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Developing a 'culturally validated' dialogic indicator tool: A reconceptualised analytical framework using talanoa to code classroom talk

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Abstract

Dialogic approaches are promising vehicles for effective pedagogy, providing opportunities for students to talk about learning; build on and sustain individual and collective identities, and; advance thinking and understanding in ways that support enhanced achievement. Whilst this is an idealised view of talk in classrooms, international literature provides evidence that suggests teachers struggle to shift practice toward dialogic pedagogy. From a national perspective, a more pressing issue given the nature of this study is to reconcile international views of dialogic pedagogy with a Pacific worldview. This article reports on the process of developing an analytic framework or tool for identifying 'dialogic' practices that are informed by Pacific ways of knowing or orientations, including language practices to progress that reconciliation. The reconceptualised 'Pacific Dialogic Indicator Tool'(PDIT) will foreground culturally validated language acts based on talanoa dimensions and weave across these dimensions key dialogic principles that are research-based.

Keywords

Talanoa; dialogic; cultural validation; discourse based pedagogy; reconceptualised framework

Introduction

The analytic framework described in this article is one component of a study of talk patterns that are effective for Pacific students in Aotearoa New Zealand. Barnes (1976) proposed, "Learning floats on a sea of talk," thus urging an analysis of what type of talk is linked to what type of learning? Some types are problematic. A focus on right answers and final scores on tests is, in Barnes' words, to "arrive without having travelled" (Simpson, Mercer & Majors, 2010 p. 1). Such a focus renders invisible the social and cognitive sense-making processes, mediated by talk within the classroom space, essential for understanding the interactions between teaching and learning. This article addresses a conceptual gap in the understanding of talk in classes with high numbers of Pacific learners. The problem was how might we provide a discourse frame that would a) be able to privilege a specifically Pacific perspective of language acts mediated by talk; and b) accurately describe the depth of patterns

captured, which could serve both as an analysis frame and a formative tool to refine practice towards more dialogic pedagogy.

Objectives of the conceptual article

This article gives a rationale for the development of the new 'culturally validated Pacific Dialogic Indicator Tool' (PDIT). This is followed by a review of the research relating to talanoa and dialogic discourse, the two traditions that inform the tool. A process of cultural validation of the tool was followed. Gaining expert cultural advice was needed given that the indigenous body of knowledge utilised was tapu/sacred and therefore required a level of protection to ensure integrity was maintained. As an emerging Pacific researcher, I did not want to be the 'brown coloniser' in the use of this indigenous knowledge. I then present the proposed PDIT, a reconceptualised analytic framework that uses talanoa as a conceptual underpinning. The final sections present key distinguishing features of the framework firstly as a coding tool to code classroom transcripts of literacy lessons and then as a tool to make visible these classroom talk patterns for formative use with teachers rethinking lesson design towards more dialogic pedagogy.

Background and rationale

My position in the university in which I work and study holds me accountable to certain academic expectations and conditions. This is advanced further by the fact that I am also responsible to Pacific networks and Pacific audiences with whom I am affiliated and who would have a vested interest in my journey, specifically how my study might contribute to the wider Pacific literature base for the betterment of our Pacific learners in a New Zealand context. Externally, there are also the highest academic targets set for PhD candidates. Both worlds in which I walk do, and should, expect a high level 'product' through the research I lead. Academic rigour is a constant in both worlds, as well as inclusive, culturally responsive and transformational propositions of my research and study. These explicit expectations from both internal and external communities align with the need to answer research questions that can positively impact Pacific learners in Aotearoa New Zealand.

A pragmatic approach was key to addressing these challenges. As most of my professional career has been spent teaching in the primary domain, specifically, teaching in low decile and high Pacific population schools, I have engaged my 'teacher lens' to drive the design phase of the developing tool. For me the classroom space is *my* 'safe space', a space where I was on a continuous inquiry cycle week in week out, year after year, as I strove to develop my teaching craft through the multiple iterations of learning cycles for both myself and for my Pacific students. So the question I challenged myself with was:

> What is my point of difference that will work towards ensuring the multiple learning pathways in classrooms linked to talanoa and dialogic principles, are well *travelled* and not about **just** about the *final destination*?

Talanoa hallmarks

Very few studies have explicitly addressed the cultural language acts that might underpin a dialogic classroom approach. However, the well-known Oceanic process of talanoa captured 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).

Talanoa in its whakapapa can be linked to many other indigenous research methodologies and approaches found in Kaupapa Maori (Smith, 1997), Fonofale (Pulotu-Endermann, 2001), Kakala (Thaman, 2003), Faafaletui (Tamasese, Peteru & Waldergrave, 1997) and Tivaevae (Maua-Hodges,

2001). Integral to the essence of each of these research approaches is the notion of valuing cultural practices, identities and voice, and being mindful of power and authority when using such approaches. If researchers are aware of these matters, outcomes are more likely to contribute to the advancement of knowledge that best determine and address areas of concern in the research itself. From a research perspective, talanoa is fundamentally about building culturally valued and respected relationships between research participants and the researcher mediated through talk (Halapua, 2000).

Even though each nation in Oceania has its own distinct frame of talanoa, there are many commonalities to be found. The literal definition, 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 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.

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 and 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" (Vaioletti, 2013, p. 204). It could be considered then that the degree of skill and expertise involved in the talanoa process as Vaioletti (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 worldview.

Dialogic hallmarks

There are many definitions of dialogic pedagogy. Alexander (2006) provides the following five principles as key characteristics of a dialogic approach. Alexander (2006) considers both how the talk is conducted, and by whom it is conducted. For him, a dialogic approach is:

> **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.

(Alexander, 2006, p. 38)

Pacific values and concepts can be related to Alexander's (2006) principles. The dialogic principles maintain the emphasis on collective socialisation and reciprocity that involve the varied actors within the learning community. Like values-based references across many Pacific nations, the notions of respect, connectedness and identity resonate.

Others in the dialogic field (Cazden, 2001; Kuhn & Crowell, 2011; Reznitskaya 2012; Wegerif, 2006) propose similar definitions of the dialogic approach. Wegerif and Phillipson (2016) define this as "Education for dialogue as well as through dialogue" (p.1). These authors further advocate for the sociocultural positioning that this study and many dialogic educators align with, that is, teaching and learning that are premised on interactions founded on language socialisation.

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 Western discourse traditions of analysis and in a sense is "looking towards the source" (Thaman, 1992, p.3) 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 to 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 Smith (2013) 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-Western and Western 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 Western.

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 in itself 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 nuance 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 'Western' 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 (Taufe'ulungaki, 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 frame and once again added particular strength where the argument of 'cultural validation' was not only a visible process in the study but cherished as a highly valued contribution towards the overall profile of this emerging tool.

Defining the Pacific Dialogic Indicator Tool (PDIT)

Figure 1 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 come from the original source (Vaioleti, 2013) but are represented (below) as an open cylinder that:

    a) depicts the relationships between the talanoa dimensions,

    b) signifies the service each dimension has for each other and,

    c) represents the reciprocating, recursive dynamic within the classroom.

Figure 1.   **A reconceptualised model of talanoa dimensions to analyse and code classroom talk**
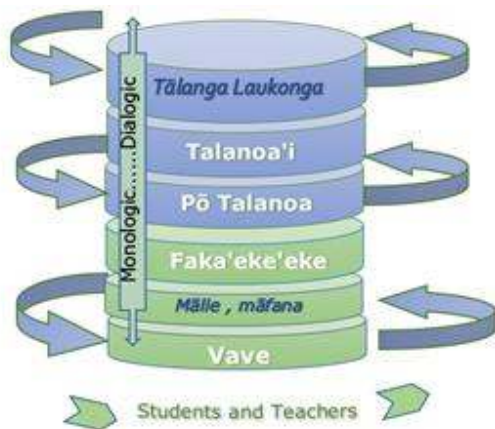
The dimensions in the model are represented as a continuum addressing a variety of dialogic purposes along a scale (monologic to dialogic). The model emphasises the well-travelled pathway mediated through talk by teachers and students, which becomes about the journey, not just the final destination. Various western 'dialogic studies' (Hennesey, et al., 2016; Reynolds, 2017; Reznitskaya, 2012; Soeter, Wilkinson, Murphy, Rudge, Reninger & Edwards, 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 six dimensions from Figure 1 are defined and described in ways that provide for usability in the coding and analysis of classroom transcripts.

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 Western 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 so as to be able to propel and advance the discussion to more dialogic heights. For teachers, what will need to be carefully considered is whether there is a 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 which can be collectively described to invoke humour and impart feelings of warmth and joy.

This dimension has been modified and replaces 'usu' with two additional culturally validated constructs to the original frame proposed by Vaioleti (2013). 'Usu' as it stands alone 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 the terms can invoke feelings of humour, warmth and a sense of euphoria at the thought of entering into a space that enhances learning. This is because of the *connections* able to be made or affective engagement of the learner due to content being culturally familiar and therefore agreeable. Examples of such spaces in classrooms might include story-telling, 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 and historical worlds. Through the process of validation, an addition was offered by key experts that would advance the understanding of the dimension, that of 'talatalanoa', or 'let's talk some more'. Talatalanoa' fitted 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" (Manu'atu, 2000, 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 worldview with a Western worldview. Whilst dialogic theorists do mention 'affective' (Cazden, 2001), the opening of a 'dialogic space' and negotiated 'grounds rules for talk' (Wegerif and Phillipson, 2016), the argument according to the corpus of Pacific literature (Coxon, Anae, Mara, Wendt-Samu & Finau, 2002; Fletcher, Parkhill, Fa'afoi, Taleni, O'Regan, 2008; Hawk, Cowley, Hill & Sutherland, 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 Western 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" (Wegerif & Phillipson, 2016, p. 4). These features offer the potential for a positive impact of the practice of mālie, māfana 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. Vailoeti (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 Western sense there is certainly no shortage of literature on questioning, the criticality of questioning, type, either open-ended or closed and levels of questions in classroom-based discussions (Dillon, 1981; Wolf, Crosson & Resnick, 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.

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. 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 and become aware of and 'extend their

experiences and knowledge about their world and their relationships to it' (Manu'autu 2000; Vaioleti, 2013).

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 exemplifies 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. This is largely indicated in classroom talk that is led by the students, who have expertise in content. Such talk invites home discourse ideas, practices and language.

Talanoaʻi

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).

Western discourse traditions used to reconceptualise talanoaʻi come from multiple authors (Alexander, 2006; Mercer & Dawes, 2010; Reznitskaya, 2012; Wegerif, 2011) who similarly argue that talk can be responsive to the voices in the discourse. Talk that is talanoaʻi 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, Wu, Gamoran, Zeiser & Long, 2001, p. 4).

Tālanga Laukonga

The modified term Tālanga Laukonga is a phrase coined by cultural experts in the validation phase of the study. It is similar in meaning and use from Tālanga but explicitly links to literacy and could plausibly extend across to multiple learning areas.

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 worldview.

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 again here. The term kauʻi-talanoa provided by cultural experts during the validation phase lends to this dimension and is supported by Vaioleti (2016). Cultural experts explained that the term kauʻi-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, given 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 discussions 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. So it is argued again that the connections and relationships and shared agreements between interlocutors is pivotal for this dimension to come to fruition.

Western literature that most closely aligns to Tālanga Laukonga is the construct 'inquiry dialogue' (Wilkinson, et al., 2017) and collaborative reasoning (Reznitskaya, Kuo, Clark & Miller, 2009). 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.

The construct 'argumentation' also aligns. Nussbaum (2008) notes argumentation has multiple meanings and dual perspectives and provides a modifier referring to 'collaborative argumentation'. This is "a social process in which individuals work together to construct and critique arguments" (p.348). Whilst its definition is comparable to others in this field, (Berland & Reiser, 2009; Kuhn and Reiser; 2006; Newel, Beach, Smith & VanDerHide, 2011; Rapanta & Macagno, 2016), it is distinguished by the emphasis on being 'less adversarial'. 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. These approaches to discussion privilege interaction and negotiation from multiple voices so that multiple meaning can 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 argued 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 Pacific 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 and 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.

Distinct features of Pacific Dialogic Indicator Tool

To highlight the distinct features of the PDIT, I provide an example of how the codes are applied using a small excerpt of classroom talk. I explicate in detail one of the dimensions, talanoa'i (Figure 2) to illustrate how classroom talk has been analysed to make classroom practices visible while serving as a formative frame to refine classroom discourse practices with Pacific students.

The indicators presented in the PDIT tool go some way towards providing an understanding of classroom processes in ways that are intended to tip the balance towards more dialogic pedagogy for learners in schools with high Pacific populations. The argument is that the dimensions must be considered collectively rather than in isolation. By gaining an understanding of how the dimensions work, it is intended that teachers and students can make positive shifts towards increasingly dialogic interactions. However, the approach does not simply focus just on decreasing monologic dimensions and increasing dialogic ones in a binary fashion (Reynolds, 2017). For example, high indications of one dimension, Vave, would hardly constitute a dialogic repertoire but if utilised expertly, each dimension in the PDIT would serve to develop the repertoire of both teacher and student thereby expanding the dialogic pedagogy for all.

Within each of the six defined dimensions sit nested coding principles that exemplify discourse functions of classroom talk. Hennesey et al. (2016) propose a similar, fine-grained approach which allows, "systematic analyses of what participants actually do and say in practice during dialogic interactions, permitting their operationalisation" (p. 19). This fine-grained analyses, which PDIT also

offers, becomes a platform to begin the sense-making process with teachers' transcript data and allows a depth of understanding that actively addresses what is 'spoken' at a granular level.

Table 1 presents all six dimensions alongside their nested principles used to analyse the talk for both the teacher and the student. The unit of analysis in coding talk patterns for both teacher and student are similar, in order to recognise the student's active contribution, as well as the teacher's role in apprenticing students into increasing control over levels of talk. The acknowledgement of the student role requires a conceptual understanding of exactly how each of the dimensions can be successfully enacted but also learned over time. This notion strengthens the essence of both talanoa and dialogic theory that signals all participants in the discourse as equally worthy contributors.

Table 1.   Pacific Dialogic Indicator Tool (PDIT) coding categories

Talanoa dimension	Code talk patterns Vave when	Coding categories
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**
Mālie, māfana	Teacher is connecting or disconnecting to learner through responsive 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 directly referenced 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
	Student is connecting or disconnecting to task/text/space/event/experience	**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 Fakeʻekeʻeke when**	**Coding categories**

Fake'eke'eke	Teacher poses a question in the discussion Student poses a question in the discussion	**TF+** open questions **TF-** closed questions **TFS+** student question open **TFS-** student question closed
Talanoa dimension	**Code talk patterns Pō talanoa where**	**Coding categories**
Pō talanoa	Teacher and student authority in the discussion/locus of control is evident by continuous strings of talk e.g. T-T-T-T or S-S-S-S(3 or more consecutive turns by the same interlocutor indicates authority)	**PTT** Mainly teacher controlled **PTS** Mainly student to student turns/control
Talanoa dimension	**Code talk patterns talanoa'i when**	**Coding categories**
Talanoa'i	Talk by the teacher and student is active and supports, engages, and prompts for a *single* reason, uptake and elaboration Student talk illustrates uptake to active prompts by the 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 others 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** 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**	**Coding categories**

	Laukonga when	
Tālanga Laukonga	Talk by the teacher is deliberate and dynamic and teacher talk; seeks/facilitates/invites/opens up/challenges/transforms understanding/models then invites truth-seeking and is extended 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 a diverse and critical knowledge, thinking and advanced understanding	**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 opportunity to seek others perspectives (single then multiple) and chain the perspectives into coherent lines of thinking and enquiry **TTLCC** 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 in detail, extension, building on/up of an idea. Extended exploratory talk with a level of co-reasoning and collaboration could include such *reasoning markers* such as because, so, if, I think, agree, disagree, would, could, couldn't why I think, might and maybe
	Student talk that is Tālanga Laukonga, illustrates sustained, dynamic, transformative facility to seek the truth, take up the challenge, rework initial claims and work in collaboration	**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 and seeks others perspectives (single then multiple) **STLCC** student provide 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 such reasoning markers because, so, if, I think, agree, disagree, would, could, couldn't why I think, might and maybe (multiple)

Applying the PDIT coding dimensions

The following example further demonstrates the features of PDIT. The short speech episode (1 minute and 7 seconds) sat within a larger whole class literacy discussion. This example came from one teacher's 'early' discussion and was one of three collected in phase one. The study comprised two phases overall. The example below shows how one speech act can achieve multiple communicative purposes.

Speech episode example

T	And why do you think he feels protective? (TF+ TC)
S1	Like he carries them… takes them everywhere (SMMT, SFE)
T	So he takes them everywhere with him (TV, TMMT)
S2	Can I add on? (SS, SF-)
T	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+)
T	Yep can you add onto that Ruby? So what did Claire say? (TF+, TSS)
S3	He's holding onto them in a carton (SS)
T	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+)
T	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+, SS, SUTXT)

Making classroom practice visible using PDIT

Figure 2 illustrates the same teacher's entire *early* transcript. The full discussion was 37 minutes and 58 seconds long. Approximately 24% of this discussion was coded talanoa'i. Figure 2 quantifies both teacher and students' total engagement in the talanoa'i repertoire. The granularity of the approach makes highly visible the principles used often (SS & TE, see Table 1) and less often (SS+, TTXT). The analysis was then able to be used as a lever for refining and modifying the dimension in practice and to support lesson redesign. These analyses, combined with the actual transcript itself, identified enacted dialogic features. For this teacher, the analyses highlighted promising sequential structures in discussions and provided detail on how the teacher and learners in this episode mobilised dialogic principles at the level of talanoa'i. When the research participants came together to study their own talk patterns and purposefully plan to be more dialogic, the analyses allowed multiple teaching and learning scenarios and hypothesis building. The teacher's personal transcript became the centre of dialogic discussion to further support improved discourse pedagogy.

Figure 2.   Frequency of talanoa'i in the discussion
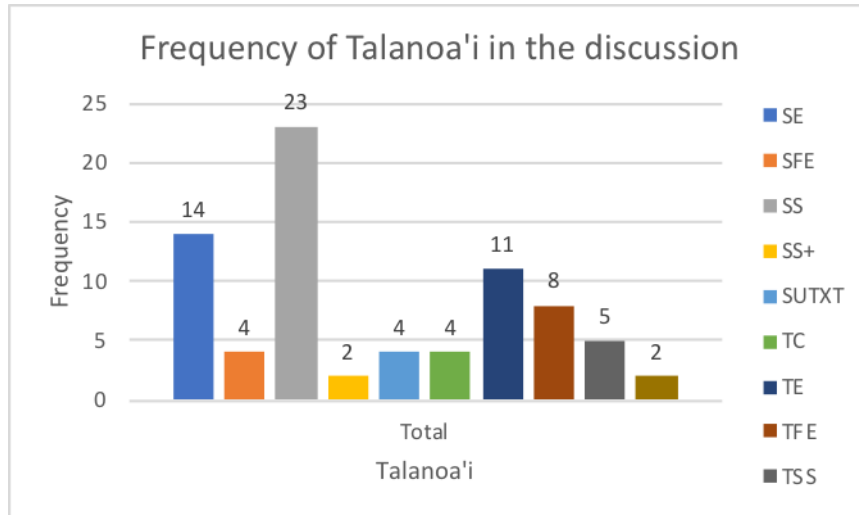
Limitations of the PDIT tool

The PDIT tool is indigenously Tongan at this point due to the nature of Vaioleti's (2013; 2016) foundational work on the original dimensions. A Samoan, Cook Island, Niuean, Fijian, Tokelaun perspective would need to be validated with experts in these nations, but that would be totally conceivable given the threads made visible through this process and the cultural commonalities across these nations and where talanoa is concerned.

Whilst talanoa is a well-known concept in academia, there is a possibility that this is not as familiar with teachers in an Aotearoa New Zealand context and for that matter their Pacific students. However, it is important that a more expansive lens is created that seeks to address Pacific needs and which places culturally validated perspectives at the centre of learning *and* teaching.

Conclusion

Throughout the tool development process, I have come to understand that those who hold the gifts of culture, knowledge, language and histories, expect or rather demand that those who come forward as contemporary agents of indigenous knowledge , must too position themselves as worthy contributors and be in humble service of all that has gone before. The reconceptualised PDIT, promoted within this study, using culturally validated language constructs, has foregrounded thinking about classroom discourse and the teacher's role in the facilitation of this talk to enhance student facility with the types of talk known to be productive. Looking at talk in this way, recognises and values such perspectives and might positively influence pedagogy, pedagogical theory and teacher stance on how talk is shaped in classroom communities.

Finally, to echo Barnes (1976), to arrive without having really travelled, succinctly portrays the path that the emerging Pacific researcher must journey. Without such a voyage there is little chance that you have truly soaked in, lived, breathed, fretted over, critiqued, cried, questioned or wondered about the rich tapestry of knowledges, indigenous and Western, that are made available to us. This privilege is not lost on the researcher and whilst this article goes someway to reconciling a Western and Pacific worldview related to discourse based pedagogy, I recognise that this is not the end, merely

the beginning of a worthy endeavour towards improved outcomes for teachers in Aotearoa New Zealand and their Pacific learners.

Acknowledgements

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