klopfer, L. E. (1989). *Toward the thinking curriculum: Current cognitive research. 1989 ASCD yearbook.* ERIC.

Reynolds, T. (2017) Mapping Dialogic Tendencies: A Four-quadrant Method for Analyzing and Teaching Whole-Class Discussion. *Journal of Language and Literacy Education 13(2),* 1-22.

Reznitskaya, A. (2012). Dialogic teaching: Rethinking language use during literature discussions. *The Reading Teacher, 65*(7), 446-456.

Reznitskaya, A., & Wilkinson, I. (2015). Professional development in dialogic teaching: Helping teachers promote argument literacy in their classrooms. *The SAGE Handbook of Learning,*

Reznitskaya, A., & Wilkinson, I. A. (2017). *The Most Reasonable Answer: Helping Students Build Better Arguments Together*. Harvard Education Press. 8 Story Street First Floor, Cambridge, MA 02138.

Reznitskaya, A., Kuo, L., Clark, A., Miller, B., Jadallah, M., Anderson, R. C., & Nguyen-Jahiel, K. (2009). Collaborative reasoning: A dialogic approach to group discussions. *Cambridge Journal of Education, 39*(1), 29-48.

Rodriguez, G. M. (2013). Power and agency in education: Exploring the pedagogical dimensions of funds of knowledge. *Review of Research in Education*, *37*(1), 87-120.

Rojas-Drummond, S., Olmedo, M. J., Cruz, I. H., & Espinosa, M. V. (2020). Dialogic interactions, co-regulation and the appropriation of text composition abilities in primary school children. *Learning, Culture and Social Interaction*, *24*, 100354.

Rubie-Davies, C. M. (2010). Teacher expectations and perceptions of student attributes: Is there a relationship?. *British Journal of Educational Psychology*, *80*(1), 121-135.

Sáez, F. T. (2002). Towards interculturality through language teaching: Argumentative discourse. *CAUCE, Revista De Filología y Su Didáctica, 25*, 103-119.

Samu, T. W. (2010). Pacific education: An oceanic perspective. *Mai Review*, *1*, 1-14.

Samu, T. W. (2015). The ‘Pasifika Umbrella’ and quality teaching: Understanding and responding to the diverse realities within. *Waikato Journal of Education, 20*(3)

Sandretto, S., & Klenner, S. R. (2011). *Planting seeds: Embedding critical literacy into your classroom programme* NZCER Press.

Sanga, K., & Reynolds, M. (2017). To know more of what it is and what it is not: Pacific research on the move. Pacific Dynamics: Volume 1 Number 2 November 2017 Journal of Interdisciplinary Research

Searle, J. R. (1969). Speech acts. London: Cambridge University Press.

Sedova, K., Salamounova, Z., & Svaricek, R. (2014). Troubles with dialogic teaching. *Learning, Culture and Social Interaction*, *3*(4), 274-285.

Sharp, A. M. (1985). Philosophy for children and the development of ethical values. Early Child Development and Care, 197, 45–55.

Simpson, A., Mercer, N., & Majors, Y. (2010). Douglas Barnes revisited: If learning floats on a sea of talk, what kind of talk? And what kind of learning? *English Teaching: Practice and Critique*, *9*(2), 1-6.

Skidmore, D. (2000). From pedagogical dialogue to dialogical pedagogy. *Language and Education*, *14*(4), 283-296.

Smith, L. T. (2004). Building research capability in the Pacific, for the Pacific and by Pacific peoples. *Researching the Pacific and indigenous peoples: Issues and perspectives*, 4-16.

Snell, J., & Lefstein, A. (2018). "Low ability," participation, and identity in dialogic pedagogy. *American Educational Research Journal*, *55*(1), 40-78.

Soter, A. O., Wilkinson, I. A., Murphy, P. K., Rudge, L., Reninger, K., & Edwards, M. (2008). What the discourse tells us: Talk and indicators of high-level comprehension. *International Journal of Educational Research*, *47*(6), 372-391. https://doi.org/10.1016/j.ijer.2009.01.001

Street, B. (1984). *Literacy in theory and practice. Cambridge studies in oral and literature culture.* Great Britain, Cambridge University Press.

Suaalii-Sauni, T., & Fulu-Aiolupotea, S. M. (2014). Decolonising Pacific research, building Pacific research communities and developing Pacific research tools: The case of the talanoa and the faafaletui in Samoa. *Asia Pacific Viewpoint*, *55*(3), 331-344.

Tamasese, K., Peteru, C., Waldegrave, C., & Bush, A. (2005). Ole Taeao Afua, the new morning: a qualitative investigation into Samoan perspectives on mental health and culturally appropriate services. *Australian & New Zealand Journal of Psychiatry*, *39*(4), 300-309.

Thaman, K. (1992). Looking towards the source: A consideration of (cultural) context in teacher education. In *Pacific teacher education forward planning meeting: proceedings. Institute of Education, USP, Suva*.

Thaman, K. H. (1999). *Songs of love: new and selected poems, 1974-1999*. editorips@ usp. ac. fj.

Thaman, K. H. (2003). Decolonizing Pacific studies: Indigenous perspectives, knowledge, and wisdom in higher education. *The Contemporary Pacific*, *15*(1), 1-17. https://doi.org/10.1353/cp.2003.0032

Thaman, K. (2014) No need to whisper: Reclaiming Indigenous Knowledge and Education in the Pacific. In Suaalii-Sauni, T. M., Wendt, M. A., Fuamatu, N., Va'ai, U. L., Whaitiri, R., & Filipo, S. L. (Eds.). (2014). *Whispers and vanities: Samoan indigenous knowledge and religion*. Huia Publishers.

Thrupp, M., & Easter, A. (2013). Tell me about your school': Researching local responses to New Zealand's National Standards policy. *Assessment Matters*, *5*, 94-115.

Tuafuti, P. (2010). Additive bilingual education: Unlocking the culture of silence. *Mai Review*, *1*, 1-14.

Vaioleti, T. M. (2006). Talanoa research methodology: A developing position on Pacific research. *Waikato Journal of Education*, *12*(1), 21-34.

Vaioleti, T. (2013). Talanoa: Differentiating the talanoa research methodology from phenomenology, narrative, Kaupapa Maori and feminist methodologies. *Te Reo*, *56*, 191.

Vaioleti, T. M. (2016). Talanoa: A Tongan research methodology and method. *Encyclopedia of educational philosophy and theory*, 1-9.

Venville, G. J., & Dawson, V. M. (2010). The impact of a classroom intervention on grade 10 students' argumentation skills, informal reasoning, and conceptual understanding of science. *Journal of Research in Science Teaching, 47*(8), 952-977.

Vygotsky, L. (1978). Interaction between learning and development. *Readings on the development of children*, *23*(3), 34-41.

Vygotsky, L. S. (1991). Genesis of the higher mental functions. *Learning to think*, 32-41.

Waggoner, M., Chinn, C., Yi, H., & Anderson, R. C. (1995). Collaborative reasoning about stories. *Language Arts*, *72*(8), 582-589.

Wagner, D. A. (2011). What happened to literacy? Historical and conceptual perspectives on literacy in UNESCO. *International Journal of Educational Development*, *31*(3), 319-323.

Wegerif, R., Littleton, K., Dawes, L., Mercer, N., & Rowe, D. (2004). Widening access to educational opportunities through teaching children how to reason together. *Westminster Studies in Education*, *27*(2), 143-156.

Wegerif, R. (2006). Dialogic Education: What is it and why do we need it? *Education Review*, *19*(2).

Wegerif, R. (2011). Towards a dialogic theory of how children learn to think. *Thinking Skills and Creativity*, *6*(3), 179-190. https://doi.org/10.1016/j.tsc.2011.08.002

Wegerif, R. (2013). *Dialogic: Education for the internet age*. Routledge. https://doi.org/10.1111/teth.12195

Wells, G. (1990). Talk about text: Where literacy is learned and taught. *Curriculum Inquiry, 20*(4), 369-405.

Wells, G. (1999). *Dialogic inquiry: Towards a socio-cultural practice and theory of education* Cambridge University Press.

Wells, G., & Arauz, R. M. (2006). Dialogue in the classroom. *The journal of the learning sciences*, *15*(3), 379-428.

Wertsch, J. V. (1998). Mind as action. New York, Oxford University Press.

Wilkinson, I. A., Reznitskaya, A., Bourdage, K., Oyler, J., Glina, M., Drewry, R., & Nelson, K. (2017). Toward a more dialogic pedagogy: changing teachers' beliefs and practices through professional development in language arts classrooms. *Language and Education*, *31*(1), 65-82. https://doi.org/10.1080/09500782.2016.1230129

Wilkinson, I. A., & Son, E. H. (2010). 16 A Dialogic Turn in Research on Learning and Teaching to Comprehend. *Handbook of reading research*, *4*, 359.

Wilkinson, L. C. (Ed.). (1982). *Communicating in the classroom* (pp. 85-99). New York: Academic Press.

Wilson, A., & Oldehaver, J. (2017). A pilot project to promote talk about text in senior secondary classrooms. *Literacy Forum NZ, 32* (2), 14-22.

Wolf, M. K., Crosson, A. C., & Resnick, L. B. (2006). Accountable Talk in Reading Comprehension Instruction. CSE Technical Report 670. *National Center for Research on*

Evaluation, Standards, and Student Testing (CRESST). https://doi.org/10.1080/02702710490897518

Wong, S. (2006). *Dialogic approaches to TESOL: Where the ginkgo tree grows*. Routledge.

Yin, R. K. (1994). Discovering the future of the case study method in evaluation research. *Evaluation Practice, 15*(3), 283-229.

APPENDICES

Appendix A: Full Document Analysis for Improved Outcomes For Pasifika

Table A1

Full Document Analysis of Recommendations in Reports and Literature to Improve Outcomes for Pasifika

Reference	Sector range	Method	Recommendations reported
Literature Review on Pacific Education Issues (Coxon et al, 2002)	ECE Primary Secondary Tertiary	A review of a decade of existing literature on Pacific Education in the regions and for Pacific migrant communities in New Zealand	More research needs to be carried out within the broad area of pedagogies including the gathering of data about "best practice" in schools and classrooms where Pacific students are achieving well compared with national standards. Shifting the focus from factors that contribute to failure to those that contribute to success may be of more significance to quality improvements. A comprehensive study of primary bilingual education for Pacific languages in New Zealand primary schools be completed comparative study of Pacific children in Years 7 and 8 programmes:
Quality Teaching for Diverse Students in Schooling: Best Evidence Synthesis (Alton-Lee, 2003)	Primary Intermediate Secondary	Brings together findings about what works as quality teaching in multiple grade settings.	Produced ten research-based characteristics of quality teaching.
Promoting Pacific Student Achievement Schools' Progress (Ministry of Education, 2010)	Primary Secondary	A total of 243 schools were included in this evaluation: 70 secondary and composite schools, and 173 primary schools.	ERO recommends that school leaders: improve how they collect, analyse and use Pacific students' achievement information: Improve school processes to enable students to know about their progress and achievement and how to manage their learning; Build teachers' and boards' knowledge of the strengths and needs of Pacific students, and how

			to use this knowledge to benefit these students; Strengthen links with Pacific parents and communities to facilitate communication and build mutual understanding about the best ways to support their children's learning; and Use the contextual flexibility inherent in *The New Zealand Curriculum* to design and implement teaching and learning programmes that reflect Pacific student's voices and aspects of cultures and languages relevant to their learning. ERO recommends that the Ministry of Education: work with schools to increase school leaders' and teachers' understanding of the importance of partnership with Pacific communities; and Consider ways to increase school leaders' knowledge of how to review and report Pacific students' achievement and progress
Samoan Students "Documenting Their Out-of-School Literacies" (Dickie, 2011)	Primary	Ethnographic approach with 14 Year 7 & 8 Samoan students. The intention was to seek an 'insider view' from the students, so they were trained as junior ethnographers to record their uses of literacy when working with peers, adults, or on their own.	There is a need for teachers to understand that students may experience conflict in values, curriculum or pedagogy between their various sites for literacy. While the values of popular culture present contradictions in values between sites, this creates an opportunity for teachers to be creative in exercising professional judgment and adapting the school curriculum. Suggests teachers need to navigate and ensure a delicate balance between sites for literacy. Teachers must take care that the tastes of one group in the class are not ridiculed or rejected and at the same time ensure that the

			Values in the texts do not clash with those of the community.
Improving Education Outcomes for Pacific Learners (ERO, 2012	Primary Secondary	Data collected on 302 schools from a range of deciles, roll sizes and locations across the country	Improve how they analyse and respond to information about Pacific students' presence, achievement and progress Review the extent to which their school's curriculum responds to the various needs and interests of their Pacific students Become familiar with the *Pasifika Education Plan* and use the goals to assist with determining school priorities for raising Pacific students' achievement Build teachers' and boards' knowledge of Pacific students, and determine how best to use this knowledge in learning programmes that reflect Pacific students' voices and aspects of culture, language and identity relevant to their learning Strengthen links with Pacific parents and communities to facilitate communication and build mutual understanding about the best ways to support student learning.
Accelerating the Progress of Priority Learners Primary Schools (ERO, 2013a)	Primary schools	Data collected on 176 primary schools	MOE Next steps from the report summarised. Support schools to improve their assessment practices to more effectively identify and monitor next steps and for accelerating learners Support schools with use of research and evidence in BES For school trustees, leaders and teachers; Seek improved achievement and information reports Use these to evaluate the effectiveness of initiatives and programmes emphasis on accelerating the progress of priority learners

			For leaders and teachers Improve aggregation of achievement data to better identify reoccurring needs of priority learners Collate and analyse achievement information to evaluate the effectiveness of teaching practices to accelerate the progress of priority learners Increase their understanding of approaches that have strong evidence of accelerate the progress of priority learners Introduce new practices known to accelerate the progress of priority learners and review the impact Extend opportunities for families and whanau to be involved in understanding and contributing to solutions to school wide achievement problem
Making Connections for Pasifika Learners' Success (ERO, 2013b	Secondary	ERO analysed the most recent ERO review reports and file notes for 25 secondary schools with large Pacific populations against the five factors to the left	Increase board, management and staff understanding of Pacific peoples' cultures, aspirations and needs Develop a curriculum that values Pacific identity and supports achievement Enhance the identification, collection, and analysis of data relevant to raising achievement levels and monitoring effectiveness of interventions Provide learning opportunities for staff to build professional capacity in the use of longitudinal data to tailor learning programmes to individual and group needs Ensure that reporting to the board adequately monitors the achievement of Pacific students throughout the school, and is sufficient to inform decisions about target setting and allocation of resources Establish strong relationships between mentors and students;

			students, teachers and parents; and with the community, so that all can work together to create meaningful support networks for students
An Analysis of Recent Pasifika Education Research Literature to Inform Improved Outcomes for Pasifika Learners (Chu et al., 2013)	ECE Primary Secondary Tertiary	A critical analysis of the evidence for five 'areas for investigation	Provides a summary and analysis by the five areas identified in the Ministry's PEP 2009–2012 as major areas requiring further investigation and development—governance and leadership, families and community, engagement, literacy and numeracy, effective teaching, transitions Determined fifteen priority goals (p. 83) as a result and which included aims for more effective use of data to plan and problem solve; Systematic evaluation of approaches for ongoing planning and problem-solving to enhance student achievement based on analysis of longitudinal data for individual students; Longitudinal research on effective interventions to enhance motivation and achievement; Research on interventions to prepare educators for effective culturally responsive teaching

Appendix B: Participant Information Sheet for the Principal and Board of Trustees

EDUCATION AND SOCIAL WORK

Epsom Campus
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The University of Auckland
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<u>Board of Trustees / Principal</u>

Participant Information Sheet for the research project:
Dialogic approaches to literacy instruction for and with Pasifika in English medium primary classrooms.

Researcher name: Jacinta Oldehaver

Supervisors: Dr. Rebecca Jesson, Professor Stuart McNaughton

Researcher introduction

Talofa lava my name is Jacinta Oldehaver and I am a PhD Candidate in the University of Auckland. I also work at the Woolf Fisher Research Centre as a Literacy Facilitator and Researcher.

I would like to invite you to participate in my study. This information sheet outlines what the study involves and your role in it.

Why is this research being conducted?

The rationale for this study is to be able to contribute to the growing body of effective teaching practices for and with Pasifika students. The purpose then is to understand how teachers plan for, enact and reflect on the use of dialogic features during literacy instruction, for their Pasifika students. I want to know what barriers might exist and also what enablers exist during classroom talk that would promote Pasifika students' facility with dialogic interactions in class.

Why is this research important?

This inquiry will specifically seek to identify existing patterns of talk during literacy instruction through a case study inquiry design that includes classroom observations; Pasifika parent voice; teacher voice and student voice.

The duration for you and your school if you choose to participate is approximately 12-15 hours (approximately) in total.

This project aims to address the following research questions;

How do teachers plan for, enact and reflect on the use of dialogic constructs such as argumentation and reasoning to promote Pasifika students' facility with these during literacy instruction?

1. What are students' and teachers' and Pasifika parents' perceptions and pedagogical beliefs about the relationships between 'talk' and learning in literacy?
2. What are the current dialogic patterns present in literacy teaching in a range of Years 2 to 4 classrooms?
3. What are the enablers and barriers to effective dialogic talk in literacy?
4. What features of a teacher's planning afford dialogic talk?
5. Under what circumstances can dialogic approaches inform and positively address pedagogically effective discourse in classrooms, for Pasifika within English medium literacy instruction?

What choice do you have?

Participation in this research is *entirely your choice*. Only those teachers and students and parents/caregiver who give informed consent can take part.

What you are being asked to do?

If you agree to take part, I would like, with your permission to invite up to two teachers who teach in Years 2 to 5 to take part. The expected time commitment from you for this will be limited as once permission is granted I would like to ask for permission to distribute the information sheets and consent forms to staff who teach in Years 2 to 5 at your school for their consideration. Where more than two teachers indicate their wish to participate a randomized selection will take place to ensure fairness.

Please also note that participation in the research must be voluntary, and I therefore seek your assurance that participation (or non-participation) of the teachers, students and parents/caregivers in this research project will not affect their relationship with the school. I also seek your assurance that the participation or non-participation of the students will not comprise their learning, i.e. that all children will be given the same level of attention and learning opportunities regardless of their participation status.

What are your *parents/caregivers* being asked to do?

1. I would like to invite your Pacific parent/caregiver community to voluntarily complete an anonymous paper based survey (20-25 minutes). As the survey is anonymous, there is no signed consent form. I would like your permission to send home a survey pack, which includes the participant information sheet, the paper based parent/caregiver survey and a stamped, self-addressed envelope with all Pacific students for their parent/caregiver, at an arranged time, most suitable to the school and their families.
2. Where teachers at your school have consented to take part in the study, those parents/caregivers of students in these classrooms are invited to give for permission for their child to take part in the study also. Only those students and parents/caregivers who have both consented can take part in the study.

What are your *teachers* being asked to do?

1. I would like to ask your teachers to allow the researcher to invite and then distribute the information and consent sheets to students in the participating and consenting classes. The researcher is then available to explain the project and answer any questions from students.

2. Distribute the parent/caregiver information and consent sheets to the parents/caregivers of students in the classes of the participating teachers. These will come with an envelope marked CONFIDENTIAL for participants to be able to return these to their child's teacher. The researcher will collect these regularly.
3. Take part in and audio record approximately 8 literacy lessons over an eight week period (one lesson per week) in their class, at agreed upon times.
4. Take part in a post-observation (after six weeks approximately) interview with the teachers (30-40 minutes) at an arranged time, most suitable to the teacher/school.
5. Be fully released to take part in a focus group with other teachers in the project (at the expense of the research project) at an agreed date, for one school day. This day will involve a small pilot study planning workshop which involves facilitated collaboration with the teachers and the researcher and that combines preliminary analysis of all data collected to support a lesson re-design, one final small group audio recorded lesson (30-40 minutes). Your school will be reimbursed for the teacher release day for this phase.

What are your *students* being asked to do?

1. Students will be asked to take part in up to 8 audio recorded small group discussions with their teachers during the school day.
2. I would like to invite up to 6 students from each class to participate in a brief post-observation (after six weeks and after eight weeks) interview (10-15 minutes) at an arranged time, most suitable for teachers and the students.

I would not expect any of these measures to cause distress or harm to any member of your school community. However, if issues were to arise, I would call upon the existing expertise and support in your school.

Right to Withdraw from Participation

All participants (teachers, parents/caregivers and children) have the right to withdraw from participation at any time without giving a reason.

How will the privacy and confidentiality of participants be protected?

The preservation of confidentiality is paramount. The information you share with the researcher will remain confidential. Nevertheless, internal confidentiality (within your school) might not be possible, either in the case of teachers and students who take part in interviews and observations as other teachers and/or parent/caregivers where this data is being collected might be recognised due to the activity taking place in those particular classrooms. Participants in focus groups will be asked to respect one another's confidentiality, however, in the case of the focus group, the researcher cannot guarantee confidentiality.

Names and other identifying information will be deleted from researcher observation and interview notes. Participants will be assigned a pseudonym to provide confidentiality.

Due care will be taken to protect the privacy of the students and teachers by electronically storing any personally identifying information in secure university storage. Raw data from the study will be retained for the next six years and will not be used outside this study. After this period, the data will be destroyed by deleting it from university storage.

The thesis write up will not identify any individual participants and will not name individual schools involved in the study. All reporting therefore will be done in a way that does not identify you or your school, teachers, students and parents/caregivers as its source.

What will happen to the information you provide?

The data I collect from you, your teachers, students and parents/caregivers in your school will be analysed for common themes to develop a directory of dialogic strategies and to assist with the lesson re-design of new teaching approaches in response to the specific dialogic needs identified for and with Pasifika.

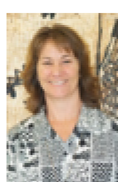
I would like to invite your school and your community to a fono that will provide feedback on the data collected at a time most suitable to you.

All data will be kept securely and separately from consent forms at The University of Auckland for a period of six years, after which all data will be destroyed and/or deleted.

What do you need to do to take part?

If you would like to take part, please complete the consent form and return it to the researcher who is available to collect via email/text/phone notification to do so.

If you have questions or would like more information about this research project please contact:



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Thank you for considering this invitation.

Approved by the UNIVERSITY of AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE on 12 Dec 2016 for (3) years, Reference Number 018431

Appendix C: Participant Information Sheet for the Teacher

EDUCATION AND SOCIAL WORK

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Auckland 1150, New Zealand

Teacher

Participant Information Sheet for the research project:
Dialogic approaches to literacy instruction for and with Pasifika in English medium primary classrooms.

Researcher name: Jacinta Oldehaver

Supervisors: Dr. Rebecca Jesson, Professor Stuart McNaughton

Researcher introduction

Talofa lava my name is Jacinta Oldehaver and I am a PhD Candidate in the University of Auckland. I also work at the Woolf Fisher Research Centre as a Literacy Facilitator and Researcher.

I would like to invite you to participate in my study. This information sheet outlines what the study involves and your role in it if you decide you would like to take part.

Why is this research being conducted?

The rationale for this thesis is to be able to contribute to the growing body of effective practices for and with Pasifika. The purpose then is to understand how teachers plan for, enact and reflect on the use of dialogic features during literacy instruction, for and with Pasifika. We want to know what barriers might exist and also what enablers exist during classroom talk that would promote Pasifika students' facility with dialogic interactions.

Why is this research important for you?

This inquiry will specifically seek to identify existing patterns of talk during literacy instruction through a case study inquiry design that includes classroom observations; Pasifika parent voice; teacher voice and student voice.

The duration for you and your students if you choose to participate is approximately 12 to 15hours (approximately) in total.

What choice do you have?

Participation in this research is *entirely your choice*. Only those teachers' and students' and parents/caregivers who give informed consent can take part. Whether you decide to take part or not will not disadvantage you in any way, or affect your current or future relationship with the University of Auckland.

Please also note that as participation in the research must be voluntary, your school has given assurance that participation (or non-participation) of the teachers, students and parents/caregivers in this research project will not affect their relationship with the school.

Why are you being asked?

This research is interested in early to mid-year Pasifika learners in Primary school setting and their teachers, for example teachers who teach in Year 2 to Year 4/5. I would like to invite you to take part in the study which will be spread out over approximately 8 weeks, and across agreed times during term time in 2017.

What are *you* being asked to do?

1. Distribute the parent/caregiver information and consent sheets to the parents/caregivers of students in your class inviting them to take part. These sheets will come with an envelope marked CONFIDENTIAL for parents/caregivers to be able to return these to you if you agree. The researcher will collect these regularly for safe storage.
2. Take part in and audio record approximately 8 literacy lessons (30-40 minutes approx.) over an agreed time period in your class, at agreed upon times during the school day.
3. Take part in a post-observation (after six weeks approximately) interview with the researcher (30-40 minutes) at an agreed time, most suitable to you and school.
4. Take part in a focus group for one full school day, with other teachers in the project at an agreed date, and with the researcher. This day will involve a small planning workshop which involves facilitated collaboration with you and the other teachers. The workshop combines preliminary analysis of data collected to support a lesson re-design.
5. Be observed for one final small group audio recorded lesson (after the focus group) with you and your students (30-40 minutes).

What are your students being asked to do?

1. I would like your permission to invite and then distribute the information and consent sheets to your students in your class. I will be available for any questions at the time and I would like to collect signed consents later on the day. If students in your class decide they need more time I would like to leave an envelope marked 'Confidential' for these students to put when they have made an informed decision on whether or not they would like to participate. I will collect these regularly for safe storage.
2. I would like to invite up to 4-6 students from your class to participate in a brief post-observation (after six weeks) interview (10-15 minutes) and one final interview after eight weeks, at an arranged time, most suitable for teachers and the students.

What are your parents/caregivers being asked to do?

1. Parents/caregivers are invited to read over the information on the project and decide if they would like to give permission for their child to take part.

Right to Withdraw from Participation

All participants (teachers, parents and children) have the right to withdraw from participation at any time without giving a reason. All participants can also withdraw any data traceable to them provided they do this within 1 month of audio observation and each interview.

How will the privacy and confidentiality of participants be protected?

The preservation of confidentiality is paramount. The information you share with the researcher will remain confidential.

Nevertheless, internal confidentiality (within your school) might not be possible, either in the case of teachers and students who take part in interviews and observations as other teachers and/or parent/caregivers where this data is being collected might be recognised due to the activity taking place in those particular classrooms. Participants in focus groups will be asked to respect one another's confidentiality, however, in the case of the focus group, the researcher cannot guarantee confidentiality.

Names and other identifying information will be deleted from researcher observation and interview notes. Participants will be assigned a pseudonym to provide confidentiality.

Due care will be taken to protect the privacy of teachers and students by electronically storing any personally identifying information in secure university storage. Raw data from the study will be retained for the next six years after which, the data will be destroyed by deleting/destroying it in a safe and secure manner.

The thesis write up will not identify any individual participants and will not name individual schools involved in the study. All reporting therefore will be done in a way that does not identify you or your school, teachers, students and parents/caregivers as its source.

What will happen to the information you provide?

The data I collect from you, other teachers, students and parents/caregivers in your school will be analysed for common themes to develop a directory of dialogic strategies and to assist with the lesson re-design of new teaching approaches in response to the specific dialogic needs identified for and with Pasifika.

I would like to invite you, the school and the wider community to a 'fono towards the end of the data collection so I can provide some feedback on the data analysed.

All data will be kept securely and separately from consent forms at The University of Auckland for a period of six years, after which all data will be destroyed and/or deleted.

What do you need to do to take part?

If you would like to take part, please complete the consent form and return it to the researcher who is available to collect via email/text/phone notification to do so.

If you have questions or would like more information about this research project please contact:

Jacinta Oldehaver
T: 09 623 8899 ext. 48638
E: jold004@aucklanduni.ac.nz

Rebecca Jesson
T: 09 623 8899 ext. 48541
E: r.jesson@auckland.ac.nz

Stuart McNaughton
T: 09 623 8899 ext.87541
E:s.mcnaughton@auckland.ac.nz

For any *queries regarding ethical concerns* you may also contact:

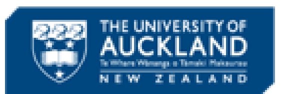
Head of School: Associate Professor Helen Hedges
T: 09 623 8899 ext. 48606
E: h.hedges@auckland.ac.nz

For any queries regarding ethical concerns you may contact The Chair,
The University of Auckland Human Participants Ethics Committee
The University of Auckland Research Office, Private Bag 92019, Auckland 1142
Telephone 09 373 7599 ext. 83711
Email: ro-ethics@auckland.ac.nz

Thank you for considering this invitation.

Approved by the UNIVERSITY of AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE on 12 Dec 2016 for (3) years, Reference Number 018431

Appendix D: Participant Information Sheet for the Parents



EDUCATION AND SOCIAL WORK

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Auckland 1150, New Zealand

Parent/Caregiver Information Sheet

Project title: Dialogic approaches to literacy instruction for and with Pasifika in English medium primary classrooms.

Researcher name: Jacinta Oldehaver
Supervisors: Dr. Rebecca Jesson, Professor Stuart McNaughton

Researcher introduction

Talofa lava my name is Jacinta Oldehaver and I am a PhD Candidate in the University of Auckland. I also work at the Woolf Fisher Research Centre as a Literacy Facilitator and Researcher.

What is this research and why is it important?

The purpose of this study is to understand how students and teachers talk during learning to read and learning to write lessons. We want to understand what is effective and what is not effective and how through understanding more about talk this might help support teachers' and students' ability to discuss their learning.

Why am I being approached?

Your child's school has been invited be part of our study. Your child's teacher has been invited to be part of our study. We would like to invite your child to be part of our study.

What choice do you have?

Participation in this research is *entirely your choice*. Only those teachers' and students' and parents' who give informed consent can take part. Whether you decide to take part or not will not disadvantage you in any way, or affect your current or future relationship with your school, your child's teacher or the University of Auckland.

What happens if I agree, what will my child be asked to do?

- We would like permission for your child to take part in approximately 8 audio (tape) recorded lessons in their usual class literacy learning time. The focus on these audio recorded lessons is on what students and teachers *say* to each other.

- We would like permission to talk to your child (once after 6 weeks and once after 8 weeks) about what they like about the discussions they have in class time. Your child will be informed of their right to stop the recording at any time and they do not have to continue if they do not wish to.
- We will not tell anybody your name, your child's name, the name of their teacher or the name of the school.

Right to Withdraw from Participation

All participants (teachers, parents and children) have the right to withdraw from participation at any time without giving reason. All participants can also withdraw any data traceable to them provided they do this within 1 month of audio observation and each interview. Your child's school says if you or your child agree or don't agree will not change and affect relationships with the school or your child's teacher at any time.

How will the privacy and confidentiality of participants be protected?

The information shared with the researcher will remain confidential. Names and other identifying information will be deleted from researcher observation and interview notes.

The PhD thesis write up will not identify any student or teacher or parent and will not name individual schools involved in the study. All reporting therefore will be done in a way that does not identify you or your school, teachers, students and parents as its source at any time.

What will happen to the information you provide?

The data we collect from your child will be analysed by the researcher to support a better understanding of our Pasifika learners and how we can provide more effective learning opportunities through talk. I would like to invite the school and the wider community to a 'fono towards the end of the data collection so I can provide some feedback on the data analysed. All data will be kept securely and separately from consent forms at The University of Auckland for a period of six years, after which all data will be destroyed and/or deleted.

What do you need to do to take part?

If you would like to take part, please complete the consent form, put it in the envelope provided, marked **CONFIDENTIAL** and return to your child's teacher. These forms and the content of these forms will only be known to the researcher and supervisors.

If you have questions or would like more information about this research project please contact:

Jacinta Oldehaver
T: 09 623 8899 ext. 48638
E: jold004@aucklanduni.ac.nz

Rebecca Jesson
T: 09 623 8899 ext. 48541
E: r.jesson@auckland.ac.nz

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E:s.mcnaughton@auckland.ac.nz

For any *queries regarding ethical concerns* you may also contact:

Head of School: Associate Professor Helen Hedges
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E: h.hedges@auckland.ac.nz

For any queries regarding ethical concerns you may contact The Chair,
The University of Auckland Human Participants Ethics Committee
The University of Auckland Research Office, Private Bag 92019, Auckland 1142
Telephone 09 373 7599 ext. 83711
Email: ro-ethics@auckland.ac.nz

Thank you for considering this invitation.

Approved by the UNIVERSITY of AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE on 12 Dec 2016 for (3) years, Reference Number 018431

Appendix E: Participant Information Sheet for the Student

EDUCATION AND SOCIAL WORK

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Private Bag 92601, Symonds St
Auckland 1150, New Zealand

Student (Under 16 years)

Participant Information Sheet for the research project:

Researcher name: Jacinta Oldehaver

My Supervisors: Dr. Rebecca Jesson, Professor Stuart McNaughton

Who am I?

Talofa lava my name is Jacinta Oldehaver and I am studying toward a PhD at the University of Auckland. I want to find out about the ways teachers and students talk to each other when they are learning to read and write. I would like to invite you to take part in my study.

What will happen?

- You will be asked to sign a form to let me know you want to take part.
- Your parent/caregiver will also need to sign a form saying its ok for you to take part.

If you and your mum and dad say it is ok to take part I might come and talk to you to ask you some questions. The interview will be at your school during school time and you do not have to answer any questions if you do not feel like it. There will be a tape recorder that will record what you say. You can tell me to stop at any time. I will type up what is tape recorded and I will take out your name. Your teacher will not know what you say to me during the interview.

I will also come to your class and I will use a tape recorder to record the talk between you and your teacher during reading and writing time. I am going to type up what is recorded but I will make sure I take out your name. You can ask me to stop recording at any time during the talk and you do not have to carry on if you do not want to.

What are your rights?

You do not have to take part if you do not want to. Your school has said that if you agree or do not agree to take part will not change anything for you at school.

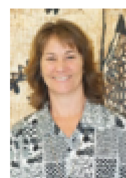
If you do agree to take part:

- You don't have to answer any questions that you don't want to, and you can ask to stop if you don't want to keep talking to me or if you want to leave the group at any time.
- You can change your mind and ask me to delete your answer up until one month after I do your interview
- You can ask me any questions you like, any time
- All of your answers and in fact anything you say will be kept private.

What do you need to do to take part?

If you are happy that you know all that you need to know about the study and if you would like to take part, please complete the bottom part of this form and return it to the researcher.

If you have any questions, please contact:



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Thank you for thinking about taking part.

Approved by the UNIVERSITY of AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE on 12 Dec 2016 for (3) years, Reference Number 018431

Appendix F: Transcriber Confidentiality Agreement

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Auckland 1150, New Zealand

TRANSLATOR/TRANSCRIBER CONFIDENTIALITY AGREEMENT

Project title: Dialogic approaches to literacy instruction for and with Pasifika in English medium classrooms

Researcher: Jacinta Oldehaver

Transcriber: ________________________

I agree to transcribe the audiotapes for the above research project. I understand that the information contained within them is confidential and must not be disclosed to, or discussed with, anyone other than the researcher.

I agree to translate the required documents for the above research project. I understand the information contained within is confidential and must not be disclosed to or discussed with anyone other than the researcher.

Name: ____________________________
Signature: _________________________
Date: _____________________________

Approved by the UNIVERSITY of AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE on 12 Dec 2016 for (3) years, Reference Number 018431

Appendix G: Student Semi-Structured Interview Questions Time 1 and Time 2

Student semi structured interview themes and overview design and questions

Project title: Dialogic approaches to literacy instruction for and with Pasifika in English medium classrooms

Key thinking: Culture, voice, perspective, thinking, how to?

Do you think talking about learning helps you learn better? How and why?

Home talk:

What languages do *you* speak fluently?

What do you like to talk about the most at home? Who do you usually talk with at home?

Do you talk/listen a lot at home? More than you do at school or less?

What things do you like talking about with your; Friends, Family

School talk:

What are some of the rules, that you know about, for talking in your class? Are these the same for talk at home or different? If you could make up your own rules what would they be? Why?

Tell me about what you thought about the talk you were doing in the ___ lesson?

Do you feel you listen more during reading/writing time or do you feel you talk more?

Do you get time to talk about what you do at home or after school? Does this talk help you with your learning? Why/why not?

What other things does your teacher do that helps you talk more about reading and writing?

Does talking in your group help you learn or not help you learn? Why/why not?

Do you like talking in whole class or small groups better?

How often would you say you ask questions of the teacher about what you are learning about?

What are some things your teacher could do to help you more to be able to talk about your learning in reading and writing? What things can your teacher do more to help you talk more so you understand more?

What are some things *you* want to try and do to get better at talking during reading and writing time?

Who at school do you feel confident enough to be able to talk the most and feel confident to do that?

Appendix H: Teacher Semi-Structured Interview Questions Time 1

Teacher Semi Structured Interview Questions Time 1

Name:	Date:

Project title: Dialogic approaches to literacy instruction for and with Pasifika in English medium classrooms

NOTE: Researcher notes on the actual classroom discussions observed pre interview will be developed and 1 or 2 specific episodes will be used to gain an insight into critical moments in the discussions to help with clear understanding from the teacher's perspective?

Teacher semi structured one to one interview to elicit teacher perspectives of talk in the classroom that enables or hinders learning.

I am interested in how talk helps or does not help with learning especially for and with your Pasifika learners and during literacy time. Remember you do not need to answer if you don't feel comfortable to do so and remember that your school will not know what or how you respond. I am really interested in finding out more about what you think about talk in class and if understanding talk better might help other teaching and learning communities understand more too.

Part One – directly from the discussion recorded

Add in some key parts from the classroom audio specific to that teacher:

Thinking back to just the lessons I audio tapes – can you tell me about what you thought about the talk in the lesson/s I observed?

What do you see as your role in facilitation of talk in class for learning (especially in reading and writing)?

What sorts of things act as barriers for small group discussions in general?

What sorts of things act as barriers for whole-class discussions in general?
Use Part 2 below as needed

Part 2 – Responsive

What usually happens when you notice students are silent?

What goals do you set for talk if any?

How effective was the talk in the lesson towards achieving this goal? How do you know this?

Planning

What strategies do you use to get the discussion in reading and writing started? From these which ones seem to be most effective for your Pasifika learners and why?

Which do you prefer and why -small/whole class discussions? How effective is talk in both?

How familiar are you with the following – NZC/LLP/ELLP/Tataiako/PEP?

How familiar are you with the Pacific Education Plan?

How familiar are you with NZC?

How often do you use these (and other docs – name) to support planning for talk in your classroom?

How useful are these documents to support your understanding on what and how to plan for talk in literacy?

How do you know if discussion topics hold merit and are responsive?

Part Two – classroom protocols

Rules for talk – what rules are in place for talk in your class? How often do you visit and/or revisit these with students? How do you develop them?

What sorts of conditions would help make whole-class discussions about texts more effective? (Types of texts, level, interest, topic, connections, behaviour, time of the year, time of day, level of energy (T) class size)

Part Three - personal development

How familiar are with the following terms;

Dialogic, argumentation, collaborative reasoning,

What does dialogic learning feature for you?

What things do you feel you need to further develop where talk is concerned?

A picture of a dialogic child – reference their response and then how would a child engage and others & teachers in a dialogic way?

Part Four - Types of instructional talk

What types of instructional talk do you find is mostly in your classroom discussions?

Part Five - Knowledge/skills/strategy

How do you know that what you are about to discuss is new knowledge?

What tells you a child fully understands the content you are covering?

Provide a window into the child's progress and attitude

Who does the majority of talking in these discussions and why?

Do you have any rules or protocols for talk in your classroom? Do these change regularly? How are they developed?

Part Six - Pasifika learners

What do you feel are the enablers for talk with Pasifika in your class?

What do you feel are the barriers for talk with Pasifika in your class?

What things do you feel you already do well with getting Pasifika kids to talk about their learning in reading and writing?

What things would you like students to be able to do better/improve on where talk is concerned (& in your class) – notion of perfect dialogic student that would be able to… (then probe more…)

Feedback – tell me about the types of feedback you give your students in class discussion – (Explore/extend/elaborate)

What are some strategies that you use or know about that you think are useful for facilitating effective discussions for PI in particular?

What advice do you give to your Pasifika parents about learning and talking at home?

How much support do you get for teaching Pasifika children?

PD to improve your teaching of PI learners (given they are the biggest population)

How often are you involved in peer observations that aims to strengthen pedagogy for and with your Pasifika students?

How familiar are you with the ways of talk at home for your Pasifika students?

How often do you talk to parents of those who positively engage and contribute in talk about what factors influence this?

How often do you talk to parents of those who are shy to contribute in talk about what factors influence this?

How often do you get students in this class to have small-group discussions (of any kind) and then about something they have read? (Are these usually with/without teacher)

Text in the talk?

What sorts of things act as barriers for small or large group discussions about texts?

Advantages or disadvantages of this type of discussion over the other two

Appendix I: Teacher Semi-Structured Interview Questions Time 2

Teacher Semi Structured Interview Questions Time 2

Name:	**Date:**

Project title: Dialogic approaches to literacy instruction for and with Pasifika in English medium classrooms

NOTE: Researcher notes on the actual classroom discussions observed pre interview will be developed and 1 or 2 specific episodes will be used to gain an insight into critical moments in the discussions to help with clear understanding from the teacher's perspective?

Teacher semi structured one to one interview to elicit teacher perspectives of talk in the classroom that enables or hinders learning.

I am interested in how talk helps or does not help with learning especially for and with your Pasifika learners and during literacy time. Remember you do not need to answer if you don't feel comfortable to do so and remember that your school will not know what or how you respond. I am really interested in finding out more about what you think about talk in class and if understanding talk better might help other teaching and learning communities understand more too.

Part One – directly from the discussion recorded

Add in some key parts from the classroom audio specific to that teacher:

BIG THEMES TIME 2

How effective was the talk in the redesigned lessons towards achieving the literacy purpose and goal?

Rules

Tell me about the Community membership – ground rules for talk process with your students? How these have helped/hindered dialogic discussion?

Your dialogic repertoire – what do you think you have developed most in and what do you feel still needs some time to develop? (Talanoa dimensions and nesting) What have you noticed with your repertoire, student repertoire for discussion?

Resourcing – text/task

How have you found using the Box Text Set? What do multiple texts support? What is not so good and how could this now be improved?

Has planning changed for you at all? Planning to be dialogic Planning to be dialogic – earlier interviews suggest that this was not really part of it for you – any change here for you in terms of this? (Resourcing the text/task)

LESSON Shape – is this the same for you or different? How and why? Is it 21st century and discussion based?

For your PI learners

What are the enablers for discussion as you see it now?

What are the barriers still to discussion in your class?

Have you used dialogic principles across the curriculum? Small group approach for discussions is this preferable and why/why not?

How would you describe the type of talk that happens mostly in your classroom discussions now?

Pasifika learners

What are your thoughts on the Talanoa frame (PDIT) I presented to support Pasifika and teachers of Pasifika in being more dialogic?

PD to improve teaching of PI learners to be more dialogic?

What were the key things you took away from our one-day workshop?

What does dialogic teaching mean to you now?

What changed?

What stayed the same?

In terms of PLD was this helpful?

Do you think PLD such as the one you just went through would be helpful? What would you keep what would you like to change? Who would benefit from it?

Appendix J: Teacher Workshop Reflection Question Prompts

Reflection Questions

Have a read of your transcript & consider the following

Types of talk/teacher repertoire

Find some examples of questions you asked in the transcript. Are they open or closed? What do you notice about the sequential pattern with both types? Are there any student questions? What do you notice about the sequential patterns here?

Find some examples of one-word responses. What is your theory on this? Would you change some of these and how?

Find a really long 'speech act' by the teacher and student discuss and share the features/patterns of talk that lead to this

What were your learning goals of this session?

What is your sense of progression?

What about pace of this lesson? Time on task? Time on mat? Sense of critical thinking and feedback?

Uptake – where are these examples of *Genuine* uptake – meaning you (or students) *really noticing* the interactional talk features and running with this line of talk

Find a section where the opportunity for uptake was missed?

From your own transcript what *types of talk* are promising and will attend to the above 3 aspects of this redesign.

Select one or two 'speech acts' only and redesign how you would use different types of talk to increase dialogic teaching and student facility in the discussion.

Resourcing

Level of challenge/task and text complexity

Consider the extent to which the text/resource you have used are 'active' participants in the talk and therefore acting as a support (in/out)

Who is doing the heavy lifting in the transcript? Where and how could this be given over to the student? What would that involve?

Activation of prior knowledge – what works and what could be ramped up?

Reading opportunities – what are the features of the reading in the session? What do we think about reading aloud?

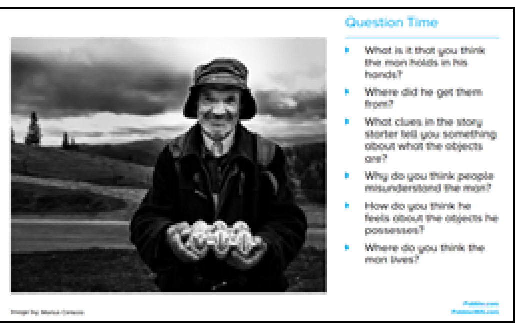
Dialogic Community Membership Connections – where are these in the transcript? Find a really elaborated response by a student – why and how was this feature possible? Listening features What is the balance of talk from your perspective? Time on task/mat/who is talking most How is the talk/lesson organised? What rules are at play in this discussion?
Return to these reflective tasks often. **Consider also the Talanoa Dimensions and where in your transcripts you see these featured.** **Over time add in some other aspects of dialogue you want to reflect on in your classroom talk.**

Appendix K: Resources Planned for Time 1 Discussions for TCH1

1

2

3



4

Sentence Challenge

Can you write a sentence containing a relative clause, starting with a noun?

- E.G. The man, who had walked thousands of miles, guarded the eggs with his life.
- The eggs, which he had found in a cave, were beginning to hatch .

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Relative clauses

Relative clauses are clauses starting with the relative pronouns *who**, *that, which, whose, where, when*. They are most often used to define or identify the noun that precedes them. Here are some examples:

- Do you know the girl **who** started in grade 7 last week?
- Can I have the pencil **that** I gave you this morning?
- A notebook is a computer **which** can be carried around.
- I won't eat in a restaurant **whose** cooks smoke.
- I want to live in a place **where** there is lots to do.
- Yesterday was a day **when** everything went wrong!

* There is a relative pronoun **whom**, which can be used as the object of the relative clause. For example: *My science teacher is a person whom I like very much*. To many people the word whom now sounds old-fashioned, and it is rarely used in spoken English.

Relative pronouns are associated as follows with their preceding noun:

Preceding noun	Relative pronoun	Examples
a person	who(m)/that, whose	- Do you know the girl who .. - He was a man that .. - An orphan is a child whose parents ..
a thing	which*/that, whose	- Do you have a computer which .. - The oak a tree that .. - This is a book whose author ..

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Appendix L: Lesson Plan and Resources for Time 2 Discussion for TCH1

Planning

Talanoa Lesson F2F Dialogic focus

Years 7/8

Learning Area – English : Creating Meaning

Learning Intentions

- to draw ideas from students prior knowledge and experience
- listen carefully to others ideas and add on
- to construct an oral paragraph.

Focus : to look deeply at a photo and to come up with statements, questions, exclamations about what they notice. Use their ideas to construct an oral paragraph.

Introduction:

From this photo we are going to come up with something that tells us what you notice? And by noticing I mean…….what we see in the photo, in the background our ideas/thoughts that are brought about by something in the photo

I am going to show you a photo – and we are going to / notice / look deeply and carefully and think of what we can say…..what is our framework for thinking in D1 – what steps we do in our thinking

Self, pair, (think preparation time), share

Here is the photo….show photo/pictures few examples……

See if we can put some together – they need to fit , flow have some cohesion

Think on your own, pair share , share……with the class

In small groups (3) construct an oral paragraph that you will need to share back with the class - whole group will need to say.

Do the same for the other photo.

\+ = one idea

++ = add on one more

+++ = adding on more detail

++++ = sentences / ideas with as much detail (saying as much as you can)

Dialogic / Oral Language Focus - National pride / patriotism or just OTT

WALT - Form an opinion on the recent events of the RLWC 2017 focus on how the Tongan community in South Auckland showed their support to use in an Exposition / persuasive piece of writing

Discuss / Write your opinion/thoughts about how the Tongans / Samoans supporters

Intro
Briefly recap some of the our class rules for talking / listening- get them in the frame of mind for dialog

Introduce the topic - show them the photo

Use the framework for thinking / speaking

Individually
Pair share
Preparing / think time
Sharing whole group.

Show video clip
http://www.newshub.co.nz/home/new-zealand/2017/11/ugly-scenes-in-auckland-as-tongan-and-samoan-league-fans-clash.html

Prompts:
Positives / negatives
Advice to the Tongan community for next time
Idea of Pasifika nations / support
Encourage student led discussion
More student talk than teacher.

Appendix M: Resources Planned for Time 2 Discussions for TCH2

Visual Texts
These are texts you can watch, read and listen too
COAL
NATURAL GAS
OIL
Renewable Resources
Hydropower - Water
Renewable Resources
Solar Energy - Sun

Appendix N: Visual Resources Used in Time 2 for All

Table N1

All Time 2 visuals used and engaged for the final discussion and group size for all classrooms

Teacher	Size of student group for Time 2	Visual text resource used in Time 2 discussion
TCH 1	Small group (n10)	
TCH 2	Small group (n5)	
TCH 3	Small group (n4)	

TCH 4	Small group (n4)	
TCH 5	Small group (n7)	
TCH 6	Small group (n6)	

Appendix O: Vave Dimension Redistribution From Time 1 to Time 2 for TCH2, TCH3, TCH5 and TCH6 and Their Students

Figure O1

Vave Dimension Redistributed From Time 1 to Time 2 for TCH2

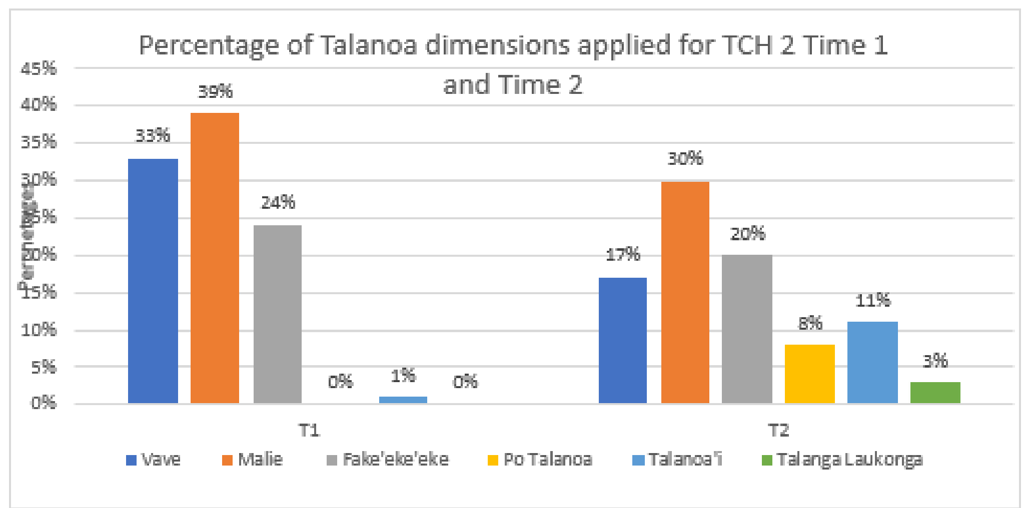

Figure O2

Vave Dimension Redistributed From Time 1 to Time 2 for Students of TCH2

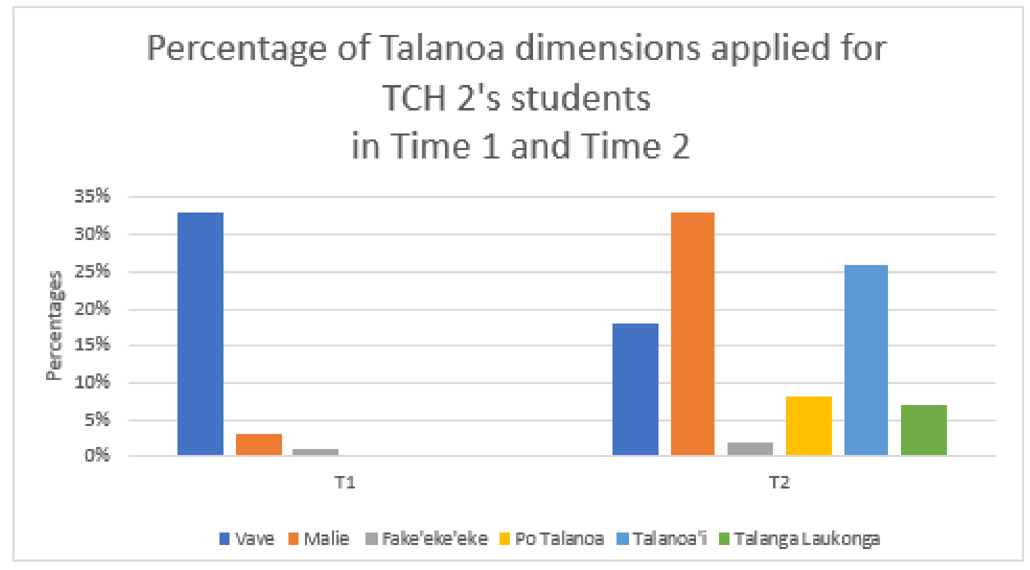

Figure O3

Vave Dimension Redistributed From Time 1 to Time 2 for TCH3

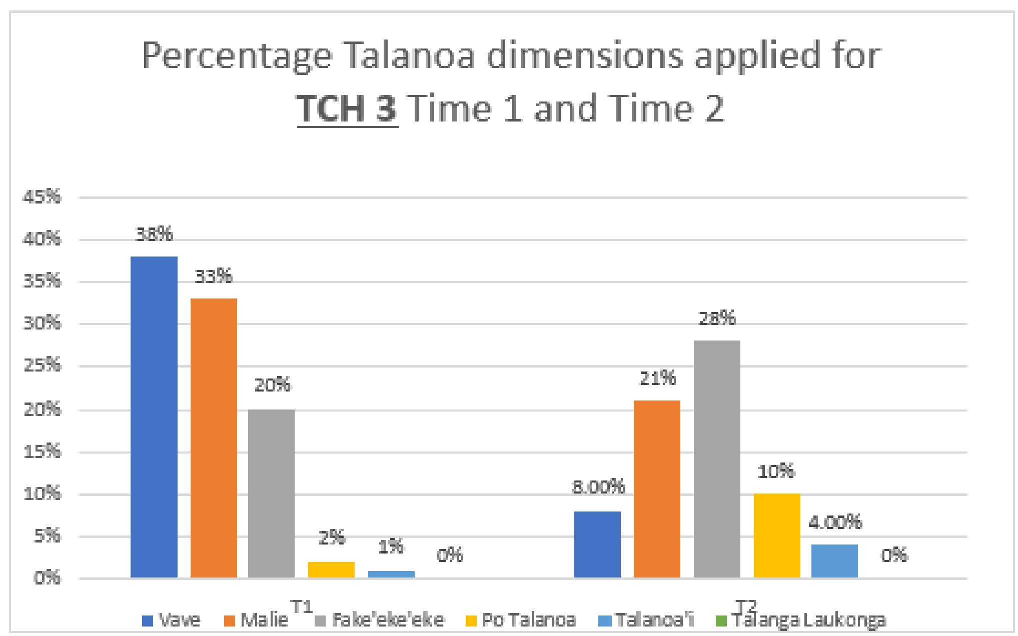

Figure O4

Vave Dimension Redistributed From Time 1 to Time 2 for Students of TCH2

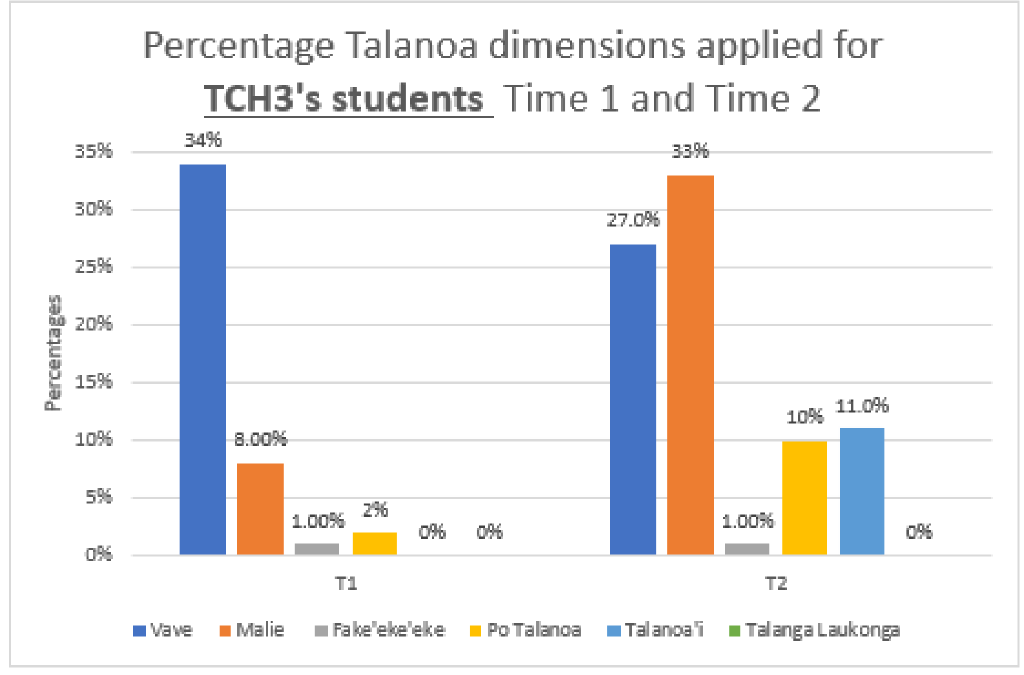

Figure O5

Vave Dimension Redistributed From Time 1 to Time 2 for TCH5

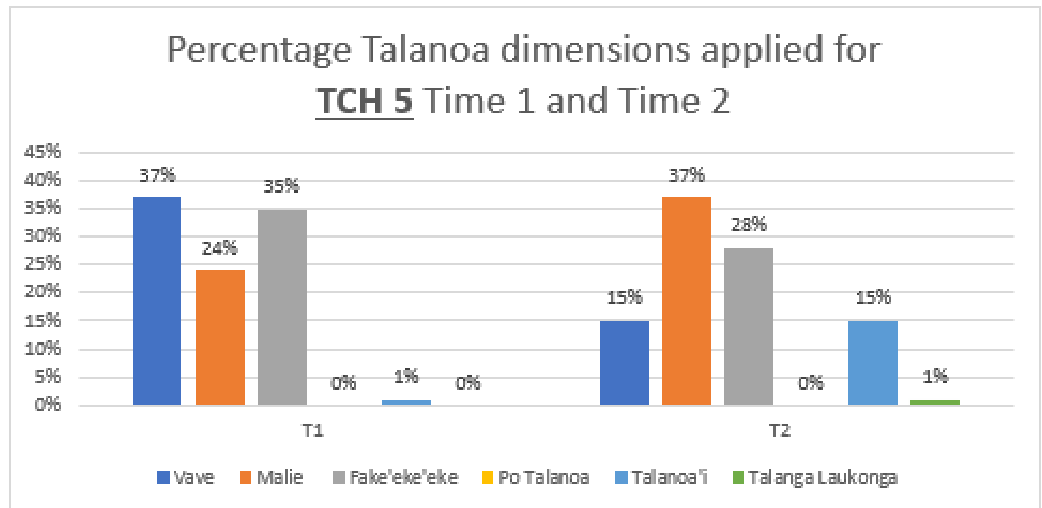

Figure O6

Vave Dimension Redistributed From Time 1 to Time 2 for Students of TCH5

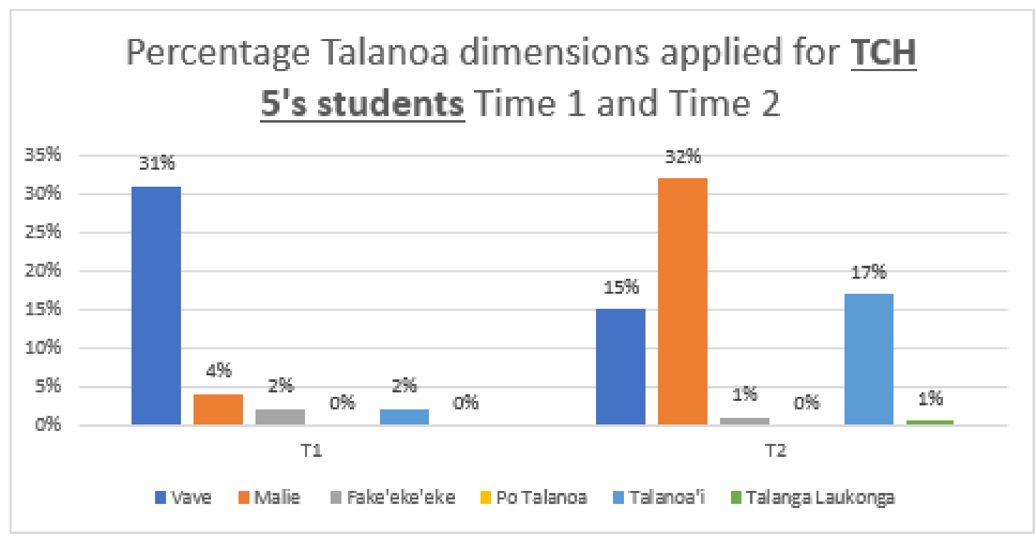

Figure O7

Vave Dimension Redistributed From Time 1 to Time 2 for TCH6

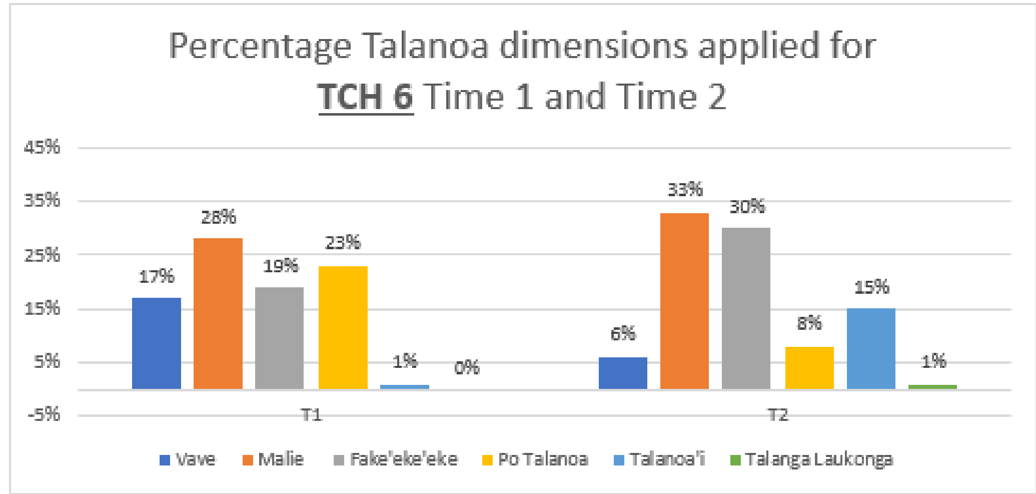

Figure O8

Vave Dimension Redistributed From Time 1 to Time 2 for Students of TCH6