Parents and Y5/6 boys' views of modern learning environments (MLEs)

A Pacific perspective

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Abstract

The rapidly changing landscape of education due to the advancement of technology has caused a paradigm shift in the content of learning. This reflects the need for today's learners to acquire skills needed in an everchanging globalised world. Consequently, the focus of education has shifted from industrial economy to the knowledge economy. Such shift has caused global education to move from traditional teaching practices to more modernised pedagogies. Suggestions that traditional single cell classrooms are not conducive to the new teaching pedagogies of the 21st century means schools' infrastructures must be transformed accordingly (OECD, 2013). Influenced by these global changes, New Zealand's education system has undergone subtle changes since 2010 when the first modern learning environments (MLEs) started erecting around the country. This subtle move has been controversial and many education stakeholders voiced concerns about the impact these changes could have on children already underserved by education. While Pacific students feature in this underserved group, the Pacific community remained silent about their thoughts on the issue. Therefore, this study derived from the need to hear Pacific parents and learners' (boys aged 9-10 years) experiences and perspectives of MLEs in New Zealand primary schools.

The participants included 6 boys from 4 Auckland primary schools and 5 of their parents. The data was collected by one-on-one semi-structured interviews using the talanoa approach. An inductive thematic approach was initially used to identify emerging codes and themes, which were further deductively analysed using an adaption of Si'ilata's Va'atele framework. Key findings include the consistency of the big open spaces in MLEs with the participants' views of the value of a communal lifestyle. The importance of communication in developing home-school reciprocal relationships through conversations and consultation also emerged as the other key theme.

This study concludes that communication appears to be the most important, yet a missing link in the chain of efforts to raise Pacific learners' achievement. It argues that regardless of the amount of resources invested in projects such as *Pacific Education Plans*, a breakdown in communication between stakeholders, will result in opportunities to collaboratively develop and establish sustainable change not eventuating.

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Chapter 1: Introduction

"At no previous time in our history has education been so critical to our social, cultural and economic prosperity and New Zealand's future. Technological change and globalisation are rapidly reshaping the way we work and live" (Education Review Office, 2020, p. 9).

1.1 Background

The above statement essentially outlines the reason underpinning the Ministry of Education's (MoE) decision to build modern learning environments (MLEs) and revise the Technology curriculum to strengthen the position of digital technologies in the New Zealand Curriculum (NZC) (Ministry of Education, 2018). The 'Ten Year Property Plan' (10YPP) mandated the requirement for schools' Board of Trustees to ensure that school buildings are maintained and designed to meet 21st century teaching and learning needs (Ministry of Education, 2015). Currently, if schools need repairs or replacement of traditional single cell classrooms, the Ministry will provide funds to build modern learning spaces instead. One of the principles stated in the Ministry's designing schools document is to "Design learning spaces to promote and facilitate the range of collaborative, individual (self-directed), conceptual and instructional learning styles" (Ministry of Education, 2015, p. 37). Modern learning environments have one big open space for large groups or class gatherings, and a few small breakout rooms attached on the side for small group activities. The government builds and refurbishes these physical spaces with 21st century furniture and digital technology devices, with the intention of preparing students with necessary future skills.

Osborne (2013) welcomed the shift from single-cell classrooms to open modern spaces as an effective response to the current knowledge of how the brain works. He claimed that construction of New Zealand's traditional classrooms was compatible with the teaching pedagogy of the time where everyone learnt the same thing in the same way or what he called 'factory-style'. However, the learning needs and teaching practices have progressively changed over time, and the Ministry endorses MLEs as learning spaces that are 'fit for purpose in the current time' (Ministry of Education, 2015). These spaces offer flexibility, openness, and access to a variety of tools including technology needed for '21st century learning' (Osborne, 2013; Ministry of Education, 2015).

Though our education system has experienced many educational changes over decades, the emergence of MLEs in the past decade has caused much controversy among school communities. Educators and parents have seriously questioned the government's rationale for imposing MLEs on schools, and their impact on students achieving valued outcomes (Gerritsen, 2015; Walters, 2015; Education Central,

2018). Thoughts and perspectives of various authors on MLEs will be examined further in the literature review.

This chapter introduces the researcher's interest in MLEs in Section 1.2; introduces the purpose of the study in Section 1.3 and explains its aim in Section 1.4. Section 1.5 justifies the rationale for the study with reference to the key research questions and its sub questions and an outline of the thesis structure concludes the chapter.

1.2 The researcher's interest in the topic

Firstly, the researcher is a first-generation Pacific migrant, English for speaker of other languages (ESOL) educated in a New Zealand secondary school in the mid-eighties. Having taught for eighteen years in an Auckland primary school and being a mother of six, the researcher has seen a few major changes in education. For example, the shift of responsibility from being ministry governed to local governed schools entrusted to Boards of Trustees as part of the neoliberal 'Tomorrow's School' reform (Lourie, 2018). Other changes include the change from School Certificate to NCEA introduced between 2002-2004 (Hipkins et al., 2016), and the launch of the revised New Zealand Curriculum (Ministry of Education, 2007). While these changes undoubtedly caused restructuring of some sort for schools and communities, the recent transition from single cell classrooms to MLEs in some schools is quite problematic in various ways. This move has caused much speculation both locally and nationally, regarding the motives (Wilson, 2015; Osborne, 2013) and methods used to implement this change (Gerritsen, 2015; Alansari, 2018).

Sadly, while different groups have been outspoken about their views of MLEs (Carroll, 2015; Moir, 2015; Redmond, 2017; Gattey, 2018), the Pacific community remains silent. For instance, the researcher's school offered consultation evenings in a bid to answer questions and respond to parents' complaints about the impact of MLEs on their children. Not one Pacific representative attended any of the meetings, which might presumably be due to Pacific peoples' respect accorded to the teachers (Wall, 2016). For instance, respect for authority including teachers is an essential aspect of many Pacific cultures, meaning many parents and caregivers might be hesitant to question or share their views about educational issues (Fa'avae, 2017).

Secondly, having taught in a school that built its first MLEs five years ago, the researcher has observed boys (mostly Pacific) going from being good role models to having behavioural issues, after they moved into MLE spaces. It seemed as if many spent their break times on the reflection bench or outside

the deputy principal's office. As a classroom teacher, the researcher wanted to investigate these observations, and to find out if this was caused by being in these open spaces.

Lastly, Pacific peoples are used to living with extended families in open spaces which have some similarities with modern open space classrooms. The difference is, in the former setting, children rely on their elders, parents, or authoritative figures for instructions, and permission to undertake something. For instance, skills and knowledge are usually passed down from an older person to the next generation. This means tasks are rarely allocated to individuals until the requirements have been mastered; tasks are usually carried out in groups (Fa'avae, 2017). This is quite the contrary regarding modern learning pedagogies where they are expected to be self-directed and self-regulated learners. Hence, the researcher's interest in finding out how Pacific boys are coping or adapting in these environments.

1.3 The purpose of this study

The purpose of this exploratory qualitative study was to investigate Pacific parents and learners' perceptions of MLEs, drawing on the views and experiences of the selected participants. As stated earlier, there has been a public controversy over whether MLEs are a benefit or deficit to children's learning. Although there is a growing body of research on the impact of 21st century's modernised learning spaces (Tuitama, 2020; Buchanan et al., 2021), there is no evidence to determine how Pacific learners in primary schools (and their parents) are responding to such changes. Therefore, this study provides an opportune platform to share their views of MLEs.

1.4 The aim of the research

The aim of this research was to explore Pacific boys' and their Pacific parents/caregivers' perceptions and experiences of MLEs. It is anticipated that the findings of this research study will inform and support schools' efforts to (i) promote effective and sustained engagement and learning for Y5-Y6 Pacific boys within MLEs, and (ii) enhance learning transitions from primary to intermediate and/or secondary school.

1.5 A justification for this study

This study focused specifically on Pacific boys aged 9-10 and their parents/caregivers based in Auckland city. The participants' perspectives and experiences of MLEs were explored to gain an understanding of how they are responding to the new 21st century pedagogies of modern learning and

environments. The following paragraphs elaborate on the key elements that form the foundation of this study.

Why Pacific?

Firstly, Auckland is home to one-third (1,571,718) of the New Zealand population with 243,966 people identified as Pacific, which is an increase of 25% from 2013 (Stats NZ, 2018). Significantly, 62% of Pacific 0-14year olds in Aotearoa reside in Auckland, which is also an increase of 14% from 2013. Pacific has a youthful population, and it is projected to grow making up 11% of the nation's population by 2038 (Stats NZ, 2014). Based on this projection, Bolton (2017) claimed that Māori and Pacific children will constitute a great proportion of New Zealand classrooms in twenty-three years' time. This means Pacific people play an important role in the social and economic landscape of Auckland now and will continue to do so in the future.

Much of the research and report articles refer to Pacific learners as priority learners, who are overrepresented at the tail end of national achievement in New Zealand (Milne, 2009; Bolton, 2017). The *Programme for International Student Assessment (PISA)* report identified a huge achievement gap between Pacific learners and their counterparts in our current education system (Bolton, 2017). This presents the critical challenge for New Zealand to make progress in addressing inequities in its education system, otherwise "it could find itself with an increasing number of young people not prepared to enter the evolving job market" (Milne, 2009; Bolton, 2017, p. 51).

Why 9–10-year-olds or Year 5/6?

Essentially, 9-10-years (Year 5/6) is a critical age to work with children to learn their views and perceptions (of schooling, of their lives) before they transition to intermediate. Adolescence is a challenging time of transitioning from childhood to adulthood which can start roughly between the age of 10 and 19 years (Lailawati et al., 2020; Sawyer et al., 2018). Their perceptions and mindsets can still be nurtured and influenced at this age before they are set in concrete.

Why boys?

Focusing on boys is supported by evidence that males and females think differently and draw from different regions of the brain to process the same physical and mental tasks; females multitask better than males (Magon, 2009). Shanahan (2012) claimed that boys are up to at least two years behind girls in emotional development and this has an impact on their learning. In addition, in some research reports, significant gaps have been identified between Pacific girls and boys in terms of achievement (Ferguson et al., 2008). At the high school level, boys are "over-represented in stand-down, suspension,

exclusion and expulsion statistics" (Fa'avae, 2017, p. 51). Identifying their needs and providing support at primary school level might help mitigate such problems.

In addition, most of the qualitative research into Pacific success has involved children in traditional single classrooms. However, there is currently no research to show how the new learning environments cater for the needs of Pacific learners, particularly primary aged boys. Therefore, it is unclear whether these new physical environments and ways of learning are supportive of Pacific children, let alone Pacific boys, nor is it clear whether these widen or close the achievement gap.

Why parents/caregivers?

Thirdly, the importance of Pacific parents and families' engagement in supporting their children's learning is highlighted in national policies and strategic initiatives for Pacific success, such as the *Tapasā: Cultural competencies framework for teachers of Pacific learners* (Ministry of Education, 2018), *Pasifika Education Plan (PEP)* (Ministry of Education, 2013) and now, the new *Action Plan for Pacific Education 2020-2030 (APPE)* (Ministry of Education, 2020). These documents stress the importance of schools working in partnership with parents and families to support their children's learning by being involved in consultation and making decisions for best learning outcomes.

Therefore, this study was designed to allow selected participants (parents, caregivers, and students) to elaborate on their views and experiences of MLEs, hoping to gain an understanding of how they (children) are responding to both the tangible and intangible realities of MLEs. The key research question driving this study was:

> 'What are the perceptions of Pacific boys, and their parents/caregivers about experiences of the New Zealand primary schools' modern learning environments?'

The following sub questions were further developed to refine the scope of the research:

1) What are Year 5-6 Pacific boys' perceptions of modern learning environments?
2) What are Pacific parents' perceptions of modern learning environments in primary schools?
3) How do the boys' experiences in modern learning environments affect their perception of their learning and behaviour?

1.6 The structure of this thesis

This thesis is organised into six chapters. The first chapter (Introduction) has introduced the rationale behind the emergence of MLEs in New Zealand and described what they are. It outlined the researcher's interest in the topic, set out the aim for the study, and justified the significance of this study and how it could contribute to educators' knowledge of Pacific boys and their community.

Chapter two (Literature Review) draws on relevant literature regarding national policy, MLEs, global and Pacific issues. It explores research literature regarding the impacts of MLEs on students' achievement and on teachers and schools. It begins with a review of educational changes to date and outlines the gap in research that this study aims to address. Chapter 3 (Methodology) explains the research design and methods used to collect and analyse the data. Chapter 4 (Results) reports the findings and themes, which are then discussed in Chapter 5 before concluding the study in Chapter 6.

Chapter 2: Literature Review

2.1 Introduction

To understand some of the global issues that have impacted New Zealand's education policies and strategies, it is vital to explore what they are and from where they are derived.

This review is formatted in three parts. The first part unpacks the term '21st century learning', which has shifted the landscape of education globally, exploring its social, political, and economic impact on education globally. The second part explores how this global paradigm shift impacts New Zealand education. It provides a snippet of historic reforms that have shaped education since the late 19th century. Given that this study involves Pacific learners, the final part explores, reviews, and comments on issues about Pacific peoples and the role education has played and continues to play on their social, political, and economic views of education. The chapter concludes with a reflective perspective on whether written policies intending to support Pacific learners are validated in the government's directives (namely modernised buildings and pedagogies), thus justifying the rationale for this study.

2.1.1 Changes in global education

The emerging changes embedded in the influx of technology are rapidly shaping the world of education and work as we know it today. Worldwide education systems are encountering an unprecedented rapid change which presents an educational challenge. Like many OECD countries, New Zealand has had to rethink and recontextualise education to accommodate the need for 21st century skills compatible with the global knowledge economy (Lourie, 2018). Educators and policymakers must make significant changes to traditional behaviour and norms that have existed for decades (Osborne, 2014). Such changes according to Byers et al. (2018) are necessary and conducive to the development of 21st century skills such as collaboration, problem solving, critical thinking, and communication. This challenge has had major implications on the purpose of education for 21st century learners given the content of the curriculum and pedagogies for teachers have changed (Wilson, 2015; Benade, 2019; Fletcher et al., 2020).

2.1.2 Purpose of 21st century education

The advance of technology in the post-industrial age meant the purpose of education needed to change from preparing learners for an *industrial economy* to equipping them to engage in a revolutionised *knowledge economy* (OECD, 2018). The ways in which people understand time, space, and place are

changing, shrinking our world into a globalised society as the boundaries between countries start to break down (Gilbert, 2007). Transferring money, exchanging stocks, and global shopping can be made effectively and at immense speed without leaving one's home or country. Likewise, all information and content knowledge that was once accessible only from books and human resources are now digitally available at our fingertips (Wineburg, 2018). Knowledge is no longer considered stuff to learn and bank for future use (Bolstad et al., 2012); it is now about the ability to utilise it to generate new knowledge (Gilbert, 2007). Knowledge (different from the way society knew it in the past) and skills are the new currency of global economies, slowly replacing the need for extracting and manufacturing natural resources (OECD, 2018; Gilbert, 2007). This shift in paradigm impacts tremendously on education systems globally.

In the past, the purpose of industrial societies' education was for attaining disciplinary knowledge and sorting people out, using a one-size-fits-all approach. For instance, knowledge, mind, and learning were mental models that informed education systems in the industrial age (Gilbert, 2007). For instance, knowledge was things that the minds individually processed and stored away for later. This was motivated by the egalitarian concept, which was about giving everyone equal access to education (Butterworth & Butterworth, 1998) and streamlining people for the skills needed for industries (Gilbert, 2007).

In contrast, the post-industrial age defines knowledge as a process, not a product; it is pragmatic, not theoretical, and it is developed to be replaced, not stored away. Minds are connectable resources for generating new knowledge, not storage containers. Learning constitutes generating new knowledge collaboratively through solving authentic problems (Ministry of Education, 2007; Bolstad et al., 2012). The Organisation for Economic Co-operation and Development (OECD) in its *Teaching for the future article* (OECD, 2018), claimed that 21st century education is about equipping learners with the navigation tools needed to thrive in a world that is progressively obscure and volatile. Consequently, the purpose of education in the 21st century is to: prepare learners to thrive in jobs that have not yet been created, use technologies that have not been invented, and solve problems that society does not yet know about (Schleicher, n.d.).

2.1.3 Learners of the 21st century

As society changes in terms of how information is presented, the complex and new forms of personal identity, and a revolutionised understanding of knowledge, the 21st century learners' needs are very different and diverse than the learners of the 19th and 20th centuries. Learners need to be creative critical thinkers equipped with communication, collaboration, and problem-solving skills (Larson &

Miller, 2011; Osborne, 2013; Byers et al., 2018) pivotal to adapting to the unpredictable nature of future jobs (Bolstad et al., 2012). This means generating and applying knowledge in an interconnected world where conducting and managing a business is becoming more digitised. Traditionally, a set of encyclopaedias and textbooks were used as trusted sources of information to which learners were directed for resources (Schleicher, n.d.). Nowadays, information can be quickly accessed on the internet through mobile phones or any digital device. Digital devices are slowly replacing books and pencils as well as bookshelves. People can skype friends and relatives overseas instantly instead of writing letters.

Now knowledge takes on a whole new meaning due to the advancement of technology and the internet (Bolstad et al., 2012). Thus, literacy is not just about learning to read, but it is now also about how learners manage the plethora of information at their fingertips.

2.1.4 Content of 21st century education

The global changes and expectations have led to content changes within education. Teachers no longer teach just skills; they are now required to focus on dispositions and facilitate the key competencies that learners need to navigate through a complex, ambiguous and volatile world (OECD, 2018). Essentially, learners are required to be effective communicators who can work collaboratively to problem solve in authentic and connected contexts, where student agency is encouraged (OECD, 2010; Fletcher et al., 2020; Timperley et al., 2017). Horizontal connectedness requires teachers to plan for learning opportunities where learners engage with others in the classroom and community agencies to solve real-life problems (Ministry of Education, 2007). This approach encourages the use of inquiry learning (Taylor, 2019) in innovative learning environments (Huda, 2018; Osborne, 2016), where students learn to self-regulate and to be innovative (Munn, 2018). This change in teaching and learning content has led to unprecedented pedagogical changes, as discussed in the following paragraphs.

2.1.5 The pedagogy of 21st century education

The change in pedagogy means teachers no longer stand up in front of the class and deliver; they are now required to facilitate learning that encourages 21st century learners to become self-regulating and problem-solving long-life learners (Kariippanon et al., 2018). In the past, teachers were considered the source of knowledge poured into learners to absorb and bring out later during examinations and assessments (Gilbert, 2007). They are now facilitators entrusted with helping learners develop the skills that will enable them to interpret and apply knowledge (Brinkley, 2006). In other words, teachers

are expected to implement future-focused and contextualised learning (Fletcher et al., 2020) that is student-centred and catered to individual needs (OECD, 2018).

In the past, individual teachers were each in charge of their own assigned children and classroom; now, they are required to work collaboratively with learners, colleagues, parents, and the community in innovative learning environments (Benade, 2018). In such innovative or modern learning contexts, learners are expected to connect with experts in local businesses and the community as resources when addressing real-life issues (OECD, 2017). There is empirical evidence to demonstrate that this pedagogical approach to modern learning improves teachers' level of competency and increases collaboration among all stakeholders (Osborne, 2013; Wall, 2014; OECD, 2018; Campbell et al., 2013).

2.2 Changes in New Zealand education

Mirroring the changes in global education systems, New Zealand's education has also changed to accommodate the need for preparing learners to be successful in the 21st century's globalised economy (Benade, 2018; Ministry of Education, 2007). This has resulted in a change of curriculum, pedagogy, and a whole restructuring and modernising of school buildings to accommodate 21st century learning methodologies. An educational movement that has been and still is controversial, as discussed in section 2.2.4. Firstly, the following section starts with a brief overview of the historical changes that have impacted New Zealand learners since the late 19th century.

2.2.1 Purpose of New Zealand education

Historically, the purpose of education in New Zealand has always been and is still influenced by social, economic, and political factors underpinned by the beliefs and values of the people of its time (Carr & Hartnett, 1996). Following the European settlers' arrival in the early 19th century, missionaries played a significant role in establishing, managing, and controlling early schools (Benade, 2018). In 1830, Māori people were eager to read and write following the first Māori formulated grammar and orthography by the first European missionaries (Parr, 1963). This prompted European missionaries to translate the Bible into Māori (Simon, 2000) and soon, most Māori young and old could read and write. To cut a long story short, day schools attended by Māori and taught by Māori were soon established; likewise, there were boarding schools taught by European teachers (Parr, 1963). These schools started declining by 1843 (Parr, 1963), which led to the provincial governments assuming the managerial role for education in 1853 (Benade, 2018). A movement that marked another political agenda to use English as the sole medium for teaching instructions because the Māori

language was considered a hindrance to civilisation (Parr, 1963). This agenda was later legislated in the 1867 Native Schools Act.

As European settlers started populating New Zealand and influencing the changes to its cultural landscape, the 1877 Education Act by the government (Simon, 2000) mandated compulsory attendance for primary school-aged children and a basic uniformed curriculum for both primary and secondary schools (Benade, 2018). The aim of this universal education system was to provide New Zealand learners equal access to education (Roberts, 1998; Selvaraj, 2016). This supposedly egalitarian universal education lasted for almost one hundred years until the Great Depression, and the 1935 election of the first Labour party (Benade, 2018).

Consequently, the significant social, economic, and political impacts of the Great Depression and the influences of the newly elected Labour's Minister of Education Peter Fraser, and the Director of Education Clarence Beeby initiated the progressive education system (Selvaraj, 2016). The objective of this change was to ensure that each learner had equal right to access free education best suited to themselves to achieve to the best of their ability, regardless of their academic or socio-economic background (Olssen & Matthews, 1997; Roberts, 1998). This was the education system for about fifty years until the global capitalism crisis in the late 1970s, which changed the education platform, yet again.

The global capitalism crisis in 1970 as the result of post-Fordism impacted New Zealand hugely- for example, a fall in wages and increased unemployment (Brown & Lauder, 1996). This challenged Beeby-Fraser's vision of free education (Benade, 2018). Prior to the crisis, New Zealanders, particularly families with children, received state-provided benefits, a fully funded public health system, state houses for people who could not afford to buy a home (Roberts, 1998). These, as well as free education, were all disrupted by this global crisis. The government had to reduce educational expenditure because it was draining a disproportionate share of tax income (Benade, 2018; Roberts, 1998). Neoliberalism and market liberalism were the discourses of the time, with the dominant idea of individualism, which argued that individuals' participation in a course or tertiary institution is a private investment beneficial to the individual and not society.

The review of the education system by the Taskforce appointed by the Labour government in the late 1980s saw another education reform, one that was to drastically change and shape New Zealand education to this day (Butterworth & Butterworth, 1998). Butterworth & Butterworth noted radical changes recommended in the 1988 *Administering for excellence* Picot report resulting from the review. Among other administration concerns, the report concluded that the education system was over

centralising and hindering opportunities for individuals. It strongly advised giving voice and power to the locals to make decisions on all education matters because they knew their communities best (Fancy, 2009). As a result, David Lange and his Labour government made some major changes to the education administration, endorsing the 1989's most far-reaching reform in New Zealand's history known as Tomorrow's Schools (Lange, 1988).

2.2.2 Tomorrow's Schools

Some substantial changes under the 1989 Act Tomorrow's Schools' reform included establishing the Education Review Office and the New Zealand Qualification Authority and replacing the Department of Education with the Ministry of Education (Langley, 2009). The regional education boards were abolished, and the Board of Trustees comprised of local parents and community members have been entrusted with governance and administration of their local schools. This reform was a response to Picot's findings that the over centralised administration caused frustration and encouraged inequality and marginalisation for some communities (Langley, 2009). The 1989 Education Act reflected the shift of policy discourse from 'equality access' to 'equitable outcomes' (Benade, 2018).

Four years later, the effect of the Picot report on education was well underway. The Ministry introduced the *New Zealand Curriculum Framework* (Ministry of Education, 1993) with seven essential learning areas: The Arts, Maths, Language and Languages, Science, Social Studies, Technology, Health, and Physical Education (Roberts, 1998). The 2000 stocktake (Ministry of Education, 2007) identified the need to review the previous curriculum due to an increasingly diverse population, complex demands of the workplace, and sophisticated technologies (Ministry of Education, 2007). In 2007, the curriculum document was released; its fundamental purpose stated: "...to set the direction for student learning and to provide guidance for schools as they design and review their curriculum" (Ministry of Education, 2007, p. 6). This gave schools and Boards of Trustees greater autonomy to localise their curriculum and set objectives to be achieved by their students but within the national curriculum guidelines.

The Tomorrow's Schools reform and the then new curriculum have had many implications for schools. Each school is responsible for ensuring its local curriculum meets the needs, circumstances, and interests particular to their community (Ministry of Education, 2007). Community involvement is an essential part of this reform, whereby the Boards of Trustees are required "in consultation with the school's Māori community, to develop and make known its plans and targets for improving the achievement of Māori students." (Ministry of Education, 2007, p. 44).

Following international trends, the New Zealand Curriculum was revised yet again in 2017 to add the digital aspect to the learning area of Technology (Ministry of Education, 2018). This gives another layer of responsibility for schools and their boards to grapple with. They are tasked with ensuring their local curriculum reflects the Ministry's 2025 vision for students to be confident, connected, and to become actively involved lifelong learners in a connected world (Ministry of Education, 2015). Embedded in this is the expectation that students would have opportunities to collaborate with others within and outside classroom walls. For example, the "Future focus" principle of the New Zealand Curriculum (p. 9) emphasises the need for students to explore the issue of globalisation, and to equip them with the necessary digital technology knowledge and skills (Ministry of Education, 2007). Such skills will enable them to "participate fully in and benefit from our globalised, hyper-connected, and increasingly knowledge-based economies and societies" (OECD, 2018, p. 15)

This previous statement has huge implications and expectations for schools to make radical changes to teachers' pedagogy and to restructure buildings. With such change, teachers are expected to facilitate information and communication technology (ICT) skills (Lourie, 2020) particularly in this era of the knowledge economy (Bolstad et al., 2012). This paradigm shift in the schools and teachers' roles is further reviewed in the following sections.

2.2.3 Rethinking pedagogy

Mirroring global changes in pedagogy particularly in the western developed world, New Zealand, too, expected changes in teachers' practice (Lourie, 2020). For instance, teachers are expected to collaborate with others: their colleagues, parents, students, even experts in fields of students' interests (Sharp et al., 2021). They are to engage in reflective practices where they collaboratively plan and assess learning with their colleagues (Osborne, 2016). This deprivatisation of teacher's practice requires tremendous trust among them to complement each other's strengths and hold one another accountable (Osborne, 2013; Twyford et al., 2017). Teachers need to collaborate with parents to set learning goals or even invite them (parents) to share their expertise with students (Ministry of Education, 2016; 2018; 2020). Thus, instead of the teacher being the expert, the student or a parent with relevant expertise can facilitate learning.

Facilitation of self-regulated skills and student agency is another crucial pedagogical change in which teachers encourage students to take ownership of their learning (Benade, 2019). This requires a mindset shift for teachers who have been immersed in traditional teaching for years teaching from the front to "exchange 'front-of-the-room', single teacher presentational approaches for collaborative, dispersed and facilitative styles, often in teams, working with multiple students in shared, common learning

spaces" (Benade, 2019, p. 1). Such pedagogical changes are not conducive to traditional single cell classrooms (Osborne, 2013), therefore structural changes needed to be made to ensure schools' physical environments support teaching and learning approaches (Ministry of Education, 2021).

2.2.4 Restructuring

The structure of schools has also changed with regards to their infrastructure. Since 2010, the Ministry has been building school buildings currently known as flexible learning environments (FLEs), innovative learning environments (ILEs), or modern learning environments (MLEs). The Ministry wanted to invest in modern environments conducive to the 21st century's teaching, and learning pedagogies explained in previous sections. These modernised environments (MLEs) are government-funded buildings offered to schools that need new classrooms, as in the case of Christchurch following the devastating 2011 earthquake. These open-space environments were first introduced as part of the Ministry of Education's changes to the ten-year property plan (10YPP) and the five-year agreement (5YA) funding for schools (Ministry of Education, 2015).

The term MLE originated in New Zealand in 2010 but has gradually evolved after public debates regarding the negative impact of these new physical environments on children (Mahat et al., 2018). To avert the public's focus from the tangible elements of such spaces, they are now referred to as flexible learning environments (FLE) or innovative learning environments (ILE). Although ILE better reflects the Ministry's intention to design physical environments that contribute to meeting the learners' needs (Ministry of Education, 2020), this study will use the term 'modern learning environments' (MLE) as it was the original term used in New Zealand (Wilson, 2015).

2.2.5 What are the general New Zealanders' perspectives of MLE?

MLEs have received mixed reactions from stakeholders such as school leaders, teachers, parents, and members of the public in general. According to written articles (stuff.co.nz, n.d; Education Counts, n.d) and literature (Mahat et al., 2018), it has caused a nationwide controversy. Schools, including the researcher's school, hosted meetings to reassure concerned parents of the much-needed shift to MLEs, and the benefits of such environments on children's learning. Considering that many education reforms have been espoused to provide better systems that cater to the learners' needs, the rest of this review will explore the impact of MLEs on the people at the heart of education: teachers, learners, and their whānau.

At this point, it is essential to establish that the learning environment is more than just property; it is also about its social, pedagogical, and physical elements (Ministry of Education, 2016). The interactions and engagement of people in the environment, the teaching and learning, technology, property, and resources are integral parts of an MLE (Ministry of Education, 2014). Osborne (2013) a strong advocate of MLEs or innovative spaces claimed that the flexibility, openness, and easy access to resources of such spaces are three components of MLEs that correspond with what we know about learning (Bull & Gilbert, 2012; Fullan, 2013; Katharina et al., 2017). Osborne asserted that learning is "personalised, socially constructed, differentiated, responsive (and often initiated by the students themselves), and connected to authentic contexts and the world outside" (2013, p. 2,). The flexibility, openness, and easy access to resource components reflect the inseparable aspect of the tangible and intangible elements of MLEs (Osborne, 2013). These elements are used here as the lens for reviewing the advantages and disadvantages of such modernised spaces.

Flexibility relates to both space (physical feature) and practice (pedagogy). On the one hand, the buildings' design affords the capacity for catering to diverse learning styles regarding their purposely built spaces (Wall, 2016). It allows for small and large groups gatherings (Imms et al., 2017), with breakout spaces for students to use if they need a quiet space (Barrett et al., 2015), and the varied zones give teachers and students the capacity to choose the most suitable need-task oriented spaces (Byers & Imms, 2016). Instead of rows of desks facing the front, different sizes and height furniture also add to the flexible component of the design (Dornhecker et al., 2015). More floor space allows those who prefer sitting or lying on the floor while working to do so, and the considerable physical space can maximise learning time in that varied activities can occur simultaneously (Barrett et al., 2015; Alansari, 2018).

On the other hand, critics such as Wilson (2015) argue that having large spaces with transparent glass can cause distractions, particularly for students easily distracted by their surroundings. Wilson also asserts that unsupervised students in breakout rooms can potentially be disengaged and distracted from the learning activity. Likewise, the parents criticise large spaces with too many students claiming that the noise level causes anxiety, particularly to students with learning difficulties (Long & Cann, 2017).

Regarding pedagogy, timetables can be less structured with MLEs (Wilson, 2015), which means subjects can be integrated better, making learning much more connected and meaningful for students. Instead of rigid teacher-led activities, the students can lead their learning while the teacher takes on the role of a facilitator or supervisor. This, according to French et al., (2020) and Morris (2019) helps

students become self-directed, the activity becomes student-centred, and less stress for the teacher because learning does not have to adhere to a timetable strictly (Wilson, 2015).

The flipside of this is echoed in Morris' (2019) article which alludes to the contextual factors that need consideration to mitigate the potential deficit impact of this approach on the already vulnerable students. Explicitly speaking, those who may not have developed critical thinking and self-regulating skills and might still benefit from a teacher-led approach. Another potential downside of a less structured environment is the hindrance of much needed positive one-to-one relationships between the learner and teacher and its impact on learning (Reichert & Hawley, 2013).

Openness in the physical sense means fewer walls, more sliding glass walls, and access doors, enabling teachers and students to observe each other's practice (Osborne, 2013). Unlike traditional classrooms, these modern spaces have easy access to attached side rooms (hubs) for teaching and learning purposes (Imms et al., 2017). The transparency of glass walls makes observing easier and encourages teachers to collaborate and learn from each other (Osborne, 2013) an aspect that embraces tuakana-teina relationships between teachers and between learners (Wall, 2014). Some also suggest that this means safer environments where two or more adults in the room minimises the chance of bullying or unsafe behaviour (Wilson, 2015). It also allows those working in breakout areas to remain connected to the rest of the group.

However, there are downsides to this too. Wall (2014) reported that fewer walls make displaying students' work difficult, making the environment less interesting. The author went on to say that lack of displays reduces a sense of belonging for students and is less inviting for parents who usually come into school to view their children's work. While working collaboratively in collegial support is said to be easily achieved in MLEs, this is suggested by Byers et al. (2018) to be more of a fad than reality, considering the lack of funds and support for schools to do this. For instance, teachers have been trained to teach in single-cell classrooms, not open spaces. Therefore, their lack of confidence to facilitate learning in transparent spaces and absence of relational trust can cause anxiety and frustration (OECD, 2013; Tschannen-Moran, 2001). This counterfeits the benefits of the collaborative approach.

Easy access to resources can be achieved here due to the range of attached spaces designated for specific resources and tools such as art materials and space for arts, science, water projects, and even a computer hub (Wilson, 2015). In a single-cell classroom, there might not be room for setting up or storing resources. MLE has break-out rooms for these purposes. This means students can carry on with their work or return to complete later, so they do not have to pack up at the end of each lesson constantly. Moreover, if they work on group projects, they have access to the tools they might need

for research and for presenting their work, such as the internet/technology (Huda et al., 2018). Providing access to a range of tools and strategies enables creativity and allows students opportunities to develop and enhance a range of skills, which is another benefit of a resource blended environment. A theory supported by Akgunduz and Akinoglu (2016) who concluded that blending instructions and technology can positively affect students' attitudes and self-directed skills.

However, as alluded to earlier, there is a growing concern regarding the possibility of learners getting side-tracked when they withdraw to these resource rooms without supervision. Wilson (2015) based on his observations claimed, while it is potentially difficult for a student to misbehave in a room with other adults, the distractions were caused by other classes who shared the big space. Further to this is the concern that learners might not have the skills to navigate the resources or to regulate their learning outcomes, especially if they have not yet developed self-regulating skills (Benade, 2018; Kariippanon et al., 2018).

New Zealand is undergoing teacher retention problems due to workloads and lack of support, especially for newly trained teachers (Education Central, 2019). However, working in these spaces can support teachers by sharing responsibilities such as planning, teaching, and managing different groups of learners (Osborne, 2016). The author endorses this as beneficial for teachers by tapping into each other's strengths and weaknesses. Moreover, instead of spending the whole year with the same group of learners, they can break into small groups and work to their strengths. This enables teachers to meet the needs of every child, so that they can achieve to the best of their ability (Ministry of Education, 2007), at the same time, support one another, especially those new to the profession.

Contrarily, while working in MLE seems like the plausible panacea for keeping teachers in the profession, research and articles on public forums report otherwise. Instead of easing the workload, teachers feel overwhelmed, exhausted, and overworked by the endless collaboration with colleagues in the shared space, which often distracts them from teaching (Redmond, 2017). Instead of feeling supported, teachers feel undervalued and discouraged due to the lack of support from the government in providing prior and ongoing training for collaborative practice in open spaces (Educational Central, 2019).

Moreover, there are suggestions that the government's initial intention might have included de-privatising teacher practice (Osborne, 2013, Benade & Jackson, 2017) and to counteract the public's rejection of the government's proposed increase of class sizes. The lack of consultation with teachers regarding the transition from traditional classrooms to MLEs means less positive influence on education. Literature advocates the importance of involving teachers in the design process because it

helps inform and prepare them for change; thus, minimising the chance of reverting to traditional practices (Blackmore, 2010; Cobber et al., 2015). Engaging teachers in the transitioning process gives them insight to the benefits afforded to MLEs for learners. For example, lighting (including natural light) and the vibrant colours in modern learning environments are considered essential stimuli for the learners' brains in helping to maximise their learning ability (Wall, 2016; Osborne, 2016; Barret et al., 2015).

While there are espoused advantages of MLEs in equipping learners with the essential future employment skills, its top-down directed approach could make it become a multimillion missed opportunity (Alansari, 2018). For instance, building MLEs in schools was directly dictated by the Ministry, excluding the stakeholders on whom its implementation extensively relies. There have been concerns raised by some school principals and parents, questioning the value of these environments in raising student achievement (Gerritsen, 2015; Walters, 2015). They also question the philosophy behind these physical spaces and why they are imposed on schools. This shows the lack of community consultation and its potential to hinder the effectiveness of even the best-intended reform. Wall (2016) reported that meaningful consultation when conceptualising the design is crucial for ensuring that the design is culturally responsive and reflects the community's values and vision.

Time is another hindrance that may disadvantage the implementation of MLEs effectively. Their subtle erection since 2010 when schools needed building repairs or more space due to growth meant little time for consultation. Given the importance of community consultation wherein all stakeholders are engaged to discuss issues pertaining to student achievement (Ministry of Education, 2007) time to consult would be beneficial. Considering sustainable changes take time, school leaders are responsible for balancing teachers' acquiring new teaching pedagogies and avoiding overload (OECD, 2013). In other words, teachers need time to adopt and maximise new ideas before sustainable changes are embedded in their practice (Hargreaves & O'Connor, 2017).

Speaking of time, a group of learners who have been underserved by New Zealand education for a long time and are vulnerable to the positive or negative impact of MLEs, are Pacific learners. Bolton (2017) asserted in her *Educational Equity in New Zealand: Successes, Challenges and Opportunities* article, "While the country's education system performs well overall, large equity gaps remain for Māori, Pasifika and low-SES students" (p. 3). Given that this study focuses exclusively on Pacific learners, namely 9–10-year-old boys and their parents or caregivers, the rest of this review explores the following questions:

- Who are Pacific peoples in Aotearoa, New Zealand?
- How are they located in New Zealand education?
- Why is the Ministry giving dedicated focus to Pacific peoples' education?
- How have the Ministry's efforts impacted Pacific learners?
- How have educational reforms impacted Pacific learners?
- Are MLEs deficit or surplus to Pacific learners' achievement?

2.3 Who are Pacific peoples?

Pacific peoples have been categorised and defined by various terms by government agencies over the years. Samu (2013) explained that the term "'Polynesian' was used in the 1970s; 'Pacific Islanders' in the 1980s, and 'Pacific Nations' in the 1990s" (as cited in O'Connor & Sauni, 2013, p. 139). Until recently, the Ministry of Education used the term 'Pasifika' but it now uses 'Pacific' to refer to this group in the newly released *APPE 2020-2030* document (Ministry of Education, 2020). The Ministry of Education's (2018) *Tapasā: Cultural competencies framework for teachers of Pacific learners* which sets out cultural competencies for Pacific learners' teachers, uses 'Pacific peoples' to refer to any of the islands from the Pacific Ocean, mainly the Melanesian, Micronesian, and Polynesian islands. It is crucial to know that the use of any term continues to be problematic due to its inability to acknowledge the complex diversities of the various cultures it entails. Some Pacific scholars argued that using the term Pasifika was a form of stereotype or a trojan horse, which meant Samoan because it is the largest ethnic group in New Zealand (Samu, 2013), and it "disregards ethnic-specific identities and cultural differences" (Matapo, 2019, p. 104).

Nonetheless, the most critical point is that whatever umbrella term is used, it represents a heterogeneous group that constitutes many diverse nation groups, each with its own inherently unique culture, language, social structures, and ways of being (Samu, 2013). It represents Pacific peoples who reside in New Zealand but are still culturally connected to the Pacific through family and land. Recognising this, the term 'Pacific peoples' is used in this study because 'Pacific' is the current term used in the education sector (Ministry of Education, 2020), and the use of 'peoples' instead of 'people' emphasises its heterogeneity. Its use encapsulates recent migrants, second, third, or fourth generations of New Zealand born, and anyone who identifies as Pacific due to ancestry heritage.

2.3.1 Why did they migrate here?

Pacific peoples are widely known as fearless navigators who traverse across and beyond the Pacific Ocean, searching for possibilities and opportunities. It is this desire to seek a better future for their families that many Pacific ancestors left the comfort of their homelands to embark on the shores of Aotearoa, the land of opportunities – the land of milk and honey (Matapo, 2019; Samu, 2013; Si'ilata et al., 2018). In the mid-20th century, New Zealand's need for unskilled labourers to help with industrial and agricultural developments meant recruiting from their colonised islands, including Western Samoa. Considering the limited financial and educational opportunities in their nations, this was a welcomed dream for many. Economic and education opportunities that would serve their families, villages, and nations. This saw an inflow of migrants from Pacific nations such as Fiji, Tonga, and Samoa, particularly between the 1960s and 1970s (Ongley & Pearson, 1995; Ferguson et al., 2008). More than fifty decades later, New Zealand became the second permanent home for approximately 382,000 Pacific peoples in 2018, making it the third-largest ethnic population, and still projected to increase to 650,000 by 2038 (NZ Stats, 2018).

2.3.2 How are they placed in New Zealand education?

New Zealand education has encountered various reforms in attempts to improve its place in the global market. Results from the Program for International Student Assessment (PISA) that measures 15-year-olds reading, mathematics, and science literacy every three years show New Zealand is achieving above average among OECD countries (Bolton, 2017). However, the results still show the disparity in learning outcomes between Pacific students (and Māori) and their counterparts (Bolton, 2017). Pacific students are underserved by the present education system featuring at the lowest end of the achievement range (Hattie, 2003; Milne, 2009). Bolton (2017) argued that the country's future economy would be left in the hands of unskilled and unqualified workers if the education system keeps failing Pasifika students.

Various literature claims that the significant role of inequity in the long-standing underachievement of Pacific learners is due to a disconnectedness to their identities and language with which they confidently start education (Si'ilata, 2014; Hunter et al., 2016). Somewhere during their time in primary school, they become detached from their own "cultural values, understandings, and experiences" (Hunter et al., p. 197). For instance, Samoan children's ability to memorise passages from the bible (tauloto) helped practise comprehension and memorisation, which is an unused skill that the teacher in the classroom could utilise to support their literacy programmes (Si'ilata et al., 2018; Tiatia-Seath, 1998).

Another contributing factor to this trend is teachers' and educators' deficit thinking and unconscious bias due to their lack of cultural knowledge and understanding (Wall, 2016; Fa'avae, 2017). While Pacific parents' genuine respect for education professionals keeps them from approaching the school, teachers assume they are not interested in supporting their children's learning. Fa'avae (2017) reported the two assumptions still common in New Zealand: Pacific children's lack of knowledge at school and the parents' disengagement showed a lack of support for their children's education. He argued, "Both assumptions are expressions of teachers' limited understanding of cultural responsivity" (p. 50). Some Pacific parents choose not to interfere based on their belief that teachers know best about teaching their children, and they (parents) should not even question it (Wall, 2016). To be culturally responsive is to understand that parents and teachers have a different interpretation of education (Spiller, 2012, cited in Turner et al., 2015).

Unfortunately, this lack of cultural understanding creates a ripple effect: deficit thinking impacts teachers' expectations, impacting learners' achievement. Milne (2013) pointed out, some teachers blamed Pacific underachievement on students and their families, and these negative beliefs and low expectations are risky to learners' learning and achievement. It hinders efforts to establish positive relationships between schools and parents to learn from each other (Bull et al., 2008). This might also unconsciously reflect racist and discriminatory behaviour contradictory to the curriculum's principles of *inclusion, cultural diversity,* and *high expectations,* as set out in Figure 1.

Figure 1. Curriculum Principles. Adapted from the New Zealand Curriculum (Ministry of Education, 2007).

This review takes the premise that the New Zealand education system has long underserved Pacific peoples and will continue to unless the rectifying policies and initiatives put Pacific peoples at the forefront. Otherwise, despite the intention of the curriculum to provide an equitable, inclusive

education system for all learners regardless of their ethnicity or socioeconomic status, Pacific learners are still marginalised (Milne, 2009; Bolton, 2017; Hunter et al., 2016).

Milne (2009) in her *Colouring the white spaces* article, argued that the dominant culture influences education policies and decisions, undermining the values and knowledge of the minority. This contradicts the 'inclusion' and 'cultural diversity' principles of the curriculum, which state "that students' identities, languages, abilities, and talents are recognised and affirmed and that their learning needs are addressed." (Ministry of Education, 2007, p.9). Milne (2009) asserted that our education system helps produce and perpetuate the culture's knowledge and ideological values that have dominated New Zealand education since the colonial period. It will be interesting to observe what happens if the situation is flipped on its head and that the majority becomes the minority. Will Pacific learners still be at the lower end of the achievement scale?

Considering that Pacific peoples have the most youthful population with a median age of 24 compared to other ethnic groups (NZ Stats, 2018), the role of education should be equipping Pacific learners well for their essential role in the future economic landscape of New Zealand is crucial (Bolton, 2017).

2.3.3 The Ministry's plethora of responses

In the government's attempts to seek responsive strategies for this prolonged disparity, the Ministry developed several initiatives since 1996 (Ferguson et al., 2008).

The first national strategic plan for Pacific peoples' education was the *Ko e Ako 'a e Kakai Pasifika* in 1996 (Ferguson et al. 2008). Two years later, Creech, who was the Education Minister at the time, reported on the positive progress of this initiative, not only in licensing Pacific Islands early childhood groups but with developing networks between families and schools (Beehive.govt.nz, November 20, 1998). This Ministry's special report titled *Focus on education for Pacific Islands people* promised further development and funding support for maintaining its momentum in the following years. However, with the change of government, instead of following up on Creech's report and goals for *Ko e Ako 'a e Kakai Pasifika*, the 2000 Labour-led government released another document, the first *Pacific Education Plan 2001-2006 (PEP).*

The next *PEP* 2006-2010 (Ministry of Education, 2006) was relaunched in 2008 to 'step up' the Ministry's efforts and to extend its time frame to align with "other key education strategies, such as *Ka Hikitia*, the *Early Childhood Education Strategic Plan*, and the *Tertiary Education Strategy*" (Samu, 2013, p. 143). While this seemed great considering that effective initiatives and strategic goals take time to put into practice and evaluate, the government change in 2008 introduced the national

standards policy for Reading, Writing and Maths for primary schools. Consequently, the *PEP* was once again reviewed and revised to incorporate the new national standards (Ministry of Education, 2009). This was the revised 2013-2017 *PEP.* When it was due for review, the change to a Labour government in 2017 saw a time lapse – and the *PEP* extended to cover 2018, and then again in 2019 before the release of the *Action Plan for Pacific Education (APPE) 2020-2030* (Ministry of Education, 2020).

While awaiting the next *PEP*, the Ministry of Education released the *Tapasā: Cultural competencies framework for teachers of Pacific learners* designed to guide and support educators to engage with Pacific learners and their families in learning (Ministry of Education, 2018). About the same time, the Ministry for Pacific Peoples released the *Aotearoa Pacific Lalanga* report, which focuses on initiating a "shift from government-led to Pacific-led solutions" (Ministry of Pacific Peoples, 2018, p. 5). The Lalanga document focuses on achieving its four goals (see Figure 2) through engagement with wider Pacific communities. The vision and goals of the Lalanga are to encourage Pacific peoples to be thriving, prosperous, resilient, and confident communities in Aotearoa New Zealand (Ministry of Pacific Peoples, 2018).

Figure 2. Lalanga goals. Adapted from the Pacific Aotearoa Lalanga report by the Ministry for Pacific Peoples, 2018, p. 9).

Two years later, the *APPE 2020-2030* (Ministry of Education, 2020) document was released with this vision of ensuring "diverse Pacific learners and families are safe, valued and equipped to achieve their education aspirations" (Ministry of Education, 2020, p. 4). This ten-year plan is said to have been informed by a series of fono (meetings) with Pacific learners, families, and communities across the country. It includes artefacts quoting comments and feedback from members of the Pacific communities, voicing ideas and opinions on what they thought could be done to support Pacific learners and their families.

Some of the suggestions include community/family engagement, having more Pacific role models in education, reducing racism and discrimination, valuing relational respect or va, and valuing the learner's cultural identity (and all it constitutes) through culturally responsive practices (Ministry of Education, 2020). Most of these ideas have featured in research literature from respected Pacific researchers such as Samu et al. (2008), Fa'avae (2017), Si'ilata (2014; 2019), and Anae (2019) to name a few. Likewise, these are reflected in the principles of the New Zealand Curriculum (Ministry of Education, 2007), Tapasā Framework (Ministry of Education 2019), and previous *PEP* documents (Samu, 2020).

It is apparent from this review that there may be a missing link in the ongoing monitoring and evaluating process which requires time to consult results and progress with the people involved. While Pacific peoples' cultural values, linguistics, identities, and ways of being are appropriately included in national documents and is monitored to an extent by ERO and via the MOE's *PEP* monitoring programme (and assuming this will be the case for the *APPE* 2020-2030), perhaps their implementation at school level needs further reviewing and monitoring.

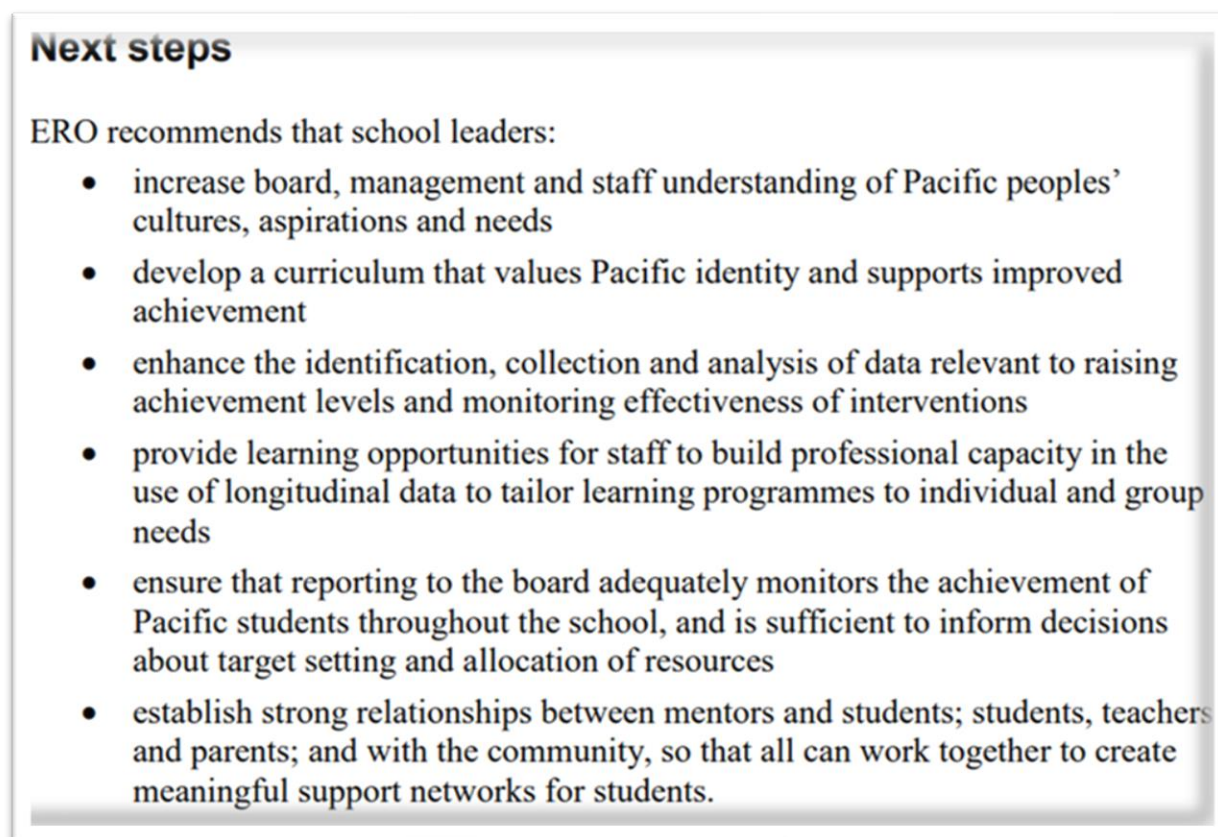
Given that the purpose for Pacific peoples' migration to New Zealand was to seek better opportunities (Samu, 2010; Fa'avae, 2017; Si'ilata et al., 2018), their value of education and the pride in their children achieving success is evident at prizegiving and graduation. Samoan students usually stand out with their lolly necklaces (lolly leis or ula lole) given by their parents and families to show they are proud of their achievement. The teacher also receives a necklace as a gift of gratitude – this part of their fa'aSamoa (Samoan way). As Samu (2010) pointed out, success for Pacific learners is not an individual achievement; it means having the capacity to serve families, villages, and churches in their homeland.

Unquestionably, the narrative of Pacific peoples in education has been greatly influenced by national policies and educational reforms, which have not served Pacific learners as intended. Hunter et al. (2016) reported that Pacific students "are characterised by unenviable statistics; statistics in which a large percentage are underachieving and disengaged within the education system" (p. 197). Albeit the growing plethora of research suggestions and government-funded strategies to help bridge the long-identified gap, statistics show a different story. The following section explores why the Ministry's focused efforts have not impacted on Pacific peoples' achievement in education.

2.3.4 Apparent reasons for unsuccessful efforts

As alluded to earlier, despite various efforts and policies intended to raise Pacific students' achievement, they are still overrepresented at the lower end of the scale. The rest of this review discusses some suggested answers to the previously posed question by examining relevant literature.

The review of the 2012 *PEP* by the Education Review Office (ERO) revealed that only 5 out of 25 secondary schools studied showed Pasifika students achieving at or close to the national NCEA norms (Education Review Office, 2013). It identified five contributing factors to these schools' successes: setting achievement targets, monitoring these closely and reported to the board, engaging teachers with learners culturally, individual mentoring, and establishing partnership with parents and communities (Education Review Office, 2013). These findings set the following six steps for school leadership as set out in Figure 3.



Next steps

ERO recommends that school leaders:

- increase board, management and staff understanding of Pacific peoples' cultures, aspirations and needs
- develop a curriculum that values Pacific identity and supports improved 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.

Figure 3. ERO's recommended next steps. Adapted from Making Connections for Pacific Learners' Success Review (ERO, 2013).

The six identified steps denote time as the correlating factor for ensuring the success of Pacific learners in New Zealand classrooms. A synthesis of the reviewed literature has also identified time as one of the plausible overlapping hindrances to the Ministry's efforts to raise Pacific learners' achievements. The inhibited scope of this review cannot discuss all the details pertaining to each issue, but three points are explored here.

1. Too many top-down directives are not conducive to implementing sustainable changes; it prohibits time for development, implementation, and monitoring processes.
2. Engaging the key stakeholders (teachers, Pacific learners, and parents) in consultations takes time, a vital ingredient for establishing a partnership with all involved.
3. Ongoing engaging collaborations between schools and Pacific communities should be given valuable time and priority.

In the past decades, teachers and school leaders have been bombarded with educational reforms, some of which lack clarity regarding their intentions and implementing processes and time for development (Hargreaves, 2005; Fullan, 2016; Meyer et al., 2020). This is detrimental to the effectiveness of any reform. Twyford (2016) identified uncertainty as one of the barriers to teacher resistance to change as they perceive the risk in taking on ambiguous ideas. This lack of clarity is also reflected in the National Administration Goals (NAGS) and National Education Goals (NEGS), which are the basis for schools' charters and strategic plans (Ministry of Education, n.d.). From the researcher's perspective, such documents are not only open to each school's interpretation, but they are also exclusive of the government's initiatives and goals for Pacific education. For instance, the NEGS amendment in 2004 was only to add regular physical activity to the list of high-level competencies, while *PEP*'s implementation and schools' accountability for its implementation generally fits under NEG 10 (Ministry of Education n.d.). This is the only goal that mentions the Pacific as part of New Zealand's diversity.

The second goal (NEG 2) states, "Equality of educational opportunity for all New Zealanders, by identifying and removing barriers to achievement" (Ministry of Education, n.d, para 2). Thus, indicating that our education system is about providing equal opportunities for all, rather than providing opportunities based on individual needs to remove the barriers for the disadvantaged (Bolton, 2017). Only then will equal outcomes for all be achievable. Milne (2009) called this marginalisation by which all learners receive the same opportunities to learn and achieve goals set by the dominant culture instead of setting goals that provide opportunities needed for everyone to be successful.

It seems that the Pacific learners-oriented strategic goals have been ineffective due to the dearth of time and resources. With any new change, time is crucial. Time to clarify goals and plans, time to consult with the community (which can be a timely process), time to implement strategies, and collect data to inform progress or otherwise. Unfortunately, while the *PEP* series has been around for twenty years, evidence reveals that the minimal improvement over the years equates to nothing, given the rise in the Pacific peoples' population (Coxon et al., 2002). Scholars argued that time and resources are crucial elements for the successful implementations of any educational change, and these need to be prioritised (Bryk et al., 2005; Hargreaves, 2005; Fullan, 2016; Hargreaves & O'Connor, 2017).

Another example of a recent subtle change is the recent directive by the Ministry to replace traditional buildings with MLEs. The lack of clarity on the purpose of this movement, combined with the lack of transitioning time, means teachers are unprepared to take risks (Twyford et al., 2017), and the philosophy behind the subtle erections of such buildings is questionable (Gerritsen, 2015). Time is crucial for all parties to connect their ways of life and learning, particularly in this everchanging 21st century (Education Review Office, 2013; Si'ilata, 2014; Hunter et al., 2016). Time to clarify shared goals is pivotal to developing genuine relationships and shared understanding between schools and Pacific communities which is conducive to achieving desired learner outcomes.

Consulting communities and parents are emphasised in all national education policies and documents, and it is even reiterated in all strategic plans for Pacific learners as the key to raising their achievement. When all involved are consulted on shared visions, the purpose becomes clear and purposeful; genuine relationships and collaboration starts to develop. Scholars define collaboration as the act of all stakeholders within schools, between schools, and beyond schools working together for a common purpose (Tschannen-Moran, 2001; Ainscow, 2016; Rincón-Gallardo & Fullan, 2016). It involves principals, school leaders, teachers, parents, and learners in making decisions that bring about equitable outcomes. Bolton (2017) and Ainscow (2016) defined equitable outcomes as fair and inclusive. This is not the reality now for most communities, given the lack of time and resources needed on the ground level to make this happen (Lee & Ward, 2013; OECD, 2015).

As mentioned in sections 1.2 and 1.3 of the introduction chapter, there is a lack of evidence to suggest that consultations regarding the transition to MLEs even happened in most schools, let alone the Pacific communities that have been underserved for many decades. Hence the purpose of this qualitative study.

2.3.5 Summary

New Zealand education has undergone major changes since its establishment in the 19th century; changes influenced by political agendas and global issues. The turn of the 21st century and its requirements added extra layers to the already challenging landscape of the New Zealand education system. This is due to its multiculturally diverse population, the country's future economy is likely to rely (to some degree) upon the most youthful ethnic group that features at the lower end of the achievement scale.

Unfortunately, instead of developing national policies to rectify the long-standing gap between Pacific learners and their counterparts, education policies have been and are still being influenced by the dominant culture and global trends (Bolton, 2017). Hence, the marginalisation of the minority prevails. Furthermore, while the Ministry’s efforts in developing remedial initiatives are acknowledged, the lack of accountability regarding their implementation, monitoring, and reporting makes them missed opportunities.

Since the erection of modernised learning environments, there have been controversial theories and conversations online, face to face at school, and through personal communications. The scarcity of qualitative research to ascertain how Pacific learners are coping with the changing physical structure and pedagogy of the 21st century education gives scope and purpose to this study. The purpose is to hear the Pacific parents and boys’ perspectives on these modernised buildings and pedagogies.

Chapter 3: Methodology

3.1 Introduction

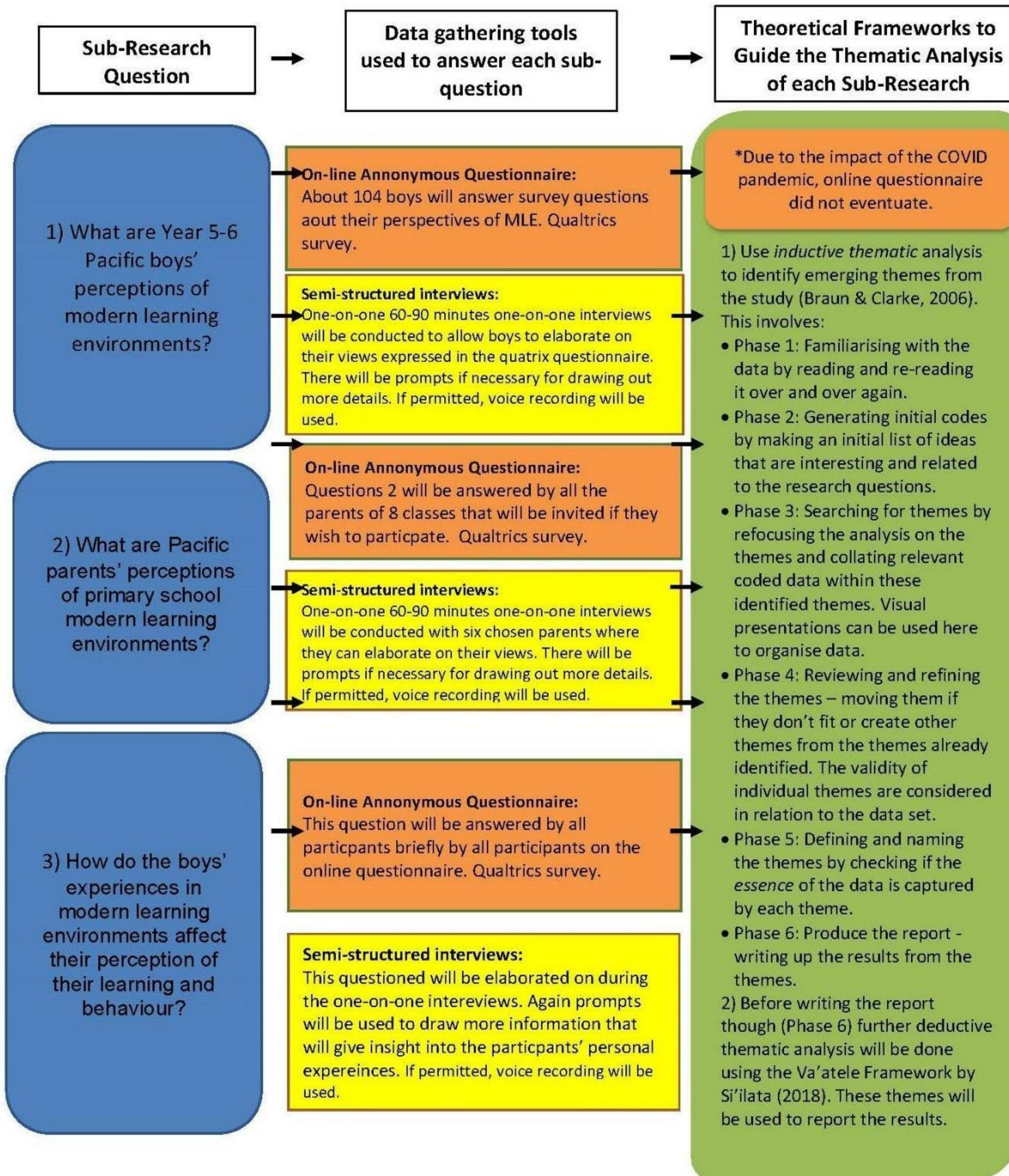
This chapter provides an overview of the research setting, participants, and the overall research design. It outlines the methods used for collecting and analysing the data, including the rationale for participants' recruitment and the selection criteria. An overview of this process is shown in Figure 4.

The main research question which guided the study was: "What are the perceptions of Pacific boys and parents/caregivers about the experiences of the New Zealand primary schools' modern learning environments?" This was explored in three parts guided by these three sub-questions also pictured in the blue boxes of Figure 4.

1) What are Year 5-6 Pacific boys' perceptions of modern learning environments?
2) What are Pacific parents' perceptions of modern learning environments in primary schools?
3) How do the boys' experiences in modern learning environments affect their perception of their learning and behaviour?

At this point, it is worth noting that while the original plan included an anonymous online questionnaire to gauge a wider Pacific perspective of MLEs and to recruit participants, the unprecedented COVID-19 outbreak impacted schools in a way that hindered their participation in this study. For example, the outbreak caused lockdowns and the first phase of the study (online questionnaire) did not occur as intended. COVID restrictions and online learning took a toll on schools' time and the principals either declined the invitation or never responded despite several communications made. Consequently, the three questions were answered by the one-to-one semi structured interview as outlined in the yellow boxes. The online questionnaire, though originally shown in the orange boxes, never eventuated due to COVID. The blue boxes outline the overview of the data analysis framework used. Section 3.2 describes the research setting and the participants, followed by the researcher's epistemological stance in Section 3.3. Ethical considerations are noted in Section 3.4, followed by the description of the research design and methods in Section 3.5 before concluding in Section 3.6.

Figure 4. The planned data collection and analysis process.



3.2 Research setting and participants

The purposive sampling of participants was going to be used to deliberately recruit participants for this study (Kothari, 2004). The sample was exclusive to Pacific boys aged 9-10 years, who were in a Year 5/6 MLE, and their parents or caregivers. This sample would have:

- recruited 2x Year 5-6 classes per school from up to 4 primary schools, identified via the Ministry of Education website as having a high percentage of Pacific students working in MLEs. E.g.; 104 boys (not including parents) would have done the online anonymous questionnaire (13 boys per class x2 classes = 26 boys per school x 4 schools).
- recruited 12 one-on-one semi-structured interview participants by their clicking of the link at the end of the questionnaire before submitting it.

However, the impact of COVID as mentioned previously meant the schools were too busy to support this research; therefore, participants needed to be sourced elsewhere. This required a change in the ethics application and then an independent recruitment drive via churches. Apart from one, three of the four participant schools were recruited through three Pacific dominated churches from different parts of Auckland. All four schools featured below 5 on the decile ratings standard. The Ministry of Education assigns schools in New Zealand with a decile rating based on the socio-economic demographic of the school's community compared to other schools in the country. For example, "Decile 1 schools are the 10% of the schools with the highest proportion of students from low socio-economic communities." (Ministry of Education, n.d). For ethical reasons, the schools have all been given pseudonyms: Contributing South School (CSS) from South Auckland, State West School (SWS) from South Auckland, Environmentally Advanced School (EAS) from East Auckland, and Waikarere School (WS) from West Auckland. Likewise, the participants have also been given pseudonyms. Suggested mediums for interviews included face-to-face, WhatsApp, phone call or zoom. All participants chose to undertake face-to-face interviews in public venues close to their homes.

3.3 Epistemological stance

Considering that the purpose of this study was to investigate and capture Pacific peoples' perceptions and experiences of MLEs, the interpretive research paradigm was used. This enabled the researcher to inquire into issues regarding MLEs observed at schools including her own, the notion that originally sparked the desire for this study. Using the interpretative approach engages participants in conversations and allows researchers to develop deeper understanding of the participants' life-world

experiences (Taylor & Medina, 2013). Punch and Oancea (2014) validate the use of a qualitative approach saying that it is "… by and large, naturalistic, preferring to study people, things and events in their natural settings" (p. 146).

This approach is closely related to the talanoa methodology by Vaioleti (2006) who described it as "… talking about nothing in particular and interacting without a rigid framework" (p. 23). Vaioleti defines '*tala'* as talk, and *'noa'* means nothing, which basically means talking about nothing and about everything. In Pacific meetings, talanoa is used as an ice breaking activity which often starts off by finding out people's names, their families, and their village. This is how participants at any gathering usually make connections and initiate trusting relationships; acknowledging the 'va' (Anae, 2019) or sacred relational space between participants. Given that talanoa is recognised as an appropriate medium for conducting research according to Pacific scholars (see for example: Vaioleti, 2006; Ioane, 2017), the talanoa methodology was deemed culturally appropriate to be used in this study as the tool for developing trust between the researcher and participants. Engaging in the talanoa successfully enabled the process of this qualitative study.

3.4 Ethical considerations

All ethical requirements by the University of Auckland were adhered to and made explicitly clear in the researcher's ethics' application, and throughout the research process (UAHPEC1465).

The participant information sheets (PIS) as shown in Appendix 1, provided a clear and brief outline of the research process. It outlined the benefits of the study for Pacific learners' education, and each interviewee received a small koha at the end of their interview in accordance with the Pacific way of showing appreciation. The koha was a culturally appropriate measure of acknowledging the exchange of gifts during this process where the researcher was gifted with each party's views and experiences. The participants were well informed that their participation was voluntary, and that they could withdraw their participation at any point during the research. The PIS also gave assurance that the school and Board of Trustees would not treat any participant differently, and that their privacy and confidentiality were protected by pseudonyms.

The participants' consent is deemed the most important consideration for social researchers (Bryman, 2012). To reduce the time and complexity for respondents, the online questionnaire (though it was not used) was purposely designed so that it could be accessed via a link included in the PIS. On all forms it was clearly indicated that completion and submission of the forms indicated consent had been provided (thus eliminating the need to download, sign and upload consent forms). Consent Forms

(Appendix 2) for the school principal, church leaders (to access church members), adult participants as well as Student Assent Forms were distributed, signed, and collected by the researcher (for interviews). Only participants who signed and returned their consent forms were involved in the one-on-one interviews.

3.5 Research design

This section gives a detailed account of the researcher's journey in conducting this study, with reference to how unforeseen circumstances were encountered and addressed. For example, the sudden outbreak of the COVID 19 pandemic in the early 2020 causing two lockdowns in March and August had profound effects on the study.

3.5.1 Measures

This was a study aimed to elicit participants' views and experiences, therefore a qualitative approach with semi-structured interviews was selected as a tool for data gathering (Cohen et al., 2002). Literature validates the use of semi structured interviews as the most appropriate tool for engaging participants in conversations (Mutch, 2013; Kallio et al., 2016) through a talanoa (Vaioleti, 2013) for the purpose of discovering people's ideas.

Over the course of the talanoa, the parents warmed up to the researcher, and they then asked questions they had from the PIS. Jones (1985) also endorses, "In order to understand other persons' constructions of reality, we would do well to ask them… and to ask them in such a way that they can tell us in their terms" (as cited in Punch & Oancea, 2014, p. 182).

This phase of the methodology was originally planned for 12 participants, but one parent pulled out at the last minute due to work commitments. Thus, 11 interviewees were undertaken; these consisted of three Year 5, three Year 6 boys, and five parents (see Table 2).

3.5.2 Procedures

Upon gaining ethics approval on the 24th July 2020, the researcher started recruiting participants from schools identified as having a high percentage of Pacific population. The principals were invited by email first and they were asked to email an invitation poster to the Pacific families fitting the recruiting criteria as explained in the Principal's Information Sheet. If the principals consented to their school's participation, they would have been sent the Participant Information Sheets (PIS), with a request to forward it to the families of Pacific boys aged 9-10years. However, due to the impact of COVID, this

part (phase 1) did not occur as mentioned earlier. This means adaptation to recruit from churches needed to be made to the Ethics' committee.

Once approval to recruit from churches was granted, the only religion-affiliated participant school invited the researcher to meet with the interested parents for an informal meeting to inform the parents about the research. This informal meeting was held with some refreshments using the talanoa method by Vaioleti (2013).

The other parents outside of this school emailed me directly to meet up with them, and after spending time answering their questions on the phone, they agreed to take part and indicated their preference of having face-to-face interviews at their chosen venues.

The one-on-one interviews were organised with the first 6 parents and 6 boys who consented and assented. Unfortunately, due to one parent pulling out, only 5 parents were interviewed. Permission for the talanoa to be audio recorded was gained from each interviewee. Although each interview lasted about thirty minutes, using the talanoa approach meant that the actual time spent on each interview lasted up to approximately 60-90 minutes inclusively.

The recordings were then transcribed by a third-party professional transcriptionist who signed a confidentiality agreement to securely dispose of all recordings and transcripts at the completion of their work. Subsequently, the participants were sent the transcripts to check for accuracy and make any changes to the scripts within two weeks of receiving them.

Data analysis:

As mentioned previously, each interview was transcribed and had its own script, and each script was analysed in two phases: first, an inductive thematic analysis and then deductive analysis (Cohen et al., 2002). Kelle et al. (1995) affirms using both the inductive and deductive analyses are essential for data verification. For instance, analytic induction is central to investigating and understanding the world's regularities by firstly generating abstracts from the data, but then deduction helps verify the generated themes or theories (Punch & Oancea, 2014).

Firstly, the transcripts were analysed using the process of inductive thematic analysis (Miles & Huberman, 1994) to identify emerging themes and recurring patterns from the raw data. When the first phase was completed and satisfied, the Va'atele framework by Si'ilata (2014) was used to deductively analyse the identified themes for verification (Kelle et al., 1995). These themes are reported in Chapter 4 and are extensively discussed in Chapter 5.

Inductive thematic analysis

The extensive inductive thematic analysis involved a six steps recursive process by Braun & Clarke (2006) as outlined in the following paragraphs.

1. Familiarising with the raw data:

During this step, the data was read and reviewed numerous times for familiarity and this process took a few days due to reading and listening to the recorded tapes to ensure the integrity of the oral conversation on the written forms. During this process, the researcher kept moving back and forth throughout the process to ensure the validity and integrity of the data is not by any means being misconstrued by the researcher's own beliefs and ideas (Punch & Oancea, 2014). Throughout the process the researcher kept an open mind in welcoming and accepting alternative views (Bree & Gallager, 2016).

2. Generating initial codes:

Once familiarity with the data was established, a systematic coding system to identify initial codes relevant to the interview questions was then developed. For instance, key ideas such as the boys' views, experiences, parents' views, and their advice to other Pacific parents were highlighted. This was also done recursively throughout the entire data to ensure equal and full attention was given to each item. Similar ideas and patterns were highlighted using a colour coding system, which meant all excerpts with the same colour were collated to identify the emerging themes.

3. Searching for themes:

The process of identifying the themes based on the codes was also done in the same recursive manner involving cross checking, going back and forth through the data repeatedly. During this process, coded ideas and patterns identified during the coding phase were grouped into correlated subthemes. After constant reviewing and cross checking, the codes were collated, and potential themes were identified.

4. Reviewing themes:

Reviewing the themes involved going over them repeatedly to ensure that these were what the participants said. Given that the nature of the inductive analysis is looking for patterns in the data that could then be identified as themes, it was extremely important to eliminate any possibility of prejudice which could be detrimental to the data and the results of the study (Miles & Huberman, 1994). A reflexive process was used (Greenbank, 2003) to ensure the emerging themes were not tampered with by the researcher's own values and beliefs. This included thoroughly checking if the themes worked in relation to the coded texts (Cohen et al., 2002), and the researcher also checked further by listening to the interview recordings. At the conclusion of this sequence, the themes merged into a few key

categories with each containing cognate subjects. For example, views on the use of digital devices, communication, and how much the participants knew about the changes in schools.

5. Defining and naming themes:

Continuing from the previous part of the process, the categories were then analysed to determine a key concept that the ideas fitted into. For instance, the statements about using devices and the new ways of learning as well as how the physical spaces had changed were grouped under the *change* heading. The parents' statements about being shy to go into schools to talk to teachers were all grouped under the heading *conversations*. Although this seemed such a prolonged and difficult approach, it resulted in establishing six cognately constituted themes namely: *collaboration, change, conversations, consistency, contextualisation, and cultural responsiveness.* All of which are intertwined as discussed in Chapters 4 and 5.

6. Producing the report:

Prior to writing up the results, the themes were once again deductively analysed using the Adapted Va'atele framework (2018). The use of this framework was credited to its dimensions' concomitants of enhancing education for Pacific peoples. Its use was warranted by the fact this was a study on Pacific peoples and their views of MLEs. The named themes were essentially aligned with the dimensions of the va'a in a bid to ascertain the best way to display information in the form of a written report as set out in Table 1. Once the themes were analysed against the framework, the report was then written accordingly.

Table 1.

Key themes emerged from the deductive analysis. Adapted from the Va'atele framework (Si'ilata et al., 2018).

Va'atele dimensions	**Explanation**	**Themes**
Knowledge (Hull/Va'a)	Foundation of the vessel. Knowledge needed to craft the va'a according to how it will travel.	**CONTEXTUALI-SATION** Modern Learning Environments
Expectations (Mast/Tila)	Connects the hull/va'a with the sail/la –enables it to withstand the strength of the wind and act as a solid base from which to furl the sail.	**CHANGE** Space & Pedagogy
Communication (Sail/La)	Enables the va'a to catch the wind – combining the strength of the hull, and mast, with its height & power of the wind to enable greater speed & success toward the journey's end.	**CONVERSATIONS** Language & Consultation
Strategies (Paddles/Foe)	Advance the va'a when there's no wind, use water to generate motion through which the va'a sails.	**CONSISTENCY** Human Resources & Confidence (in familiarity)
Connections (Platform/Fata)	Connects the 2 hulls so they sail as one vessel, enabling benefits made with one hull to benefit the other.	**COLLABORATION** Connected relationship & Sharing
Partnership (Keel/Ta'ele)	Maintains stability & straight movement despite the conditions – keeping it grounded and secure.	**CULTURAL RESPONSIVENESS** Cultural knowledge of culture & Ways of communication

3.5.3 Evaluative criteria

Qualitative data has the potential to be misconstrued if proper processes are not thought through by the researcher during all phases of the research. Therefore, the following concepts were used to establish the trustworthiness of the study (Pickard, 2013).

Objectivity/Confirmability

The notion of objectivity lies in the researcher's ability to ensure that she (or he) is distanced from the study so that the findings are not influenced by their own values and beliefs (Miles & Huberman, 1994; Cohen et al., 2002). Recruiting from outside the researcher's school attenuated inevitable biases and ensured a relatively high degree of neutrality. However, the researcher acknowledges that there may still be an inherent bias to some degree given that this study eventuated from her own determination to explore the views of Pacific peoples. Being Pacific herself, the researcher used the reflexive approach (Greenbank, 2003) to ensure the data was free from being misconstrued. Confirmability is the assurance that the same findings would emerge if the research was implemented by a different researcher (Pickard, 2013).

Reliability/Credibility

Reliability is when vigorous and constant cross checking of the emerged themes against the raw data is done to ensure that the recorded data matches the reality in the world or context of the research (Cohen et al., 2007). It is about the trustworthiness of the collected data. Therefore, the coded themes were repeatedly reviewed against the raw data and the recorded audios to confirm that these were unbiasedly extracted. Ensuring reliability is extremely important considering some of the issues uncovered from this study were closely related to issues pertaining to the underachievement of Pacific learners as reviewed in the literature review. Its credibility was ensured by allowing time for the participants to check the accuracy of the transcripts.

Validity

Regarding the validity of this study, this will be measured on the "extent to which the measure achieves its aim" according to Hinds (2000, p. 42). The use of the inductive method of analysis and the deductive process using the Adapted Va'atele framework validated the theories generated from the study. In terms of validity, though the sample is small, the participants were a good representation of the Pacific demographic given the rate of diasporic Pacific communities within the Auckland region. For instance, of the six student participants, three were Samoans (highest Pacific ethnic group), two Tongans (second highest), and one from Kiribati, thus making its findings more generalisable to the broader Pacific population.

Moreover, the study's conclusion is relevant to the experiences of parents and Pacific learners as reported in some other studies and literature reviews, albeit on different education topics. The participants will benefit from the schools' heightened awareness of the impact of modernised learning on students and families despite their silence. For instance, based on these findings, schools can rethink their strategies and approaches used to connect with Pacific learners, their families, and the community (Ministry of Education, 2018; 2019; 2020).

3.5.4 Conclusion

This chapter has summarised the research design and the methodology employed in this study. It has outlined the methods used for collecting and analysing the data, and the evaluative process taken to validate the study. The key themes identified here are reported in the next chapter, the Results Chapter.

Chapter 4: Results

4.1 Introduction

This chapter reports the results of this study beginning with a summarised overview of the participants in Section 4.2, followed by the presentation of the analysis of the data collected from semi-structured interviews held with both the boys and parents in Section 4.3. The chapter is concluded with a paragraph summarising the overall key themes that emerged from the data in Section 4.4 which are then discussed in Chapter 5.

4.2 Participants

As described in the methodology chapter, this qualitative study was originally formatted into two phases. Phase One involved completing an anonymous online questionnaire, whilst Phase Two involved undertaking one-on-one interviews. As mentioned in Chapter 3, Section 3.1, the online questionnaire's objective was to gauge a bigger picture of the larger Pacific demographic about MLEs; at the same time, recruit one-on-one interviewees for Phase Two. However, the research participants' recruitment proved frustrating due to the unprecedented outbreak of COVID 19 in 2020.

By the time approval was granted for the research to start, the second outbreak of the virus caused another lockdown in August, which resulted in declined access to invited schools. In addition to the schools' refusal to participate in the study, a significant element of cultural responsiveness played a huge role in this unsuccessful recruitment, which is one of the themes discussed in Chapter 5. Nonetheless, 11 interviewees were very happy and willing to have a face-to-face interview.

The participants consisted of three Y5 boys, three Y6 boys, and five parents, all of whom were females aged between 41-55 years as detailed in Table 2.

Table 2.

Participants' details.

Ethnicity	Participants	Age/Year
Tongan	Alofa	41-55yrs
Tongan	Ofa	41-55yrs
Kiribati	Ela	41-55yrs
Samoan	Cindy	41-55yrs
Samoan	Donna	41-55yrs
Samoan	Michael	Y5
Tongan	Sione	Y6
Tongan	Fale	Y6
Kiribati	Kevin	Y6
Samoan	Iose	Y5
Samoan	Lui	Y5

As mentioned in the previous chapter, the participants were recruited from four schools, three of which were through church organisations. The four schools are all in Auckland: two from South Auckland, one from East Auckland, and one from West Auckland. These schools and participants have all been given pseudonyms to protect theirs and their schools' identities as shown in Table 3 below. Five parents of the student-participants participated in the interview instead of the six as originally planned because one parent opted out.

Table 3.

Participant schools' details

Participating Schools (Pseudonyms)	Abbreviations
Contributing South School, Y0-Y13	CSS
State West School, Year 0-6	SWS
Environmentally Advanced School, Y0-6	EAS
Waikarere School, Y0-6	WS

4.3 Data analysis

As outlined in the methodology chapter, an inductive thematic approach (Miles & Huberman, 1994) was used for the initial coding to identify recurring themes from the data to answer the main research question. Several broad themes emerged from this initial coding and repeating this process a few times emanated five key themes and eleven sub themes as shown in Figure 5. These identified key themes were further analysed to ascertain the common views between boys and parents and to confirm the themes' validity. The Adapted Va'atele framework was then used to analyse the themes further, using the deductive analysis approach as shown in Figure 6.

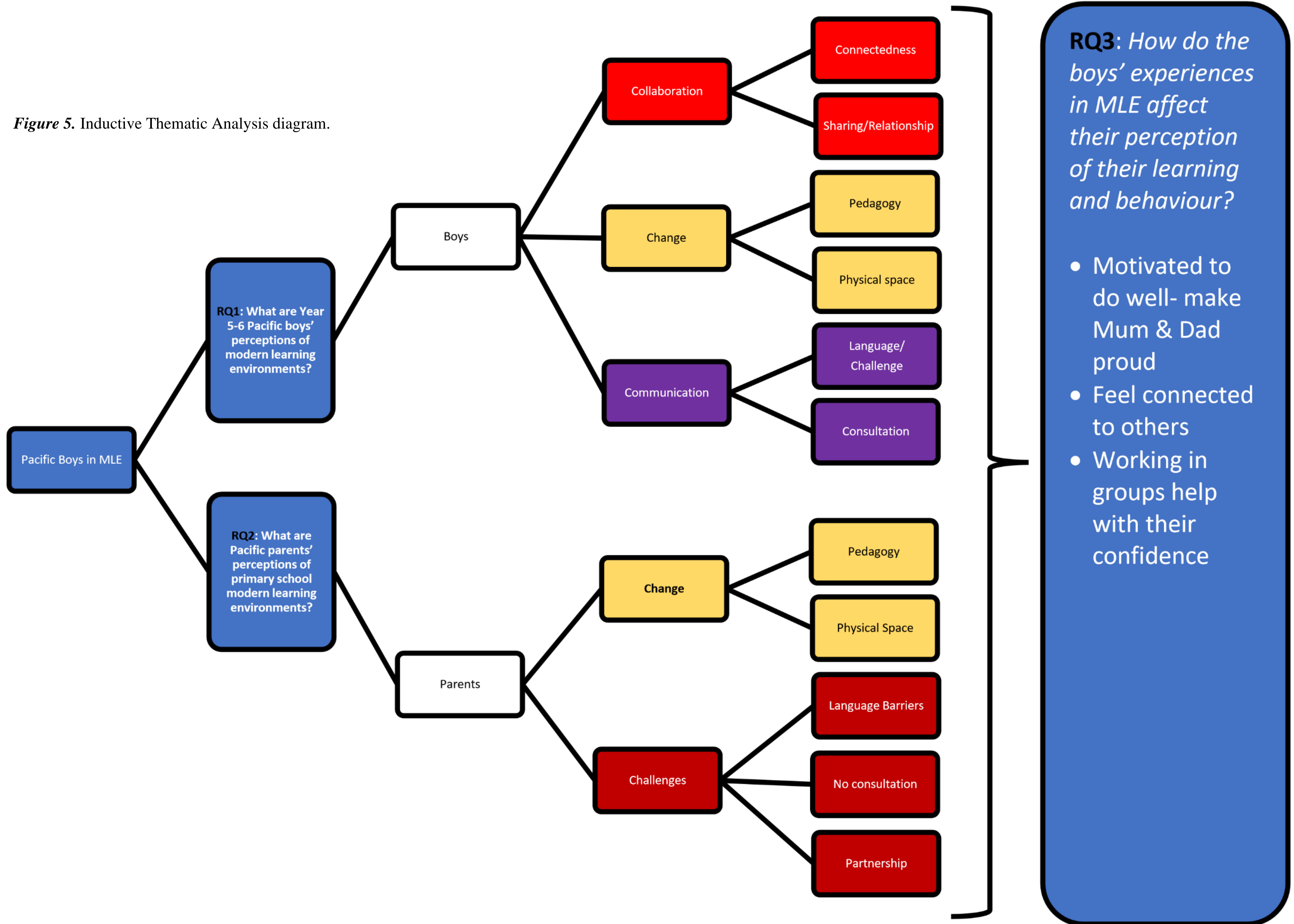
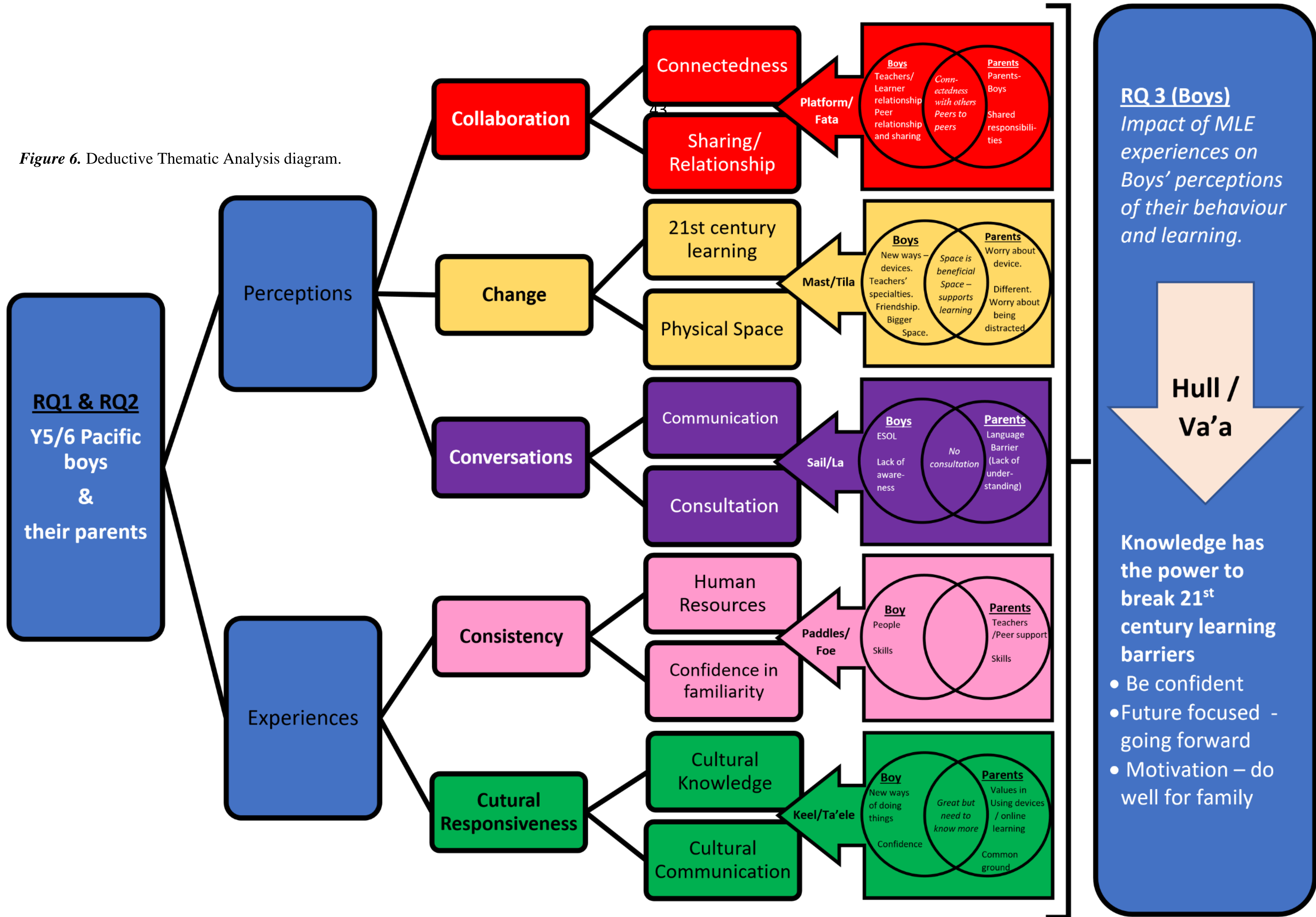


Figure 5. Inductive Thematic Analysis diagram.

Figure 6. Deductive Thematic Analysis diagram.



The major themes identified were *contextualisation (knowledge), change (expectations), conversations (communication), consistency (strategies), collaboration (connections), and cultural responsiveness (partnership),* which were again analysed using the deductive approach through the lens of the Va'atele framework (Si'ilata, 2014) as shown in Figure *6.* A further analysis of the themes and cross checking between the raw data and the identified categories are set out in the Adapted Va'atele framework (see Table 4).

Table 4.

Key themes resulted from the deductive analysis.

Va'atele Framework's dimensions	Explanation of each dimension	Major themes from data Sub-themes	Research Question 1 What are Year 5-6 Pacific boys' perceptions of modern learning environments?	Research Question 2 What are Pacific parents' perceptions of modern learning environments in primary schools?	Research Question 3 How do boys' perceptions in modern learning environments affect their perceptions of learning and behaviour?
1. Hull/Va'a: Knowledge of Pasifika learners Knowledge	-Foundation of the vessel. -Knowledge needed to craft the va'a according to how it will travel.	**Contextualisation** Stakeholders' knowledge of MLEs	• Lack knowledge and understanding of MLE's purpose, what is expected… but like/enjoy what they experience	Advice for parents to be involved in children's education – based on developing knowledge and understanding contextualised by the study.	**(Future navigation)** Advice for boys: • *Future navigation* • *Motivation – make Mum proud* • *Self-identity/confidence*
2. Mast/Tila: Expectations of Pacific learners Expectations	Connects the hull/va'a with the sail/la – enables it to withstand the strength of the wind and act as a solid base from which to furl the sail.	**Change:** • New ways of learning (21st century pedagogies) • Physical Space (connects ways of learning and space)	• Using devices is good • Teachers' specialising in different subjects is good for learning • Bigger space means we can have more people – good for making friends and learning support • Bigger space is good for art and performance	• Good for children to learn what they need to / though different ways • Good to use devices but not too much • Space is good for learning • Confused – not sure what to expect • Worried that big space can be distracting for boys	
3. Sail/La: Knowledge of Pasifika bilingualism, second language acquisition, literacy learning Communication	Enables the va'a to catch the wind – combining the strength of the hull, and mast, with its height & power of the wind to enable greater speed & success toward the journey's end.	**Conversations:** • Language • Consultation	• ESOL – Using own language and learning new language. Want to learn English language • Challenge – lack language skills • No consultation – not fully aware of what is happening (Key to connecting all essential elements of partnership)	• Lack understanding due to lack of English language skills • No consultation – trust that the school knows what they are doing • Parents find out about things at parents' interviews / from others / from own children	
4. Paddles/Foe: Use of instructional strategies including Pasifika languages as resources for learning. Strategies	Advance the va'a when there's no wind, use water to generate motion through which the va'a sails.	**Consistency** • Change (support) • Confidence (child's confidence)	• Consistency of teachers - When one teacher is away the other teachers are still there – helps with confidence • Peer support - having others to help with learn gives confidence to learn new and challenging things • Consistent with cultural / personal experiences	• Pedagogy - new learning is helpful but challenging, boys need it to keep up with 21st century education • Physical Space – helpful but challenging re distractions • Build on children's cultural values and strategies to advance learning… connect with others • Confident in son's ability	
5. Platform/Fata: Supporting Pasifika connections with text, world, language and literacy knowledge. Connections	Connects the 2 hulls so they sail as one vessel, enabling benefits made with one hull to benefit the other.	**Collaboration** • Connectedness • Sharing/Relationship	• More teachers give more support when we are stuck • Being connected to others help the boys with their confidence • Sharing ideas is very helpful especially when learning new things	• Teachers and learners' relationship / reciprocal relationships • The boys share responsibilities; they look out for others which is great to see • Help each other learn	
6. Keel/Ta'ele: Partnerships with Pasifika families/aiga and community knowledge holders. Partnership	Maintains stability & straight movement despite the conditions – keeping it grounded and secure.	**Cultural Responsiveness** • Culture (perspectives) • Communication	• New ways of doing things • Great but need to know more • Speak in own language	• • Great but need to know more • 1 & 2. Hard to communicate with teachers and schools	

4.3.1 The research data

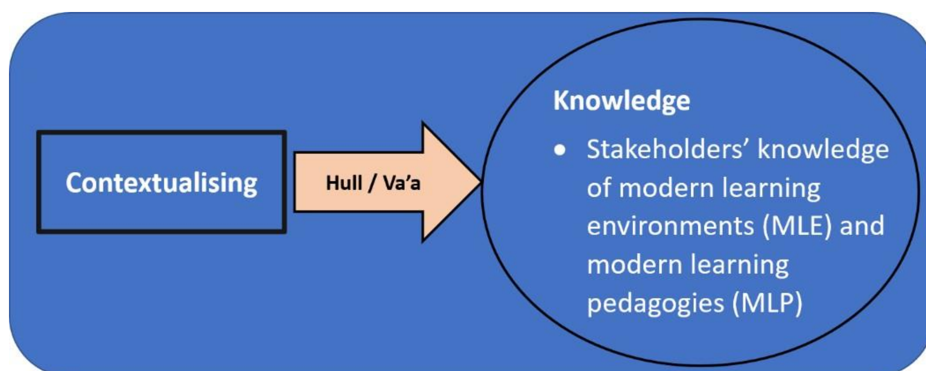
Figure 6 and Table 4 laid out the key themes and subthemes that derived from the qualitative data, guided by the three sub questions (see Chapter 3, Section 3.1).

Using the talanoa approach, research question one (for the boys) and two (for the parents) were explored in three parts:

1) Their views of MLEs
2) Their experiences of MLEs
3) Based on their experiences, would they recommend modern learning environments to Pacific learners and their parents? What advice would they give them?

The participants' responses were then organised and reported in the following sections under the key themes relevant to the six dimensions of the Adapted Va'atele framework as shown in Table 4. Given the nature of talanoa, the semi-structured interview did not follow any sequential order; in fact, some of the responses are interchangeably reported throughout the chapter.

4.3.1a Theme one – Knowledge (Hull/Va'a): Contextualising



As previously mentioned, using the Adapted Va'atele framework helped put the recurring themes into context, while determining if the goals of the current APPE, the Tapasā's competencies, and strategies for enhancing Pacific learners' achievement are reflected in the views of the participants. The latter (the participants' views) will be discussed in the discussion chapter.

Contextualisation: knowledge

The use of the Adapted Va'atele framework contextualises the ideas of modernised learning regarding its tangible and intangible elements. For example, the double hulls represent the two groups of stakeholders, (i) schools with teachers in one hull, and (ii), students with their families in the other. In

other words, the double hull represents home-school partnership. Critical in this is the knowledge held by all stakeholders which enables them to understand each other's perspective. Each hull is connected to the other by the platform (fata) symbolising collaboration and the connectedness among the stakeholders, and the inherent interaction that helps them navigate both the tangible and intangible elements of modern education. The following paragraphs report on what the participants know about this modernised phenomenon: modern learning environments (MLEs), and modern learning pedagogies (MLPs) conducive to 21st century learning. The participants' perceptions of these two elements are reported in the theme two section. The following paragraphs report their views and experiences of MLEs.

Regarding knowledge of the 21st century and the changes it entails, the data analysis surfaced an interesting, yet not surprising theme. The interviewees accepted the idea of modern learning spaces and viewed the new ways of learning as appropriate and exciting.

> Donna: "Yes, I think to me I like how it's putting my children in an advanced learning environment… he is wanting to be an IT and that is like a huge difference from my 12year old."

> Cindy: "It is quite positive; my son is quite comfortable using the netbook and navigating through the blog."

However, it was obvious that prior to this research, they did not fully know or understand what this change entailed. For example, when the parents were asked to talk about what they thought about MLEs, some said they first heard about it from the researcher's information. Some admitted they noticed the spaces were bigger, and the ways of learning were different, but did not know what these environments were called and for what purpose. Donna said:

> "I just heard it now. I didn't know it was called MLE, but I have always had that feeling that it is modern technology, but I didn't know."

Similarly, the boys did not know a lot about these environments, but they recognised that these open spaces helped them learn better. For example, two very excitedly said the idea of being with others and having their friends in the same class meant they could always be helped with their work. These boys reported:

> Lui: "It is great because my friends are there, and they are always beside me to help me with my work. They are always with me when there's trouble and we always do some things together."

Michael: "It is safe to go to school because I can meet other classmates in other classrooms. I can talk to other people."

It is clear from the boys' responses that they view these spaces as a place to make friends and help with their learning because they can work with other people. Besides knowing about the benefits of the bigger spaces in MLEs, and the imposed use of technology devices, the findings indicate that the participants lacked knowledge concerning the purpose for such recent developments. In fact, the talanoa held just before conducting the semi-structured interviews helped the participants contextualise the connections between MLEs and the changes they were encountering. Having the talanoa allowed space and time for questions and answers while at the same time developed trust between the researcher and participants (Ioane, 2017). While these necessary conversations took place on the day of the interviews for some, the researcher had the opportunity to hold an information afternoon upon invitation from the only school that responded to the advertisement. This, according to the meeting's attendees, was the first time they heard these environments explained.

When asked to talk about their thoughts on modern learning environments, three out of five parents agreed that the change was necessary for the new generation. They responded:

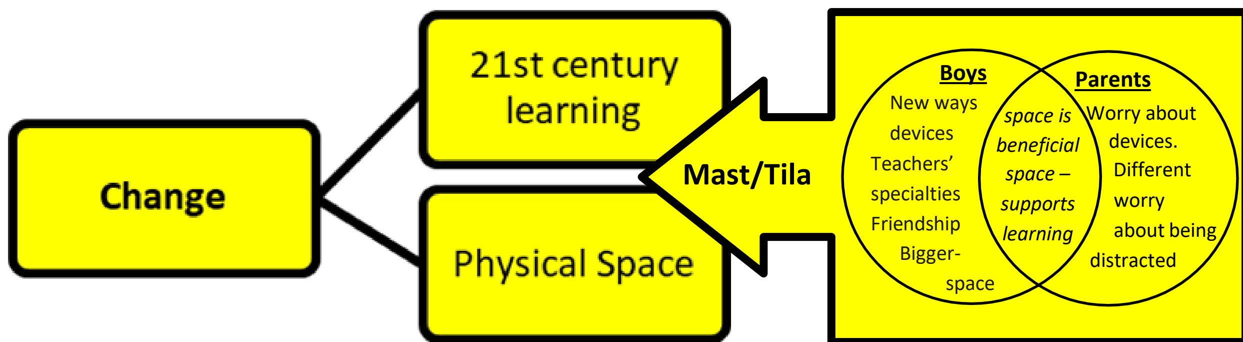
Donna: "I think now because our kids' generation are more advanced. So, to me it is helping my son in a way where he gets to learn and get help with his learning. For example, he does have a good goal programme at school; a lot of study, and he has been studying maths, reading, and writing there. So, it [MLE] really does help him."

Ofa: "For me it is really good because for my boys they want to learn more... so when they meet, they learn more."

Alofa: "Right now, I can see it. I prefer the modern learning environment because the little kids like it. It has more space, and they work in teamwork. So, they share ideas and so they can get to know each other."

The responses from these parents are indicative of how little they know about their sons' learning environments. Their excitement and approval of these spaces are seemingly based on what they thought about learning. For instance, that it was socially constructed (hence their comments about the space), and that it is advanced so MLEs were good for helping their sons with their learning. The following section (Theme Two) will elaborate more on the expectations associated with working in MLEs: MLE (Physical Space) and MLP (21st century learning).

4.3.1b Theme two – Expectations (Mast/Tila): Change



Change – expectations of the 21st century

Just as the mast/tila "…connects the hulls/va'a with the sail/la, enabling it to withstand the strength of the wind and to act as a solid base from which to furl the sail" (Si'ilata, 2014, p. 257), the changes regarding modernised spaces with modernised ways of learning are expected to be understood by education stakeholders. The most vulnerable people in this equation are the Pacific learners and their families. Thus, understanding and familiarising with these new ways of learning is important for them if they are to withstand the challenges of change. The following section delineates the participants' experiences and views of the expectations embedded in the 21st century's new ways of learning and modernised environments.

Changed pedagogy (MLP)

As mentioned in the literature review, education in the 21st century has changed; for example, the ways teachers teach and how learners learn. All boys indicated that the changes to the education landscape regarding the new pedagogies helped them learn better. They were unanimous in the view that these new ways of learning, having a choice in what they wanted to learn, and having different teachers teach different subjects were very helpful to them. They all agreed that the combination of these helped them learn new things they had not learned before. For example, being given a choice of what to learn and who to work with helped them develop confidence to get better at learning basic and harder stuff. For example, when asked what they thought about learning in MLE, some responded:

> Sione: "Pretty good. It is good for me to learn new stuff that I haven't learnt before. There are times when there's like independent work that I want to finish off and like to do my favourite subjects. So, you can be in a group of ten. They can be learning what they want. "

> Fale: "I think it's good because it can help me learn. It helps me think better and learn more… like the stuff I've improved."

Sione and Fale acknowledged that working in MLEs helped them learn more about taking responsibility for their own learning and choosing what they should learn. All the boys preferred teachers teaching different subjects, and children learning things they needed to know and doing things differently. This reflects one of the modern learning pedagogies about encouraging student agency or the idea of learners learning to self-regulate where they reflect on what they need to learn and setting their own goals to achieve (Wright, 2018). For instance, they could choose what they would like to learn based on their goals, and they could choose easier work if they found the work harder, or harder work if they wanted to learn more. Sione gave an example of this saying:

> "So, if there is a subject for Pasifika boys like some Pasifika boys that have trouble learning English, it can be a subject for them to learn and then the other half of the class could do what they are doing."

According to the participants, they felt their learning had improved since the change to MLEs because there were more teachers, which was helpful, and choosing what they wanted to learn motivated them to learn more. As two boys illustrated:

> Kevin: "I kind of feel confident when the teacher comes and looks at your work and she wants to help you."

> Fale: "MLE is good for my learning because it helps you learn heaps more stuff. It helps me with harder stuff. So, like if I don't know the question then I just like to go back to an easy one and just keep going until I figure out the hard one."

Another common aspect of MLP reportedly acknowledged by all the participants was that modernised ways of learning were understandably inevitable, which included learning to use technology. The parents expressed their desire for their children to do well at school and in the future and therefore, supported their children being introduced to the use of devices and the modernised learning styles. Two parent participants commented:

> Donna: "It is really important for them because as we progress to advance in the future, everything will be technology, everything we will do is to do with modern learning and to have that opportunity to learn from a young age, they will be able to be successful. They will be able to achieve the goals and also because I see this as an experience where I never had a chance. So, I would love for our future generation to be successful."

Cindy: “It is quite positive; my son is really comfortable using the netbook and navigating through the blog. He likes to blog about his work and knows what he is doing on the netbook and where to get his learning.”

Regarding the use of devices, only one boy mentioned anything about it, which may indicate that the change in the physical space and its social capacity rated higher on the boys’ views than technology. Interestingly, while the parents were very supportive of the new ways of learning, they were concerned about their sons’ use of technology or devices. While they all admitted that pedagogical change was necessary, three out of five raised concerns about their sons’ potential overexposure to devices. They acknowledged the new ways were very different to the education they knew, and this generated a sense of excitement and anxiety. They freely admitted that they were excited that their children were able to use technology, but they were majorly concerned about their (parents) inability to provide support or to monitor online content their children accessed. Moreover, they were troubled by the amount of time their sons spent on devices, saying that it would be alright if the use was limited to school. Two interviewees reported:

Alofa: “It is good to use technology, but I think sometimes they are depending on the technology. It is okay, but I know for sure they only need it sometimes. I don’t feel they should be too much on technology. They need some writing by hand.”

Ofa: “Just one thing about the device: when they do their homework on the chrome book, they explain that it’s good. It is different if they use paperwork when they are coming home to do their homework, but now they use chrome book devices a lot. So sometimes I want them to spend their time doing their writing on paper.”

Ofa’s other concern was due to her not being able to support or monitor her son’s online activities. For instance, she was worried about what he was doing and seeing on the internet. She expressed an awareness of how different these days were to her old days, and she worried about the current generation being too smart to go to places on the internet where they should not. For this, she heavily relied on her older son to check up on his younger brother’s work and what he was on. She said:

“That is why I don’t trust them (devices) for my son because the kids nowadays know everything. You don’t want them to go there but they are there. They are smart.”

The Physical Space

Regarding the tangible element of modern learning environments, all boys agreed that having a bigger space is beneficial to their learning. For instance, they preferred working in MLEs where they are taught by more than one teacher, which they thought helped them develop self-confidence and to achieve good grades. When referring to the bigger spaces, Lui said, “So, I think it would be great to have a big hub with many teachers for kids to learn.”

When asked if they thought MLEs were good for Pacific learners, the boys’ responses endorsed the bigger spaces as more beneficial for communal learning activities. This reflects the value of extended families and community approach, one highly regarded by Pacific peoples which focuses on group or community achievement over individuals. As Lui put it:

> “It’s good for children to learn and get good grades because I don’t want myself to only get a good grade. I want my friends and everyone to get good and excellent grades.”

Furthermore, when asked if they would choose MLEs for new classrooms if they were principals, all boys except one endorsed these types of classrooms because of the spaces they afford. Kevin agreed saying, “… because there’s more space.” Iose also said, “I think we have enough space to do our learning.”

Regarding the social aspect of these physical spaces, all participants including parents asserted that the bigger space allowed them (the boys) to do things together as a big group such as cultural performances and whole class presentations. Iose said, “Big learning space for diorama learning, our diorama work.” From a parental perspective, Ofa added “Yes, because they know their culture and they can perform in the big space.”

Additionally, making friends and feeling connected to others is another benefit of MLEs according to the data. The student respondents favoured being in the bigger space because it meant they could work together with their friends to help each other. Lui shared how he would go up to them if he needed help and vice versa. He recalled helping someone saying, “I helped him by showing respect and then I gave him a speech to cheer him up.”

Interestingly, Lui’s positive view of these modern learning spaces was supported by only two parents out of the five interviewed, albeit they all embraced the modern learning pedagogies. One of the two who expressed support for MLEs reported how happy she was about her son being in the big space, and she was not concerned at all. They thought that the open-space classrooms were good for boys because these encouraged teamwork and students’ relationship building. As Alofa put it, “Sharing as

a team with encouragement, teamwork, and sharing ideas in the big space means they can get to know each other."

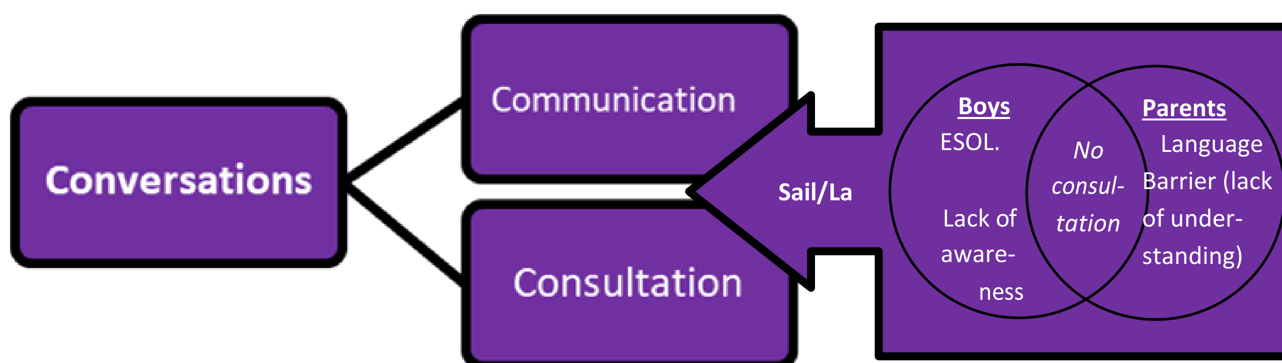
On the contrary, two respondents were not fully convinced that the big spaces were beneficial to students' learning. They expressed their concerns about the boys getting distracted in a crowded space. For instance, when asked if they thought MLE or single cell classrooms were better for Pacific students, Ella responded, "The single one [classroom] so they can concentrate on something." Clearly, Ela's response assumed her preference of single cell classrooms despite admitting that MLEs with bigger spaces are the future classrooms. It has become apparent from the parents' responses that while they acknowledge open spaces as good for communal learning, there is an existing degree of concern about distractions that could occur.

This concern is evident in two boys' admissions about getting into trouble for being distracted and not completing their work. Kevin said, "One time when me and three other people were working together in Maths, we kept on talking and after that we had to stay in at lunch to finish it." He admitted that albeit getting into trouble for talking, he preferred the bigger space where he had more peer support.

Another interviewee, Iose, was quick to say he would choose a single classroom when asked what types of classrooms he would choose if he was a principal. His rationale was that sometimes the noise in MLEs was too loud. He also suggested that people who are distracted easily and play around a lot should be in single classrooms.

Overall, there is evidently a mixture of views by the participants about MLEs physical spaces. On the one hand, some think these bigger spaces could be detrimental to learning due to the level of noise and social distractions. On the other, they all acknowledged that these current spaces are conducive to the new ways of learning.

4.3.1c Theme three – Communication (Sail/La): Conversations



Conversations – Learning conversations & Consulting

This concept is likened to,

> "…the sail/la that enables the va'a to catch the wind - combining the strength of the hulls/va'a and mast/tila, with the height of the sail, and the power of the wind to enable greater speed and success toward the journey's end." (Si'ilata, 2014, p. 257).

This theme emphasises that communication is the link that connects all stakeholders, enabling success through shared knowledge and understanding of educational concepts and processes. Effective communication is an essential element in any setting including, and perhaps most importantly, larger settings such as MLEs where two or more teachers work with up to sixty students. Being able to communicate orally (speaking and listening) strengthens the connection which empowers everyone involved to succeed in the task. This oral communication (from experience) is perhaps the most preferred way of communication by Pacific families.

These next few sections report on how the participants viewed their experiences of MLEs using two sub questions: *'Have you ever had any negative experience in MLEs?* and, *'What advice would you give to Pacific parents or students about MLEs?'* This theme was explored in two ways and are explained under the subthemes: *Learning conversations* and *Community consultation*.

Learning conversations

The data analysis identified possible challenges which hindered effective communication between the boys and teachers, and parents and the school. Hindrances such as language barriers for English for speakers of other languages (ESOL), and the disengagement between the boys and teachers due to the high number of students in one space. These points are interchangeably reported in the following paragraphs.

Firstly, engaging in learning conversations for ESOL learners can be quite challenging especially for the first and second Pacific generations for whom their main medium of communication may be their mother tongue. Although the boys did not specifically identify a lack of communication in these spaces, their responses indicated a degree of negativity when asked what advice they would give to other Pacific boys and their parents going into MLEs. Speaking from experience, they thought these spaces would be unsuitable for people who are not good listeners, but good for people who are not confident in speaking English. For example, Sione said:

> "It is good for them [Pacific boys] to learn the language of English and they can probably use it in their future. Like instead of them talking their language and then like other people have no idea what they are saying, it's good for them to learn the language of English."

Typically, Sione's response is indicative of how ESOL children and families perhaps view the challenging impact of not being able to speak English that is understood by others. Thus, suggesting the importance for Pacific students to learn the English language according to Sione. This challenge of conversing in English recurred in the parents' data in which one participant admitted to being embarrassed to speak to the teachers or in front of groups in the anticipation of saying something wrong. Hence, this finding suggests that parents' minimal involvement and awareness of what happens at school can be perhaps narrowed down to the impact of language barriers and their ripple effects. Ella's (parent participant) response illustrated this when she answered:

> "When I went there, they just had one class and when the teacher asked me questions, I didn't want to answer because otherwise they would hear me wrong. Yeah, that is what makes me shy."

From the parents' perspectives, their strategy for overcoming this barrier was to ask their own children or other parents about the events or the happenings at school. For example, Ela reported that sometimes she learned about school events including when her son transitioned to an MLE from others. Unfortunately, for her though, her younger daughter is a more reliable source than her son. She said:

> "I can see the difference with my girl… she talks more than her oldest brother. She is the one who tells me everything about what happened at school… she is the one that reminds me of everything."

Another parent recounted the time she went to a meeting, and she just sat there listening and agreeing to what was said because she could not ask questions or talk clearly. These thoughts were commonly

shared by most of the parents for whom communication is also challenging and have become reliant on their children for information and clarification.

Interestingly, although the student participants did not identify communication as problematic, there is an obvious sense of disappointment in their responses because communicating with the teachers was sometimes hindered by the number of students in MLEs. When asked to talk about a negative experience they encountered in MLEs, two boys recalled waiting for the teacher to help them, but they ended up asking other students for help because she was too busy helping other people. Iose reported:

> "I was nervous because when I have to do some problems I don't know and I have to tell the teacher, but she's busy all the time and I don't know what to do."

Additionally, there is a hint of worry from the parents about their sons' abilities to communicate confidently in English as well as their own language. Ela expressed a concern for her son being in a big MLE in that he might be too quiet and not talk; but she was optimistic that being in there might get him used to it.

This section has highlighted perhaps the most significant finding of the study, the role of conversations in education for Pacific learners, which has been inadvertently barricading the lines of communication for Pacific peoples far too long. The data analysis disclosed communication as a barrier to learning, due to not being able to speak or understand English causing embarrassment and confusion on the parents' part. As for the boys, the frustration is due to the potential distractions caused by overcrowded spaces. Overall, the findings indicate the importance of being able to communicate with everyone involved in the education of Pacific learners. The following section reports on how the participants viewed their experiences and views on how they schools consulted their community regarding MLEs.

Community consultation

Secondly, the data unearthed an obvious concern that the consultation opportunities between the schools and their communities might be lacking. From most participants' views, their English skills and ability to articulate oneself caused them to feel inadequate to partake in learning conversations with teachers. The analysis reflects the innate complexity of community consultation for schools, particularly, for diverse communities with existing language barriers. Effective community engagement relies on consultation (Erdener & Knoeppel, 2018), which can only occur if schools identify and remove communication barriers (Humphrey-Taylor, 2015). The next paragraphs endeavour to explain the participants' preferred ways of being consulted.

From the outset, the participants made known their preference of having face-to-face meetings. During the preparation phase of the study, all participants were asked to choose their preferred medium for the interviews from these options: phone calls, WhatsApp, Zoom, and face-to-face. Not surprisingly, everyone chose to meet in person for a talanoa, which is a concept widely used by Pacific peoples. For example, in the fa'a-Samoa (Samoan way), before making decisions on anything, the authoritative figures such as the chiefs (matai in Samoa) call for a meeting. A message to assemble all the family members for a talanoa about the decisions to be made or to discuss an issue, is circulated by a noteworthy person. Hence the Samoan saying, 'Se'i fono le pa'a ma ona vae' which translates 'the crab needs to consult its legs because the crab itself cannot move unless the legs move.'

The study revealed that the missed consultation opportunities may have been a result of a breakdown in communication between the schools and parents. For example, when asked about when they first heard of MLEs, all participants could not recall hearing the term; however, they did notice that the classrooms were very different to what they thought. Some parents said they first saw the new spaces at parent interviews, while others said it was either when they were asked to come in to look around the school or at parent evenings. Cindy reported:

> "I think just now…but I didn't know it was MLE. But to me, I have always had the feeling that it is modern technology, but I didn't know. I was shocked. I don't know why they have done it. So that is my question, why have they done it like that?"

Furthermore, two parents from two separate schools said they did not know about what classrooms their sons were in until they went into the schools for something as they usually just drop off or pick up their sons. Essentially, they could not recall ever being told about it. Yet another interviewee said she had not been in her son's MLE classroom, and she found out about it from someone else. Donna explained:

> "I was shocked, and when I asked them, they said, 'Oh don't worry, we have our own space and our own group and students within our class'. And I said, but that never happened before."

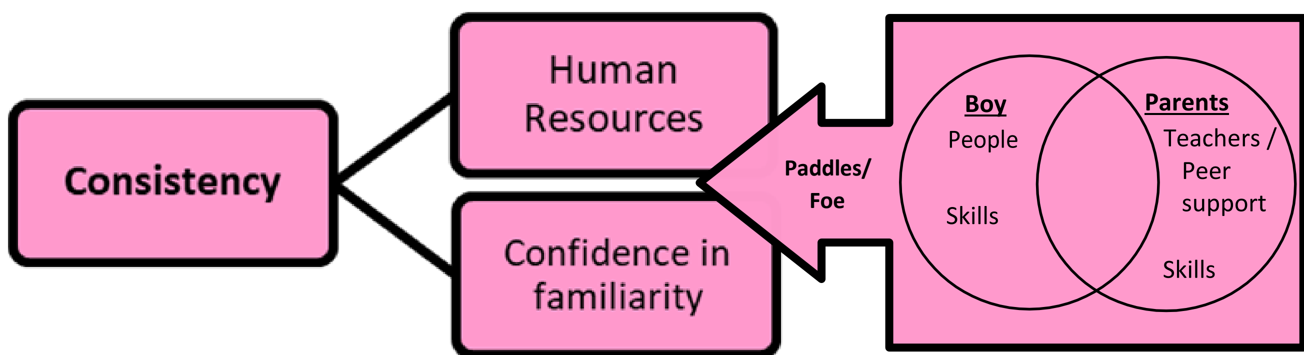
This dearth of communication is reflected in Ela's sad expression when she went to see her son's teacher and was confused about who to talk to. She elucidated:

> "Yeah, so sometimes when I came there was a different teacher, I thought it was the same one he had. So, I can't even ask her how his progress is because I don't know which one to talk to."

These responses from the parents regarding how they first heard about MLE suggest that the opportunity for consultation might have been overlooked due to a communication breakdown. It appears that the parents were not consulted prior to their children going into MLE, at neither the conception nor the designing phase. Cindy described how her son had been in the same school for three years and she was shocked when she saw that they built a new building with more classes. When asked if she knew they were building the new MLEs she responded, “No, not that I know of; I would have known.” Yet another parent talked about how shocked she was when she first went into her son’s school because it was very different and not what she expected. Ofa said, “I had not been there but when the kids were in the room with the parents, they explained it to me.”

These few excerpts have illustrated the seemingly lack of adequate communication regarding conversations and consultation between the schools and their communities. The implication of these findings will be discussed extensively in Chapter 5.

4.3.1d Theme four – Strategies (Paddles/Foe): Consistency



Consistency - strategies for navigating changes

The concept of the paddles (foe) which advance the va’a in the absence of the wind, generating motion in the water for the va’a to sail through (Si’ilata, 2014) provides a comprehensive analogy for the value of consistency according to the Adapted Va’atele framework. For instance, the paddles’ crucial task of creating and maintaining movement is comparative with the use of consistent resources and skills necessary for capacity-building. For example, just like using the paddles to move along when there is no wind, teachers-peer support and familiarity can help learners paddle on when they encounter difficulties or when stuck. The correlation between the consistency theme and the previous themes are reflected in the boys’ views on how they coped with the daily challenges in their learning spaces as follows.

Consistent human resources

The data analysis extracted two connected aspects that according to the boys helped provide them with resources and confidence to feel successful. For example, being in a bigger space, and the relationship with the people they worked with. They reported that being in a bigger space gave them a sense of belonging by having their friends to support them, especially when the teacher was busy with other students. Fale expressed:

> "Yes, it helps me when I get stuck on something. I just ask the other kids and if they don't know I just ask the teacher."

When asked if MLE was suitable for Pacific students, most participants agreed saying that smaller classrooms can be very lonely and a little bit noisy. Included in this aspect of being in a bigger physical space is the opportunity to sit on the ground, and to work in larger groups, which is consistent with what Pacific people do.

Another benefit of being in a bigger space (MLEs) reported by the boys is having more than one teacher because it meant, if one teacher was away, at least one familiar teacher would still be there. This reflected the idea that children are confident when they are familiar with their surroundings and with the people they are with. Lui explained:

> "It is because at my other school, I was in the small classroom and there weren't that many teachers… but big spaces with more teachers means it would be easier for us to get good grades."

Moreover, consistency from the parents' views related to their sons getting the best learning opportunities like the other children around New Zealand. This meant they (their sons) were not missing out. The parents' responses demonstrated a level of contentment in their sons' ability to learn what was consistent with the rest of the world such as using technology. As Donna commented:

> "It is really important for them because as we progress into advance future, everything will be technology. Everything we will do is to do with modern learning, and for them to have that opportunity to learn from a young age, they will be successful."

Confidence in familiarity

The boys' data revealed a common view that having more than one teacher in one space is more beneficial than having just one teacher. The participants unanimously agreed that being in MLE helps develop confidence because they have more peers and teachers to support them when needed.

Supporting each other is one of the familiar concepts to Pacific peoples. This derived from being in big families, all living in big open spaces where everyone helps one another to achieve a common goal. As Lui put it, "…I don't want myself to only get a good grade. I want my friends and that to get good grade and be excellent." Lui's comment reflects an ideology very familiar to the Pacific community: 'It takes a village to raise a child' or according to Johansson-Fua et al. (2020), 'It takes an island and an ocean to raise a Pacific child.'

Another unearthed benefit of familiarity is being able to sit on the ground to do work because they were used it. When asked if he thought MLEs were good spaces for Pacific students, Kevin said, "… because we mostly sit on the ground to do our work and they can sit on the ground because they are used to it."

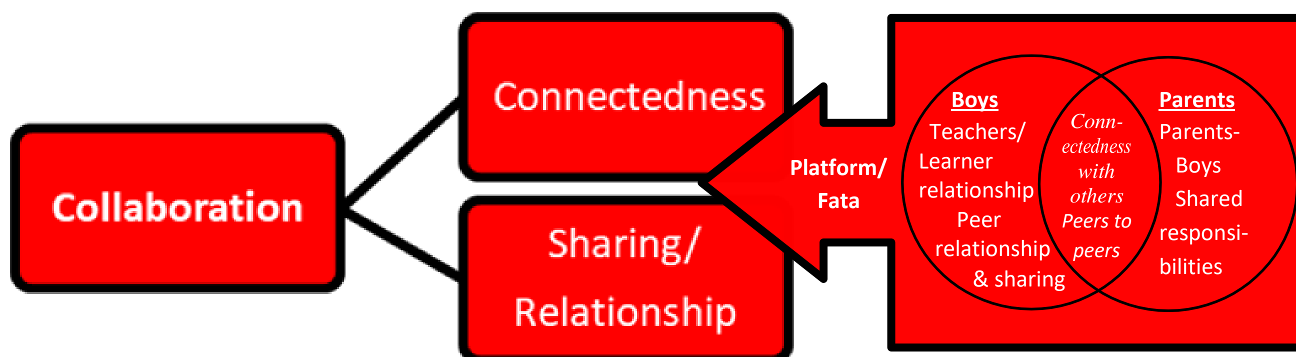
Further still, the consistency of cultural values and praxis at home and school was another positive aspect credited to MLEs by Lui (student) and Donna (his Mum). Opportunities to tutor the young ones, share their culture, and to pray at school were among some of the benefits identified by the respondents. As Donna reported about her son:

> "He has been on that for like 3 years and it also motivates him because he is into study and tutoring at school. That means he tutors the young ones… and he got his second award for tutor. So, I am very happy and glad. Another thing also is the culture, the religion, that we are in. My son likes to do prayers and like he has been offered to do prayers during assemblies."

To reiterate, positive experiences in the Pacific peoples' views are experiences that relate to their values and praxis. Lui described his positive and successful experiences in MLEs as being able to help others, show respect, give someone a cheerful speech, and the opportunity to pray as well. When asked how he felt about being able to do these things he replied, "I feel amazing. I feel like a star."

Essentially, human resources regarding relationships, and familiarity have been reported by the participants as the key strategies for navigating the uncharted waters of educational changes, namely in this study, modernised spaces. It is worth noting that this theme is inextricably linked to all the themes and is inadvertently woven through the following sections also.

4.3.1e Theme five – Connections (Platform/Fata): Collaboration



Collaboration between stakeholders

This concept is likened to "the platform (fata) that connects the two hulls, so they sail as one vessel, enabling benefits made with one hull to benefit the other" (Si'ilata, 2014, p. 257). This reflects the role of collaboration in connecting all stakeholders: teachers, students, their families, and the community in which they live, to work together for the benefit of the learners.

The two recurring subthemes from the interview data are: the critical role of consistent relationship, and the sharing of (but not limited to) space and values. From the interviewees' points of view, being connected to others was what really motivated them to cope with learning and the changes they encountered, as explained in the following paragraphs.

Connecting through relationships and sharing

Due to the inseparable nature of relationship and sharing, these two sub themes are interchangeably reported here under one subheading. The importance of connecting with others and relationship building is a common view among the interviewees. For instance, connection in the sense of being able to connect to the Pacific people's ways of doing things (cultural and traditional values) created a sense of belonging through sharing with others and building consistent relationships. These views were prominently recurring in the data as some of the key components of being a successful learner.

From the boys' perspective, always having friends with them and working together to help each other when in trouble has helped develop their confidence in themselves and in learning. Lui spoke specifically about helping a friend who needed it, and how it made him feel amazing. A feeling transparent in his facial and emotional expression as he described the incident, emphasising the impact on himself and his friend. He said, "One time there was a kid that was really like not confident like he was about to not pass his test. So, I asked him if everything was alright, and he said no and so I helped him"

Likewise, the other boys recounted times when their friends helped them during learning when the teacher was busy with the other children, and how grateful they were to have more than one class because it meant more people. Evidently, the boys' responses surfaced a preference of working in collaboration with others instead of being isolated. According to Michael, "I enjoy working with other people, not just the ones in my classroom; they can help me with my learning."

In agreement, the parents preferred the modern learning environment's capacity to provide opportunities where children work together, albeit admitting to having some reservations as mentioned in Section 4.3.1b. For example, Alofa mentioned that sharing ideas was better in small groups than just working independently because it gives them (boys) a sense of belonging. The parents reported that sharing the space with others helped their sons look after each other's property, share responsibilities, and check each other's work. They reported:

> Ofa: "… sometimes my boys are shy, but when they go, they see other people and make friends; mixing up [] with their friends and other kids learning about their culture and language."
>
> Alofa: "His behaviour is reflecting him [ ] more confident in being with others and sharing ideas to learn more. I think he is learning more in the modern by sharing."

As mentioned earlier, collaboration with more than one teacher in a classroom or space was one of the benefits of MLEs reported by the boys. When asked how working in MLE was affecting their learning, Michael said, "Yes, good for my learning. Reading and Writing done together helps me learn when other people come and help me."

Moreover, the students testified to the benefit of the valued relationships they have with more than one teacher in MLEs, which avoids getting used to a different teacher if one teacher is absent. For example, a great advantage of being in MLE was having a hub of teachers meant when one of his teachers was sick, the other teachers were still there. He said, "So, when some teachers are sick there are still other teachers there." Here, Lui reiterates the value of consistent relationship and connectedness between teachers and students (and their families) as echoed in the *PEP 2013-2017* (Ministry of Education, 2013) and the *APPE* (Ministry of Education, 2020), the Tapasā competencies (Ministry of Education, 2018), and reiterated repeatedly in various Pacific education literature, which will be discussed in the next chapter.

Another component particularly strong in the parents' views is connected relationships in the sharing of cultural values and traditions. They believe that being in MLEs gives their sons opportunities to share their culture and their language skills with others. Repeatedly, the parents viewed connectedness and sharing as the Pacific boys working together and wanting them to know and share their sons' culture or tradition. For example, Ofa thought being in MLE was helping her son share his culture and language with others. She said:

> "It's like sharing the traditional class of Pacific people. They do it better now in the bigger space. Because they know their culture they do perform because they have performed at Pasifika, and I like them to learn more about the Tongan language because they have a speech for the Pasifika boys."

Furthermore, the parents perceived the relationship between them, and teachers as a major contributing factor to their sons' success. When asked what advice (based on their experiences) they would give to Pacific parents with children in MLEs, they all recommended connecting with teachers, and connecting with their children. They all agreed that this was the key to building positive relationships that help support their children. For example, Alofa said:

> "… you don't have any choice […] it is a political one. […] but if we can encourage our kids by studying at home so that they can feel confident being in class; they will know what to do."

The participants suggested that some aspects of building relationships and sharing are, asking questions about their child's day, find out what is happening at school, make themselves available to help them at home with their work, have ongoing conversations, and go to meetings to find out what is happening at school.

These identified strategies have been advocated as strong links in the collaboration chain asdiscussed extensively in Chapter 5.

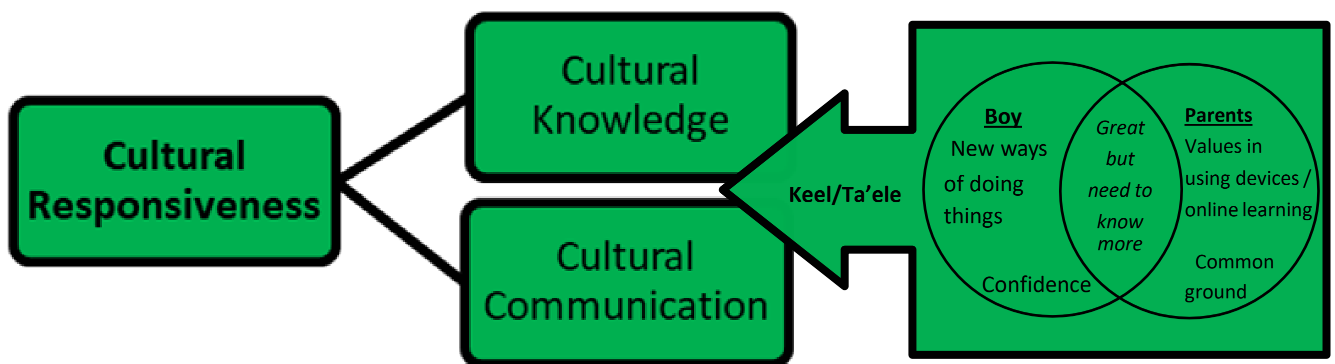
Nonetheless, for some parents, this can be a far-fetched reality, for various reasons. Apart from one parent who holds a prominent role in the school, the rest acknowledged that they had only been at their sons' schools around twice a month or a few times a year. One participant who is actively involvedin her son's school lamented on the lack of collaboration between Pacific parents and their school, something she said needed urgent addressing. She reported that she always encourages parents to connect with the teachers to help their children feel comfortable if they need support. This, she said:

> "If I have a chance, I have to encourage them to help out with their kids. So, when they are coming to school, it doesn't matter if it is modern learning or other things, but they can say something they can […] from home they know… they sit in class and they know what is going on."

Unfortunately for two parents, namely Ofa and Ela, language barriers and shyness hinder their desire to connect with the teachers to share any concerns or issues, and to even ask clarifying questions. When asked about what she thought the school could do to help her feel comfortable going into her son's class, Ela said, "I think if I know them better, I think I can say something". While she adamantly expressed how uncomfortable she felt about going into her son's classroom, Ofa could not explain her reasons for it. The latter is indicative of her shyness and lack of the skills needed to articulate herself as alluded to earlier. This was reflected in her decision to send a family member to receive the information about the research and then it was translated and explained in her mother tongue.

Overall, the data confirmed the importance of collaboration among all stakeholders and revealed that the lack of communication is extremely problematic for Pacific learners and families. This is a prerequisite that needs to be instantly addressed as per its discussed implications in the discussion chapter.

4.3.1 f Theme six – Partnership (Keel/Ta'ele): Cultural Responsiveness



<u>Culturally responsive partnership</u>

The partnership theme is likened to:

> "The keel/ta'ele running from the stern to bow, which helps the va'a maintain its stability and straight movement despite the conditions – keeping the va'a 'grounded' and secure" (Si'ilata, 2014, p. 257).

Using culturally responsive ways of communicating and relationship building is key to establishing an effective partnership, which stabilises the journey regardless of any change. There are elements of

success identified by the participants as crucial to establishing partnership. These are: the connectedness to culture and building friendly relationships. Albeit these aspects have been subtly reported in the other themes, the following paragraphs reiterate how culturally responsive strategies and effective communication (or the lack of) affect home-school partnership. The latter is evidently detrimental as highlighted in the in the quoted responses.

Culturally responsive relationships through communication

The data analysis emanated a concern regarding Pacific parents' lack of involvement and engagement with their sons' schools as blatantly reported by Alofa saying:

> "So, the problem is not being coming in, so they know but complain without doing anything. I would say Pasifika one is not good parents we are all because some of the teachers always mention to me if they know like the image, we try to teach the kids in Tongan but still they didn't."

According to Alofa, Pacific parents at her school complain about what the school does or does not do without going into school to be informed. She expressed that her motivation to engage with the school was to see her children achieve and get the best that education offers. She concluded that her being a member of the school's Board of Trustees gave her insight into what the school does. She therefore wished that other parents would find ways of engaging with their children and the schools too. Interestingly, the other parents had the same desire for their children but the expressions on their faces hinted an unspoken level of reluctance.

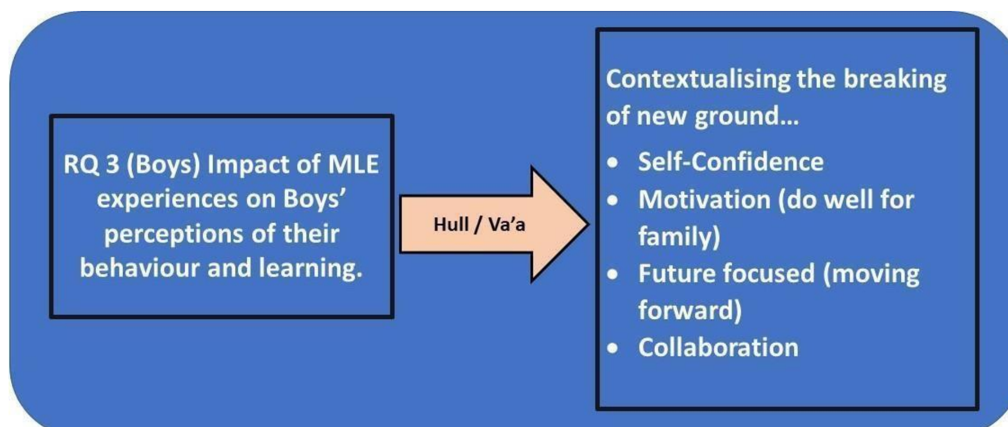
Accordingly, it appears that their willingness to engage with the school is perhaps more challenging than how Alofa viewed it as reported earlier. For example, some parents' work commitments make it difficult to engage with their children or school, while others said their lack of English language skills make them shy to engage in conversations.

It appears that the lack of communication plays a significant role in the lack ofengaging relationships and developing partnership opportunities for these interviewees. This is suggested in the boys' views that their parents were only called if they were sick or to be asked to come for parent interviews. When asked if his parents were ever called about his work or something he had done, Lui said:

> "In the parent interview. They never call my Mum like to say my work is […] only at the parent interview. They talked about how I feel confident and how helpful I am to people, and I always take the challenges."

Kevin on the other hand could not remember if his parents were ever contacted about something he had done and had this to say, "But when you have a sore tummy, they have to call your mum". The other boys made no reference to their parents being called in for anything. Thus, suggesting a disconnectedness between the parents of these boys and their teachers and schools.

4.3.2 Research Question 3: How do the boys' experiences of modern learning environments affect their perceptions of learning and behaviour?



The answer to the third research question about how the boys view learning and behaviour based on their MLE experiences is reported under the hull (va'a) dimension of the Adapted Va'atele model. To reiterate, this dimension relates to the knowledge of Pacific learners or contextualisation. Its use to describe the first theme was solely based on the learners' knowledge of the 21st century ways of learning in modern spaces. In this instance, it relates to putting this knowledge into perspective and using their experiences as ground-breaking tools for navigating the changeable landscape of education.

The significance of using this dimension is to convey the recurring theme of contextualisation; for example, *knowledge* as the key to putting things into perspective. The initial use of knowledge represented the participants' knowledge of MLE; its use here though, is to contextualise both boys' thoughts and their experiences to suggest bridge-building ways that Pacific learners and their families may use to succeed in 21st century education.

The analysis shows that while the participants embraced the use of technology as a way forward as it is in accordance with the rest of the world, there was an obvious degree of anxiety for parents given their lack of technology skills and knowledge. This is predominantly evident in some of the participants' comments quoted and paraphrased in Section 4.3.1b. On the contrary, the boys barely mentioned technology or devices in their talanoa. In fact, the only time one interviewee mentioned the use of device was when he was asked if he had any negative experiences in MLEs. To this, he explained

how some people got into trouble for looking at inappropriate content on the internet, and the teacher found out by checking the search history. He said he quickly learned from that experience not to try it.

Connectedness was highly valued by the boys regarding the collegial relationships such as teacher-to-teacher, teacher-to-learner, and learner-to-learner as reported throughout this report. For example, being able to connect to others by working in groups as opposed to working alone or having a familiar teacher if one was sick. Sustaining collaborative and reciprocal relationships has been critical in developing their confidence, which in turn, enabled active involvement in their learning. From the boys' perspective, when they are confident, they can perform their cultural dances, and can learn English. All except one saw themselves as confident learners who preferred working in MLEs and would recommend these types of spaces as best classrooms for Pacific boys. When asked what advice they would give to other Pacific children about working in MLEs, they said:

> Fale: "Students that are struggling with their learning and students that want to learn more learning and know more."
>
> Iose: "Yeah, big spaces because big learning."
>
> Sione: "…for Pasifika boys like some Pasifika boys that have trouble learning English."
>
> Michael: "To be quiet – don't talk to their friends otherwise they'll get into trouble. If they don't know what to do, they can ask the teacher."
>
> Lui: "What they should do, is always don't be distracted because you want your parents to be proud of you. So, I would say if they are being mean to him, I would say ignore them. You should make your mum and dad proud so don't get distracted, always take the challenges, and always do your work to get your parents proud of you."

Overall, the boys' experiences in MLEs made them feel positive about themselves in terms of their behaviour and learning. One interviewee said his behaviour changed for the better since being in an MLE, while another one said that his learning has improved a lot. All six boys expressed their motivation to make their Mum proud.

In a nutshell, based on their experiences, the boys see learning in MLEs as a positive way forward. Meaning, they are motivated to learn better, behave better, and achieve better grades to make their Mums proud.

4.4 Summary of findings

In summary, the data analysis identified *contextualization, change, conversations, consistency, collaboration,* and *cultural responsiveness* as the key themes. As shown in Table 5, the themes have been identified as either a positive or negative finding based on the raw data evidenced in the excerpts. These key themes are summarised in Table 5 to conclude this chapter, but they are discussed comprehensively in Chapter 5.

Table 5.

Key themes' summary.

Positive findings	Negative findings
Consistency: • consistent relationships between learners themselves, leaners, and teachers – a big factor in learners' confidence building. • using technology • learning what the other children are learning	
	Communication: • lack of communication due to language barriers.
	Contextualisation: • lack of participants' knowledge regarding MLEs and the relevant guiding pedagogies.
	Cultural responsiveness: • schools not using appropriate means for engaging parents -minimal to non-responsive.
Collaboration: • teachers-teachers collaborating, teachers-students, students-students - beneficial to students' learning.	**Collaboration:** • lack of schools-communities, teachers-parents means they do not seem to be on the same boat, at least from the parents' perspectives.
	Change: • not knowing what is expected from their sons being in MLEs. • too much time on device instead of writing in books

Firstly, contextualising learning in terms of, children and parents knowing what is happening at school, and teachers knowing about the learners' culture and tradition is a recurring theme from the data. For example, once the participants understood the pedagogy behind MLEs, they were grateful for the knowledge and for being able to put the changes they encountered into context. Things such as using devices, having more teachers, and working in big open spaces with friends were all important and positive experiences. For example, these are reflected in the children's motivation to achieve good grades, becoming more responsible for completing homework, looking after their property, as well as sharing their cultural traditions with others. Confidence in self and their own identity, and confidence in their friends and teachers was evident right throughout the data particularly from the boys' perspectives.

Contrarily, there was a hint of anxiety from parents due to their lack of knowledge of the 21st century skills needed to support their children. This is undoubtedly an identified challenge for schools and teachers which will be discussed further in the next chapter.

Secondly, change is inevitable in the schools' set up and use of modernised ways and technology as identified by both parents and boys. Evidently, the big modern space provides many benefits and positive experiences as highlighted in the collected student voice. According to them, having more than one teacher in one space, and having their peers of the same age to help them when needed made adapting to the 21st century changes easier and manageable. Despite having a tiny speck of worry about potential distractions in these bigger spaces, they all thought that these spaces were good for allowing Pacific children to be successful. This view was fully supported by the parents based on the transparent benefits experienced by their children; thus, endorsing the move to modern learning environments.

Unfortunately, though, communicating these changes and the transitioning process to MLEs could have been better. This key finding seems to be, from the results, the domino effect on which the success afforded to MLEs was depended. According to the interviewees' responses, there appeared to be a lack of communication between the participating schools and their community, namely, parents. While learning in these spaces seemed highly recommended and accepted by the parents and boys in this study, important contextual conversations did not eventuate. Based on the findings, this study assumes there was a breakdown of communication between the parents and teachers or schools, and between students and teachers.

This hindrance according to the data seems to be a result of language barriers; teachers being frustrated by the lack of communication from parents, and parents frustrated by not being able to clearly

communicate with the teachers. The latter shows that the plausible rationale for this breakdown is due to the lack of language acquisitions or communication skills for parents to communicate with teachers, and vice versa.

Another strong theme that emerged from the data is the consistency of relationships in modern spaces where the boys feel confident to learn and to be valued by their teachers and peers. Evidently, consistent relationships among all the stakeholders are seen as critical to the successful experiences of the boys in this study. For example, all participants supported this element as one of the open modern spaces' benefits.

Furthermore, another aspect of consistency highly valued by all interviewees was being able to connect to their language and culture. According to the boys, having cultural performances with their peers and others motivated them, which was another reason why they preferred the big open spaces. As mentioned in the Literature Review, doing well, and achieving good grades is consistent with the Pacific belief that when a person achieves, it benefits their family here and in their homeland. This will also be discussed in the next chapter.

Collaboration among relevant people in one's education is valued across all cultures, but it is even more significant for Pacific peoples, given their innate desire to live together with big extended families to help one another. While literature endorse working collaboratively with colleagues and peers as one of the key aspects of the 21st century learning globally (Byers et al., 2018; Bolstad et al., 2012; Benade, 2018), this study reveals a concern regarding collaboration between parents and teachers. While there is evidence of collegial collaboration among teachers, students and their peers, the data reveals there is much more work to be done; notably, the collaboration between parents and teachers, or schools and their communities.

Finally, the theme cultural responsiveness which is one of the current discourses in the education sector was endorsed by all participants. For example, they all valued positive and consistent relationships despite communication and collaboration already mentioned. Their preference of modern pedagogies as an inevitable change needed in this digital age depicted their desire to respond positively to the current trends. For example, the connection to the bigger spaces and working in bigger groups meant the student participants felt at home. Albeit the parents found connecting with their sons' teachers and learning challenging, their advice to other parents were indicative of their intention to support their children in these new challenging ways. The participants' views suggested the need for schools to build relationships and establish partnership through culturally responsive ways.

In closing, this chapter has reported the key themes and summarised the findings that emerged from the talanoa. The next chapter will discuss the implications of the key findings on the schools, on the parents, on the wider community, and most importantly, their plausible impact on student achievement.

Chapter 5: Discussion

5.1 Introduction

This research aimed to discover the perspectives of Year 5/6 Pacific boys and their parents or caregivers about the experiences of primary aged students in modern learning environments (MLEs). This chapter discusses the findings from the study and considers their implications. It begins with contextualising the research in Section 5.2. The key findings that emerged from the results are discussed in Section 5.3, followed by the implications of the key findings for schools in Section 5.4. Section 5.5 will identify the limitations of this study, and recommendations for further research are suggested in Section 5.6.

5.2 Contextualising the research

As mentioned in the literature review, qualitative research for determining how Pacific learners view their learning experiences in modernised classrooms is scarce, hence the purpose of this study. The rationale derived from the researcher's curiosity regarding Pacific peoples' thoughts about MLEs given the non-Pacific communities were outspoken about it. Their comments may be construed as parents' voicing their dissatisfaction about the lack of proper consultation either at the designing or the transitioning phase of these environments. Included in their disappointment is the deficit impact of such environments on students, particularly those with special learning needs.

Given that the Pacific communities were not forthcoming in their thoughts about this current education phenomenon, it was therefore considered critical to explore their views for the following reasons. Considering New Zealand's socio and economic future is likely to be entrusted to our most youthful Pacific population (Samu, 2013; Bolton, 2017; NZ Stats, 2018), researching what impacts their academic achievement is critical. For instance, they (Pacific learners) are considered underserved by the New Zealand education system and have been at the lower end of the achievement scale for decades (Bolton, 2017). Lastly, given the government has invested in various counteractive initiatives for raising Pacific learners' achievement for over two decades, this study's findings may provide some insight into whether the transition to MLEs may regress any progress made to date towards achieving Pacific goals.

The main research question was *'What are the perspectives of the Pacific boys aged 9-10 years and their parents about the experiences of New Zealand primary schools in modern learning environments?'*

The study has given insight into what the Pacific community thinks about MLEs. All participants embrace modern learning environments as relevant for New Zealand primary school aged children, due to the new pedagogies, and the use of technology. From their perspectives, the move to MLEs is especially important now considering the world is becoming more advanced which means their schools are consistent with other schools in New Zealand and around the world. Embedded in this consistency theme is the opportunity to learn alongside the same people in big open spaces; this is consistent with their cultural settings at home, and it makes their primary school experiences successful. Thus, consistency is one of the key findings identified as an enabler for Primary school children in MLEs.

Another interesting finding is the lack of participants' knowledge about MLEs. The parents did not know why their schools changed from single cell classrooms to modernised environments. In fact, they could only talk about their experiences and their perceptions of MLEs after the researcher answered their questions about MLEs. Communication is therefore considered another key finding revealed from the study.

To reiterate, this discussion takes the premise that *communication* and *consistency* are the two overarching findings in which the other themes are embedded and discussed accordingly in the following section.

5.3 Contextualising the themes

Considering the Adapted Va'atele framework was used to deductively analyse the data, it is therefore considered appropriate to use it here to contextualise the themes from a Pacific perspective. The inextricably linked dimensions of the va'a means each dimension is essential to the movement of the va'a, and when each part functions well, momentum is gained (Si'ilata et al., 2018). Similarly, the themes are discussed in an inextricable way using *communication* and *consistency* as the main discussion points.

5.3.1 Communication is the key to developing sustainable strategies

As previously mentioned, communication is one of the major findings in relation to the impact of its demise on developing shared understanding among schools and families. The pre-interview conversations and the data revealed that the participants did not know much about MLEs, except that the pedagogies and building structures look different. These contextualising conversations enabled the researcher to answer many of the participants' questions about the rationale of MLEs. They then started

to share their personal experiences and views in the light of this new understanding, in which endorsement of the new change as the way forward was mutual.

Essentially, communication is important in almost all fields of life for developing sustainable strategies for implementing changes, but it can only happen through effective communication (Genć, 2017). The importance of effective communication to Pacific learners' success is illustrated perfectly by the Va'atele analogy (Si'ilata et al., 2018). For instance, the sail (la) enables the double hulled vessel to catch the wind necessary for the journey's success. Likewise, effective communication enables schools and parents to successfully work towards achieving desired goals. Without the sail, the vessel cannot catch the wind and therefore unable to move successfully. Without communication or the lack of it can result in lack of parents' awareness and understanding of their children's learning goals as evidenced in the study.

Parent engagement can be a key part in a child's education (Ministry for Pacific Peoples, 2018). According to international and national literature, it can influence a student's success (Vinopal, 2018), attendance (Hornby & Blackwell, 2018; Allison et al. 2019), motivation (O'Toole et al., 2019), engagement (Erdener & Knoeppel, 2018), and completion of tasks (Reparaz & Sotés-Elizalde, 2019). Communication is therefore vital. As discovered from the study, when communication is amiss, the stakeholders, namely, parents may not be fully aware of their role in their children's success. This can make achieving education goals challenging and almost impossible due to the lack of shared understanding. Hence, achievement goals will either regress or become stagnant. Open and clear communication is stressed in other fields such as the medical field (Politi & Street, 2011), business and economics (Muscgalu et al., 2013), and education (Baydillah & Rintaningrum, 2021; Ministry of Education, 2020). This literature concludes that engaging in effective communication enables stakeholders to prepare and engage in tasks that achieve better sustainable outcomes.

To reiterate, the participants' lack of knowledge is indicative of the low degree of communication between schools and parents. For example, one parent mentioned always going through the school newsletter to find out what was happening at school. This suggests that perhaps newsletters are the schools' main medium for communication, which might be assumed as the reason for its lack. For example, some possible explanations might be that newsletters get misplaced or misconstrued, or families may not have access to electronic copies due to limited-to-no internet access. Whatever the case may be, this has serious implications for schools regarding the use of more culturally responsive approaches when communicating with Pacific communities.

As evidenced in the study, the most common and appropriate way of communicating for Pacific peoples is a face-to-face talanoa as supported by Pacific scholars such as Vaioleti (2013) and Fa'avae (2017). For instance, out of all the time-effective modernised ways of conducting an interview offered to the participants, they all chose to meet in person. They preferred face-to-face conversations or talanoa as explained in the Methodology Chapter, Section 3.5.2. This was to be expected given it is a culturally appropriate way for them. Thus, it demonstrates that talanoa is the most effective way for engaging Pacific peoples in conversations and decisions that impact them. Otherwise, education goals and strategies for implementing change, in this case, transitioning to MLEs might not be understood by all stakeholders as discussed in the next subsection.

5.3.1a Lack of communication hinders consultation

The findings of this study are inconsistent with the crucial role of communication in consulting parents and communities on education issues. According to the parents, they were not aware of any communication about MLEs prior to their sons' placements. One parent reported how shocked she was to find MLEs erected at her children's schools, and she did not know what they were called. Although the other parents observed the infrastructural change on their occasional visits to the school, they were not aware of the reasons for the change and what it meant for them or their children. This demonstrates the lack of consulting conversations between schools and parents which can be a deficit to any efforts to engage Pacific communities. For instance, the absence of consultations that gauge parents' views and input, can be interpreted as affirmation of their innate belief that schools know best and parents do not need to be involved (Wall, 2014). This is due to the respect Pacific parents have for teachers, which can unfortunately be misconstrued as a lack of interest in their children's education (Hunter et al., 2016; Fa'avae, 2017; Sharp et al., 2021).

Unsurprisingly, this lack of consultation is consistent with reported complaints mentioned in the literature review, which reported parents using social media and public platforms to voice their concerns about not being consulted on MLEs (Education Central, November 19, 2018). This article's main concern was the low level of consultation between school communities across New Zealand. The survey participants were angry that their communities were not consulted by the schools before designing and building ILEs. It reported only 9% of the participants confirmed they had some sort of consultation, but not to the extent the parents would have appreciated.

Likewise, teachers at the ground level of teaching and learning also had concerns about their own ability to teach in such spaces due to the lack of consultation and professional development (Redmond, 2017). Similarly, the little that the participating parents knew prior to this study about

MLEs was either heard from other parents in passing or from their own children. For example, they only knew there was a change but did not really understand why. This communication breakdown hinders vital opportunities for engaging conversations between the school and its community (Epstein, 2010), which is even more disadvantageous for Pacific communities who are already vulnerable stakeholders of education. At this point it is important to discuss some other, but not limited to, contributing factors to this demise as explored in the next subsection.

5.3.1b Language barriers hinder communication

One of the communication deficits emanated from the study is the barrier caused by the participants' inability to speak English articulately. One participant admitted that she was too shy to talk to teachers or ask questions in case they heard her wrong. This finding is supported by Vinopal's (2018) and Gonzales & Gabel (2017) who suggest the decrease involvement of parents classed as immigrant and of low socio-economic status may be a result of language barriers (Humphrey-Taylor, 2015) which causes difficulty in communication. Gerchow et al. (2020) claim this has become a global concern given the increase levels of global migration. This has high implications for New Zealand as a diverse society in which there is a myriad of different languages and dialogues embedded in each Pacific ethnicity.

A recent study by da Costa (2021) stresses the significant role of language in the classroom by comparing it to 'water for the fish' by which the fish cannot survive without water. Similarly, goals and aspirations for Pacific learners cannot be realised if the learners and their families do not have the language skills needed to communicate with teachers or the schools (Si'ilata et al., 2018). This finding is supported by a study in the United States by Garcia-Mateus & Palmer (2017) who found that when the Spanish students used their language experiences in English dominated spaces, they were able to construct meaning around critical bilingual literature. He asserts, for this to happen, the teacher had to allow space for this to happen. However, despite ample suggestions by Pacific literature propagating the pivotal role the schools play in empowering Pacific children and families to use their own language in learning (Ferguson et al., 2008; Si'ilata, 2019; Si'ilata et al., 2018; Major, 2018; Ministry of Education, 2019), this study revealed that there is still much work to be done accordingly. The implications of this for schools regarding strategies to mitigate language barriers are discussed in Section 5.4.

5.3.1 c Effective communication enables shared understanding

As mentioned in the literature review, Pacific parents' have high expectations and the desire to support their children's learning, and this was revealed in the study. For instance, the data confirmed the parents try to support their children at home so that they can achieve just as well if not better than other high achieving students. This finding is also found in Australia where parents from low SES backgrounds have the same aspiration as the parents in this study (Fischer et al., 2019). For instance, these parents possess high expectations that their children should learn and experience success just like their counterparts. The Pacific parents in this study were all immigrants (island born), and they had the desire for their children to succeed for the sake of family, faith, and villages is the purpose for their migration. For instance, they migrated to New Zealand for better study and employment opportunities. Embedded in this, is their children's success in education, which also means, success for their families back in their homelands (Si'ilata 2018; Matapo, 2019; Ministry of Education, 2018).

Unfortunately, while parents uphold this inspiration for better employment as revealed from the data, they lack understanding of how to support their children to be successful. This finding supports the findings by Gonzales & Gabel (2017), which reported parents' 'expectations and aspirations for their children.' Knowing this can help schools to initiate strategies that engage parents in learning conversations that empower them to support their children as they navigate the complexities of the 21st century learning. The role of parent engagement is supported by scholars, McDowall et al. (2018), Goodall and Montgomery (2014), and Clinton and Hattie (2013) as an integral element for achieving better student outcomes. Importantly, when parents feel empowered as a vital resource for their children's success engaging them in their learning seems purposeful and necessary (Ministry of Education, 2018). Fundamentally, this level of engagement can only be activated when stakeholders hold a shared understanding of the goals to be achieved including when and how to achieve them (Sharp et al., 2021).

Subsequently, involving, and engaging parents in school consultations leads to establishing reciprocal relationships (Hornby & Blackwell, 2018) which in turn, enables success (Ministry for Pacific Peoples, 2018; Humphrey-Taylor, 2015; Erdener & Knoeppel, 2018). Community engagement has been suggested in the longstanding Pasifika education strategic goals for raising Pacific learners' achievement (Ministry of Education, 2007; 2013; 2020). Perhaps knowing this is not a new strategy considering it has long been in international literature (Malone, 2015; Goodall & Montgomery, 2014), national literature (Clinton & Hattie, 2015; McDowall & Hipkins, 2018; Si'ilata et al., 2018), and

national policies (Education Review Office, 2013; Ministry of Education, 2019), policy makers and educators might review current efforts and make changes accordingly.

Changes can include, but not limited to, making community engagement a priority, carry out research around the types of culturally responsive strategies to use, and recruit appropriate people in the community with such expertise. The implications for schools regarding this are further discussed in Section 5.4, while the next section discusses the role of consistency in navigating uncharted waters of modernised environments through consistent strategies.

5.3.2 Consistent strategies in a changing environment

The second overarching theme emanated from the study is *consistency* relating to consistent relationships the boys have in the big open spaces, which they consider as one of the benefits of being in an MLE. In their view, the relationships with teachers and their peers as well as the big open space MLEs afforded to them, inspires them to be confident and gain good grades. These types of peer-relationships are described by Reynolds (2018) as valuable Pacific brotherhoods in education for boys. Furthermore, Male and Palaiologou (2017), and Humphrey-Taylor (2015) also emphasise the importance of relationships built on mutual respect in which everyone listens to one another. Concepts also endorsed in the *Best practice for teaching Pacific learners* (Ministry of Education, 2019), *APPE 2020-2030* (Ministry of Education, 2020), and *Parental involvement, engagement, and partnership in their children's education during primary school years* (O'Toole et al., 2019).

Using strategies that align with Pacific peoples' core values and praxis is mandated in the current *APPE 2020- 2030*, in which educators are required to develop reciprocal relationships using Pacific friendly methods (Ministry of Education, 2020). This concept is also metaphorically supported by Si'ilata (2018) in her Va'atele framework. For example, the foes (paddles) help the paddlers advance the va'a using water when there is no wind. The Adapted Va'atele framework using strategies consistent with Pacific peoples' methods can help develop, establish, and sustain home-school relationships (Ministry of Education, 2018; 2019; 2020), which will subsequently advance Pacific learners' journey towards a successful education (Ministry of Education, 2019). This is consistent with that of Gonzales & Gabel (2017) who contend that when teachers create classroom environments built on students' cultural knowledge, greater academic confidence and success are produced. The following paragraphs further discusses the significance of employing methods that are culturally and widely accepted by Pacific- ethnic groups.

5.3.2a Culturally responsive relationships enable home-school partnership

As mentioned previously, culturally responsive relationships between the boys and their peers gave them confidence to engage in learning even when it was challenging. In other words, when engaged with their peers and teachers in learning situations, boys feel empowered and supported (Reynolds, 2018). The domino effect of reciprocal relationships on people is phenomenal whether in a positive or negative manner. The former is thought to be conducive to community engagement (Ministry of Education, 2018; 2020) and home-school partnership (Averill et al., 2016; Flavell, 2020) as found in this study, because Pacific people usually start to share information when they feel comfortable with their new acquaintances, or in other words, when *va* or relational space has been established (Wendt, 1996; Anae, 2019). *Teu le va* in Samoa or *tauhi va* in Tonga (Fa'avae, 2017) means to "value, nurture, and care for (teu) the secular/sacred and social/spiritual space (va) of all relationships (Anae, 2019, p. 1). Conversely, the latter was strongly evident from the participants' perspectives as follows.

The relationships between the parents and schools seemed non-existent; thus, this discussion takes the premise that culturally responsive ways of engaging the community may not have been considered. A possible explanation could be that the existing complex role of schools and teachers in adhering to curriculum and the abundant inherent responsibilities might have placed attempts to be culturally responsive in the too hard basket. Resulting in the lack of knowledge on the parents' part about this educational change. On a positive note, albeit challenging, home-school partnership takes genuine effort and resourceful planning as the researcher discovered at the recruitment phase. For example, the researcher needed to spend time with the participants for a talanoa during the recruitment process.

The absence of home-school relationships discovered in the study can be explained as a negative domino effect of ineffective communication as signalled earlier. For example, much of the literature claims that effective communication among stakeholders (schools, teachers, learners, and parents) has a domino effect; for example, using culturally appropriate ways leads to successful partnership, which in turn, leads to learners' success (Vinopal, 2018; Erdener & Knoeppel, 2018; Reparaz & Sotes-Elizalde, 2019). It appears that perhaps schools have not exhausted resources available to them to establish reciprocal relationships that are culturally appropriate (Ministry of Education, 2018). Perhaps in their defence, the multi-ethnic nature of Pacific peoples poses challenges for New Zealand schools (May, 2002) considering that there are varied languages and customs embedded in the blanket term 'Pacific' (Samu, 2010). Thus, albeit Pacific peoples have similar ways of being, each is unique in its own ways of being, namely, language and culture. Chu et al. (2013), McDowall et al. (2017), and the *APPE 2020-2030* (Ministry of Education, 2020) point out, when parents work in partnership with the

school, their children are more likely to be successful. The Ministry of Education (2018) also endorses the importance of reciprocal relationships as an essential goal for Pacific success, in the Tapasā framework. This framework sets competency goals for teachers of Pacific learners as one part of the bigger picture of bridging the engagement gap for Pacific peoples. For example, Turu 2 requires educators to establish and maintain "Collaborative and respectful relationships and professional behaviour" for enhancing "...learning and wellbeing for Pacific learners." (Ministry of Education, 2018, p. 12).

At this point it is worth noting that engaging Pacific communities in conversations relies on strategies that empower parents as revealed from this study. Giving parents the power (mana) by reassuring them that their views matter in their sons' learning and allowing time and space for them during meetings for relationship and trust building opens the door for deep conversation (Ioane, 2017; Ministry of Education, 2019; Durišić & Bunijevac, 2017, Sharp et al., 2021). This finding supports similar findings in other countries such as Turkey (Erdener & Knoeppel, 2018), Spain (Reparaz & Sotes-Elizalde, 2019), and Canada (Leithwood & Patrician, 2015).

Providing food and drink to have during the talanoa at a space of their choice (Ioane, 2017), made the participants feel comfortable and before long they were fully engaged in conversations about MLEs. This idea is supported by the Ministry of Education (2020) in the *APPE 2020-2030*, which considers one of the ways to develop partnership with families is to engage in fono or meetings. Such meetings need to give priority to Pacific parents to share and not to just give them information. Evidenced in the study, the participant parents asked the researcher questions about why schools were using technology, expressing a concern about how it could affect their children's wellbeing because of so much time spent on devices. Such informative conversation would not have occurred had the researcher not given them the opportunity to do so.

Regarding technology, the parents' concern about their children spending a long time on devices is because they think prolonged use of screen time is not healthy for their children. Literature supports this finding as an existing global concern. For instance, Sikorska (2020) reports on parents losing control of their children to devices. Polish parents also reported that children's prolonged use of devices was influencing their behaviour in a negative way and making them naughty. Moreover, Danet (2020) from France highlights concerns from parents about the harmful potential of ICT on child development and family functioning relationships.

5.3.2b Deficit effects of using non-culturally responsive strategies

The adverse effects of non-culturally responsive communication are considered detrimental to Pacific parents' confidence to engage in conversations. For instance, the parents' embarrassment of their lack of ability to speak English left them to just wonder why schools changed to MLEs and how this change impacted on their sons' learning. This discussion takes the stance that using language relevant to the stakeholders' ethnic groups as a strategy to communicate with them helps gain momentum towards community engagement (Leithwood & Patrician, 2015; Si'ilata et al., 2018; Ministry of Education, 2020). This lack of community engagement is therefore, as it has been for too long, espoused as the reason for the prolonged educational disparity for Pacific peoples. Despite being one of the three ministerial priorities since 2005 (Brooking, 2007), effective partnership is not yet realised in many education settings as reported in ministerial literature (Ministry of Education, 2019), reviewed by the Education Review Office (2013), and revealed in this study.

5.3.2 c MLE practices consistent with Pacific cultural praxis

Another aspect of consistency discovered from the study that relates to Pacific peoples' ways is the element of being in big open spaces. The participants in the study reported that working in big spaces made them feel at home because it enabled them to sit on the ground, and most importantly to work in groups as a team (Reynolds, 2018). The value of working collectively to achieve an outcome is evident in the boys' expressions of the positive experiences they have had in MLEs. This familiarity is evidently valued by the boys, which schools could capitalize on as a potential steppingstone for achieving better outcomes for Pacific learners (Fa'avae, 2017). The value of working in big spaces afforded to the boys is the opportunity to support each other with learning. In fact, all student participants prefer working in groups rather than working as individuals. This sense of community derives from the communal ways of living experienced by Pacific peoples, which can see more than one household housed in one home (Ravulo et al., 2020). In these contexts, everyone works for the good of the collective family, and an individual's success is considered a group success, given that person is expected to use their success to serve the family, church, and the community.

Although this cultural sense of community is highly valued and recognised by Pacific people, almost every parent participant voiced a concern about the noise and the distractions that exist in such open spaces. While they recognise the space's connectedness to their social and cultural norms, the parents are worried that the noise level and social interactions in such spaces may cause distractions that affect learning. This concern is commonly held by MLEs' critics and parents of those who have learning

needs such as hearing impairment and children suffering from anxiety (Fletcher et al., 2020; Nagaraj et al., 2020). The implications of this finding for schools are also discussed in the next section.

5.3.3 Discussion summary

The overarching themes from which the other emerged themes derived are communication and consistency. The significant importance of communication in building relationships through shared understanding that leads to success has been considered. Despite its pivotal role, the study found that the lack of communication had a domino effect on the boys' experiences of MLEs, and on the parents' lack of understanding about what MLEs were. Its adverse effect on Pacific learners and their families was also discussed.

The second overarching theme is consistency regarding the use of culturally responsive pedagogies and practices that enhance relationships. Some examples discussed included the benefits of big open spaces to Pacific learners given these are like their communal way of living at home. Other advantages such as learning alongside friends whom they rely on for support and the flexibility afforded by the big spaces are also consistent with their experiences at home. Advantages and disadvantages of these spaces on learners have been considered with reference to the literature. These findings' implications are explored in the following section.

5.4 Implications

This study's findings suggest several implications for schools when planning to communicate and to consult Pacific families. The importance of communication in engaging families in collaborative reciprocal relationships is widely promoted in education policy and strategies targeting Pacific learners; for example, the *Tapasā: Cultural competencies framework for teachers of Pacific learners* (Ministry of Education, 2018), *The New Zealand Curriculum* (Ministry of Education, 2007), *APPE 2020-2030* (Ministry of Education, 2020). Communication is the initial step in building reciprocal relationships which enable collaboration, connectedness through open conversations that result in students' success. However, as revealed in the study, the ramifications of its inadequacy played a huge role in participants' lack of knowledge and awareness regarding the transforming landscape of education. It seems that schools have a lot of work to do in this area especially now in this 21st century era where communities are expected to navigate the modernised ways of learning.

The heterogeneous nature of Pacific peoples impacts hugely on schools as they may not have the linguistic resources to accommodate this need. For instance, embedded in the blanket term 'Pacific'

are many ethnic groups, each with their own unique identity, culture, and language (Samu, 2010), making it difficult for schools to source resources needed to communicate effectively with the collective Pacific community. The pivotal role of communication as discussed earlier in sharing information with parents/community (Humphrey-Taylor, 2015; Erdener & Knoeppel, 2018) suggests that perhaps the Community of Learning (CoL/Kahui Ako) could potentially resource this with some effective planning. This suggestion is supported by the Education Review Office (2018) endorsing schools to capitalise on Kahui Ako's capacity to engage educational providers and provide resources that enhance student achievement.

Through Kahui Ako, schools can work together to use teachers from within their community to act as interpreters at meetings (fono) where parents can be informed in their own language. This is due to an ongoing language barrier; despite the best schools' intentions to hold evening meetings designated to Pacific communities, information is still given in English (Major, 2018). Unfortunately, parents with minimum English skills may not fully comprehend information being communicated. Collaborating with Kahui Ako schools can mean teachers help their neighbouring schools by speaking in their mother tongue for that specific community.

As alluded to previously, meetings done face-to-face are preferred by Pacific peoples, therefore, needs careful planning to ensure culturally responsive practices are appropriately considered (Ministry of Education, 2018). For instance, space, time, food, and as mentioned recently, interpreters are all crucial elements of a fono as per the guidelines in the *APPE* document (Ministry of Education, 2020) which the next sections also refer to.

Regarding space, familial is important so using venues and spaces that are familiar to Pacific peoples (Ministry of Education, 2020) is more inviting for them, and it removes any initial barrier of coming to the school or to the fono. The other element of space is giving them time to talk and share their ideas and thoughts through a talanoa (Ioane, 2017). Time is a factor in this type of communication in that people need time to break through the barrier (break the ice) as evidenced in the study; rushing through a meeting is not considered appropriate because parents need time to feel comfortable first. Allowing space for them to share and not just to be told information is also crucial. For instance, encouraging them to ask questions about what is being discussed or share how they feel about it or what they know about it, can help them make connections to their own experiences.

Another implication for schools is planning for face-to-face talanoa when discussing education matters, which suggest schools ensuring that the *va* (Anae, 2019) is considered by researching into the Pacific community's whakapapa and making sure there is someone who knows Pacific whakapapa on

the board of trustees (Ministry of Education, 2020). Schools also need to proactively bring these people on board, and to assign the liaison role to a representative who can liaise with the families. In the fa'a-Samoa, whenever there is an issue to be discussed either in a family or village, talanoa or fono is always called by the matai (chief) through his messenger (orator) sent to inform the people about the time, date, and agenda. Compared to education, this means it is the authoritative figure's prerogative to inform participants of a meeting via a respected person such as the Pacific liaison or community-respected figure. This is supported by the recently released *APPE 2020-2030* as one of its Learning Environments' strategies for educators, "Consider the potential for a Pacific liaison role to connect with families. Consider fono (meetings) in places that families are familiar with and comfortable in" (Ministry of Education, 2020, p. 36).

To reiterate, the current *APPE 2020-2030* (Ministry of Education, 2020) once again brings to the fore the important role of community engagement in student achievement. Though this has been one of *PEP*s' goals for some time, reviews by the Education Review Office (ERO) (2012; 2013; 2017) and the findings of this study have indicated otherwise. For Pacific learners and their families, once effective communication breaks the first wall between them and schools, the other issues found in the study such as parents' concerns about their children's use of devices, and their lack of knowledge about MLEs can then be addressed. Thus, the researcher proposes that school leaders use strategies in the *APPE* and the *Tapasā* documents to create an action plan for improving communication, evaluate its effectiveness, and make the necessary changes for improvement. Planned workshops facilitated in their own language can encourage parents to attend to learn more about MLEs and importantly, to immerse in reciprocal conversations that help them contextualise education discourses. Some other suggestions include, developing a curriculum that values Pacific identity or fa'a-Pacific (Education Review Office, 2013), provide language acquisition professional development opportunities for non-Pacific teachers, and implement "pedagogical approaches that are effective for Pacific learners" (Ministry of Education, 2018).

5.5 Limitations of this study

The unprecedented outbreak of COVID-19 in 2020 played a huge role in the participant recruitment process. At this time, New Zealand had just come out of the second lockdown, hence the reason schools rejected invitations to partake in the study. Consequently, given the term 'Pacific peoples' represents a heterogeneous group, the small size sample was limited to Samoan, Tongan, and Kiribati, who were the first respondents. Albeit Pacific nations may have similar values and beliefs and the findings of

this study may be generalisable, the uniqueness of each group warrants the purpose of exploring their views too.

Another limitation relates to the difficulty of recruiting from schools where principals and Boards of Trustees are the gatekeepers of Pacific communities. For example, as found in the study, the existing breakdown in communication between communities and schools due to language barriers and using non-culturally responsive ways such as emailing, may limit opportunities for Pacific parents and boys to partake in any study. For future studies involving Pacific participants, face-to-face recruiting from community groups, including but not limited to church communities, are thought to be the most effective.

Given the focus was on Year 5 and 6 Pacific boys only, different results may be found with individual ethnic groups including non-Pacific students or with different aged groups both younger and older. Moreover, the parents' lack of knowledge might have skewed the reliability of the data.

5.6 Future recommendations

The identified limitations and the findings of this study would be useful for future research.

Given the scarcity of research on education issues pertaining to Pacific boys, this study focused only on boys and their parents/caregivers' perceptions of MLEs. An extended investigation of the impacts of MLEs on learning with a larger sample, would be valuable for schools to ensure Pacific learners are not further disadvantaged by this change. For example, a comparative study which compares their achievement prior to and after transitioning from traditional classroom to an MLE would provide further useful insights.

Another suggestion would be to explore teachers' perceptions of how they think the new pedagogies and open spaces affect Pacific learners' achievement. Perhaps a comparative study which repeats this research design to unveil the experiences and views of Pacific boys and their parents of MLEs from the teacher perspective. This might give schools insight into the consequences of poor communication and lack of consultation on making sustainable changes.

The last suggestion would be to investigate the different ethnic groups separately, considering the inherent complex variables that exist in the blanket term 'Pacific peoples'. Like Fa'avae (2017) who investigated family knowledge and practices useful for non-Pacific teachers of Tongan boys, perhaps a study focused on Samoan or Niue boys could be implemented. Perhaps then, research findings from Pacific peoples' studies might be discernibly generalised.

<u>Chapter 6: Conclusion</u>

Given that this study researched Pacific boys and their parents' views on modern learning environments, this chapter concludes the thesis by establishing the study's contribution to the existing body of literature on issues pertaining to Pacific learners' success in education. This contribution is based on the two overarching themes of communication (or rather, the lack of) in terms of consultation with parents and the community, and consistency regarding ideas and practices consistent with the participants' cultural practices. The following concluding paragraphs suggest the difference that this study's findings can make to Pacific learners' education based on the goals of the *Tapasā: Cultural competencies for teachers of Pacific learners* (Ministry of Education, 2018) and the *Action Plan for Pacific Education 2020-2030* (Ministry of Education, 2020).

To contextualise, the *APPE 2020-2030* sets out 'five key system shifts' that Pacific learners and their families need to experience in order to achieve the education system's overarching objectives. The Tapasā framework gives the lens through which the *APPE 2020-2030's* goals can be achieved. It constitutes three Turu or competencies which are:

> "… designed to support teachers to become more culturally aware, confident and competent when engaging with Pacific learners and their parents, families and communities." (Ministry of Education, 2018, p. 6).

As mentioned earlier, the research findings identified communication as a key theme from which the other themes derived. It was also identified as an important missing component of the remedial initiatives for raising Pacific learners' achievement. In other words, it is suggested that perhaps the lack of communication has hindered the Ministry's efforts to engage Pacific learners and their families in education matters. Fundamentally, without communication, the other themes such as collaboration or establishing and maintaining reciprocal relationships may not exist or be done effectively as evidenced in this study.

This finding is reflected in Turu 2 of the Tapasā framework which endorses the importance of enhancing communication and relationship building. This competency is reflected in Key Shifts 3 and 4 in the *APPE*. These Key Shifts and Turu 2 stress the need for schools to have regular conversations to discuss Pacific learners' stories, what is important to them and to use this knowledge to inform teaching practice. Schools also need to be proactive in finding places to get information or resources that incorporate various unique Pacific histories and stories in classrooms. As for parents and the communities, they are encouraged and given suggestions about what they can do to support their

children, such as reaching out to the schools, asking questions, and finding information from a variety of sources.

Regarding consistency, Turu 1 and 3 stress that Pacific learners' unique identities, languages, and cultures be acknowledged, valued, and used to provide culturally responsive pedagogies that are effective and consistent with Pacific cultural values. The boys in the study embraced all ideas and experiences in MLEs that connected to their culture because it gave them a sense of identity and confidence to achieve. The *APPE's* Key Shift 4 endorses the need for stakeholders to engage in consultations, to connect teachers, parents, communities, and learners in conversations about Pacific peoples' needs and aspirations.

"We have another chance to navigate, perhaps in a slightly different way than we did yesterday. We cannot go back. But we can learn" (Jeffrey R. Anderson, n.d).

References

Ainscow, M. (2016). Collaboration as a strategy for promoting equity in education: Possibilities and barriers. *Journal of Professional Capital and Community, 1*(2), 159-172. https://doi.org: 10.1108/JPCC-12-2015-0013

Akgunduz, D., & Akinoglu, O. (2016). The Effect of Blended Learning and Social Media-Supported Learning on the Students' Attitude and Self-Directed Learning Skills in Science Education. *Turkish Online Journal of Educational Technology-TOJET*, *15*(2), 106-115.

Alansari, M. (2018, May, 17). *Modern classrooms won't fix education.* Newsroom. https://www.newsroom.co.nz/@future-learning/2018/05/16/109682/modern-classrooms-wont-fix-education

Allison, M. A., Attisha, E., Lerner, M., De Pinto, C. D., Beers, N. S., Gibson, E. J., ... & Weiss-Harrison, A. (2019). The link between school attendance and good health. *Pediatrics, 143*(2).

Anae, M. (2019). Pacific research methodologies and relational ethics. In *Oxford Research Encyclopedia of Education*. https://doi.org:10.1093/acrefore/9780190264093.013.529

Averill, R., Metson, A., & Bailey, S. (2016). Enhancing parental involvement in student learning. *Curriculum Matters, 12*, 109-131.

Barrett, P., Davies, F., Zhang, Y. & Barrett, L. (2015). The impact of classroom design on pupils' learning: Final results of a holistic, multi-level analysis. *Building and Environment, 89*, 118-133. http://dx.doi.org/10.1016/j.buildenv.2015.02.013

Baydillah, P., & Ratna Rintaningrum, S. S. (n.d.). *Importance Of Communication In Education*. https://www.researchgate.net/profile/Pramuja-Baydillah/publication/354968194_Importance_Of_Communication_In_Education/links/615605db61a8f466708fb797/Importance-Of-Communication-In-Education.pdf

Benade, L. & Jackson, M. (2017). Intro to ACCESS special issue: Modern learning environments. *Educational Philosophy and Theory, 49*(8), 744-748. https://doi.org:10.1080/00131857.2017.1317986

Benade, L. (2018). Flexible learning spaces: Designed for inclusion?

Benade, L. (2019, in press). Pedagogy in flexible learning spaces. In M. Hill & M. Thrupp (Eds.), *The professional practice of teaching (6th ed.)* (pp. 213-235). Cengage Learning.

Blackmore, J. (2010). Preparing leaders to work with emotions in culturally diverse educational communities. *Journal of Educational Administration 48*(5), 642-658. http://dx.doi.org/10.1108/09578231011067785

Bolstad, R., & Gilbert, J., with McDowall, S., Bull, A., Boyd, S., & Hipkins, R. (2012). *Supporting*

future-oriented learning and teaching: A New Zealand perspective. Ministry of Education. http://www.educationcounts.govt.nz/publications/schooling/109306

Bolton, S. W. (2017). *Educational equity in New Zealand: Successes, challenges and opportunities*. Fullbright New Zealand.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org:10.1191/1478088706qp063oa

Bree, R. T., & Gallagher, G. (2016). Using Microsoft Excel to code and thematically analyse qualitative data: a simple, cost-effective approach. *All Ireland Journal of Higher Education*, *8*(2). http://ojs.aishe.org/index.php/aishe-j/article/view/[281]

Brinkley, I. (2006). *Defining the knowledge economy*. The Work Foundation.

Brooking, K. (2007). Home-school partnerships. What are they really? *Set: Research Information for Teachers*, *3*, 14-18.

Brown, P., & Lauder, H. (1996). Education, globalisation and economic development. *Journal of Education Policy, 11*(1), 1 - 25.

Bryk, A. S., Gomez, L. M., Grunow, A., & LeMahieu, P. G. (2015). Learning to improve: How America's schools can get better at getting better. Harvard Education Press

Bryman, A. (2012). *Social research methods (4th ed.)*. Oxford University Press.

Buchanan, R. A., Forster, D. J., Douglas, S., Nakar, S., Boon, H. J., Heath, T., Heyward, P., D'Olympio, L. D., Ailwood, J., Eacott, S., Smith, S., Peters, M., & Tesar, M. (2021). Philosophy of education in a new key: exploring new ways of teaching and doing ethics in education in the 21st century. *Educational Philosophy and Theory.* https://doi.org/10.1080/00131857.2021.1880387

Bull, A., & Gilbert, J. (2012). Swimming out of our depth? *Leading learning in 21st century schools*. NZCER.

Butterworth, G., & Butterworth, S. (1998). Reforming education: the New Zealand experience 1984–1996. Palmerston North, New Zealand: Dunmore Press.

Byers, T., & Imms, W. (2016). *Does the space make a difference?.* In *LEaRN*. The University of Melbourne LEaRN group. https://minerva-access.unimelb.edu.au/bitstream/handle/11343/191354/Churchie's%20New%20Generation%20Learning%20Spaces%20Booklet.pdf

Byers, T., Mahat, M., Liu, K., Knock, A., & Imms, W. (2018). *A systematic review of the effects of learning environments on student learning outcomes*. Melbourne: University of Melbourne, LEaRN. https://www.iletc.com.au/wp-content/uploads/2018/07/TR4_Web.pdf

Campbell, M., Saltmarsh, S., Chapman, A., & Drew, C. (2013). Issues of teacher professional learning within 'non-traditional' classroom environments. *Improving Schools, 16*(3), 209-222. https://doi.org:10.1177/1365480213501057

Carr, W., & Hartnett, A. (1996). *Education and the struggle for democracy: The politics of educational ideas*. Open University Press.

Carroll, J. (2015, November, 6). *Parents take extreme measures to move children out of school zones.* stuff. https://www.stuff.co.nz/national/education/73732596/parents-take-extreme-measures-to-move-children-out-of-school-zones

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.

Clinton, J., & Hattie, J. (2013). New Zealand students' perceptions of parental involvement in learning and schooling. *Asia Pacific Journal of Education*, *33*(3), 324-337. https://doi.org/10.1080/02188791.2013.786679

Clinton, J., & Hattie, J. (2015). Teachers as evaluators: An empowerment evaluation approach. *Empowerment evaluation*, 86-111. https://dx.doi.org/10.4135/9781483387079.n8

Cohen, L., Manion, L., & Morrison, K. (2002). *Research methods in education*. Routledge.

Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education (6th ed.).* Routledge.

Cobber, R., Tan, E., Slotta, J., So H., & Konings, K. (2015). Teachers as participatory designers: two case studies with technology-enhanced learning environments. Instructional Science, 43(2), 203-228. doi:10.1007/s11251-014-9339-0

Coxon, E., Anae, M., Mara, D., Wendt-Samu, T., & Finau, C. (2002). Literature review on Pacific education issues. *Auckland: University of Auckland*.

da Costa, D. F. (2021). Entangled in Two Romance Languages: Experiencing Language Barriers in Higher Education. *Australian Journal of Applied Linguistics, 4*(2), 60-74.

Danet, M. (2020). Parental Concerns about their School-aged Children's Use of Digital Devices. *Journal of Child and Family Studies., 29*(10), 2890-2904.

Dornhecker, M., Blake, J. J., Benden, M., Zhao, H., & Wendel, M. (2015). The effect of stand-biased desks on academic engagement: An exploratory study. *International Journal of Health Promotion and Education*, *53*(5), 271–280. https://doi.org/10.1080/14635240.2015.1029641

Đurišić, M., & Bunijevac, M. (2017). Parental involvement as a important factor for successful education. Center for Educational Policy Studies Journal, 7(3), 137-153.

Education Central. (2018, November, 19). *Opinion: Kia King – Parents: what do you think of modern learning?* https://www.educationcentral.co.nz/opinion-kia-king-parents-what-do-you-think-of-modern-learning/

Education Review Office. (2012). *Improving Education Outcomes for Pacific Learners*. https://www.ero.govt.nz/assets/Uploads/Improving-Education-Outcomes-forPacific-Learners-May-2012.pdf

Education Review Office. (2013). *Making connections for Pacific learners' success*. Wellington: Education Review Office. https://ero.govt.nz/sites/default/files/2021-05/Making-Connections-for-Pacific-Learners-Success-November-2013.pdf

Education Review Office. (2018). *Leading innovative learning in New Zealand schools* https://www.ero.govt.nz/publications/leading-innovative-learning-in-newzealand-schools-april-2018/

Education Review Office. (2020). *Strategic intentions 2020-2024*. https://www.ero.govt.nz/publications/strategic-intentions/

Epstein, J. (2010). *School, family, and community partnership: Preparing educators and improving schools (2nd ed.)*. Routledge.

Erdener, M. A., & Knoeppel, R. C. (2018). Parents' Perceptions of Their Involvement in Schooling. *International Journal of Research in Education and Science, 4*(1), 1-13.

Fa'avae, D. (2017). Family knowledge and practices useful in Tongan boys' education. *Set: Research Information for Teachers*, *2*, 49-56.

Fancy. (2009). Reengineering the shift in the system. *Tomorrow Schools: 20 years on…*. Cognition Institute.

Ferguson, P. B., Gorinski, R., Samu, T.W., & Mara, D. (2008). *Literature review on the experiences of Pasifika learners in the classroom*. Ministry of Education. https://www.educationcounts.govt.nz/publications/pacific/27772

Fischer, S., Barnes, R. K., & Kilpatrick, S. (2019). Equipping parents to support their children's higher education aspirations: A design and evaluation tool. *Educational Review*, *71*(2), 198-217.

Flavell, M. (2020). *The place of ako in strengthening home-school relationships for Pasifika secondary learners in Aotearoa/New Zealand*. Institute of Education.

Fletcher, J., Everatt, J., Mackey, J., & Fickel, L.-H. (2020). Digital technologies and innovative learning environments in schooling: A New Zealand experience. *New Zealand Journal of Educational Studies*. http://doi.org/10.1007/s40841-020-00156-2

French, R., Imms, W., & Mahat, M. (2020). Case studies on the transition from traditional classrooms to innovative learning environments: Emerging strategies for success. *Improving Schools, 23*(2), 175-189.

Fullan, M. (2013). *Stratosphere: Integrating technology, pedagogy, and change knowledge*. Pearson Canada.

Fullan, M. (2016). The elusive nature of whole system improvement in education. *Journal of Educational Change*, *17*(4), 539-544. https://doi.org/10.1007/s10833-016-9289-1

García-Mateus, S., & Palmer, D. (2017). Translanguaging pedagogies for positive identities in two-way dual language bilingual education. *Journal of Language, Identity & Education, 16*(4), 245-255.

Gattey, M. (2018, May, 2). *How modern learning environments work, and what parents' options are*. stuff. https://www.stuff.co.nz/national/education/103557339/how-modern-learning-environments-work-and-what-parents-options-are

Genć, R. (2017). The importance of communication in sustainability & sustainable strategies. *Procedia Manufacturing* 8, 511-516.

Gerchow, L., Burka, L. R., Miner, S., & Squires, A. (2021). Language barriers between nurses and patients: a scoping review. *Patient Education and Counseling*, *104*(3), 534-553. https://doi.org/10.1016/j.pec.2020.09.017

Gerritsen, J. (2015). *Backlash against open-plan classrooms*. RNZ. http://www.radion/z.co.nz/news/national/291045/backlash-against-open-plan-classrooms

Gilbert, J. (2007). " Catching the knowledge wave" Redefining knowledge for the post-industrial age. *Education Canada, 47*(3), 4-8.

Gonzales, S. M., & Gabel, S. L. (2017). Exploring involvement expectations for culturally and linguistically diverse parents: What we need to know in teacher education. *International Journal of Multicultural Education, 19*(2), 61-81.

Goodall, J. & Montgomery, C. (2014). Parental involvement to parental engagement: a continuum. *Educational Review, 66*(4), 399-410. https://doi.org/10.1080/00131911.2013.781576

Greenbank, P. (2003). The role of values in educational research: The case for reflexivity. *British educational research journal*, *29*(6), 791-801.

Hargreaves, A. (2005). Pushing the boundaries in educational change. In A. Hargreaves (Ed.), *Extending educational change*: *International handbook of educational change* (pp. 1–14). Springer Netherlands.

Hargreaves, A., & O'Connor, M. T. (2017). Cultures of professional collaboration: their origins and opponents. *Journal of Professional Capital and Community, 2*(2), 74-85.

Hattie, J. (2003). *Teachers make a difference: What is the research evidence?* Paper presented at the Australian Council for Educational Research Annual Conference on Building Teacher Quality.

Hinds, D. (2000). Research instruments. In D. Wilkinson (Ed.), *The researcher's toolkit: The*

complete guide to practitioner research (pp. 41-54). Routledge Falmer.

Hipkins, R., Johnston, M. & Sheehan, M. (2016). *NCEA in context*. NZCER Press.

Hornby, G., & Blackwell, I. (2018). Barriers to parental involvement in education: An update. *Educational review, 70*(1), 109-119.

Huda, M., Maseleno, A., Teh, K. S. M., Don, A. G., Basiron, B., Jasmi, K. A., ... & Ahmad, R. (2018). Understanding Modern Learning Environment (MLE) in Big Data Era. *International Journal of Emerging Technologies in Learning, 13*(5).

Humphrey-Taylor, H. (2015). Barriers to parental involvement in their children's education. *Journal of Initial Teacher Inquiry: Journal Articles*. http://dx.doi.org/10.26021/846

Hunter, J., Hunter, R., Bills, T., Cheung, I., Hannant, B., Kritesh, K., & Lachaiya, R. (2016). Developing equity for Pāsifika learners within a New Zealand context: Attending to culture and values. *New Zealand Journal of Educational Studies, 51*(2), 197-209.

Imms, W., Mahat, M., Byers, T. & Murphy, D. (2017). *Type and Use of Innovative Learning Environments in Australasian Schools ILETC Survey No. 1*. Melbourne: University of Melbourne, LEaRN. http://www.iletc.com.au/publications/reports

Imms, W. (2018). Innovative learning spaces: Catalysts/agents for change, or 'just another fad'?. *Alterator, S (Ed.). Deed, C (Ed.). School Space and Its Occupation Conceptualising and Evaluating Innovative Learning Environments,* (1), 107-120.

Ioane, J. (2017). Talanoa with Pasifika youth and their families. *New Zealand Journal of Psychology, 46*(3), 38-45.

Johansson-Fua, S., 'Otunuku, M., & Toumu'a, R. (2020). *It takes an island and an ocean* (Selected papers from the third Vaka Pasifiki Education Conference).

Kallio, H., Pietilä, A.-M., Johnson, M. & Kangasniemi, M. (2016). Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing* 72(12), 2954– 2965. https://doi.org:10.1111/jan.13031

Kariippanon, K. E., Cliff, D. P., Lancaster, S. L., Okely, A. D., & Parrish, A.-M. (2018, 2018/10/01). Perceived interplay between flexible learning spaces and teaching, learning and student wellbeing. *Learning Environments Research, 21*(3), 301-320. https://doi.org/10.1007/s10984-017-9254-9

Katharina, F., Stephanie, K., Jonathon, Z., Katherine, E. & Inger, M. (2017). A labour of love: A critical examination of the 'labour icebergs' of massive open online courses. In D. Lupton, I. Mewburn & P. Thomson (Eds.), *The digital academic: Critical perspectives on digital technologies in higher education* (pp. 122-139). Routledge.

Kelle, U., Prein, G. & Bird, K. (Eds.). (1995). *Computer-aided qualitative data analysis: Theory, methods and practice*. SAGE Publications.

Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd revised edition). New Age International (P) Limited.

Lailawati, M., Japil, A. R., Aftar, N. F., Bullare, M. I., & Zhi, A.-C.-H. (2020). Are they emotionally – socially intelligent? Examining emotional-social intelligence among adolescents residing in a children's home in the state of Sabah, Malaysia. *Southeast Asia Psychology Journal, 10* (January, 2020), 124-148.

Lange, D. (1988). Tomorrow's schools: The reform of education administration in New Zealand.

Langley, J. (2009). Introduction. *Tomorrow Schools: 20 years on….* Cognition Institute.

Larson, L. C., & Miller, T. N. (2011). 21st century skills: Prepare students for the future. *Kappa Delta Pi Record*, *47*(3), 121-123. https://doi.org:10.1080/00228958.2011.10516575

Lee, M., & Ward, L. (2013). Collaboration in Learning: Transcending the classroom walls. Camberwell, ACER Press.

Leithwood, K., and P. Patrician. (2015). "Changing the Educational Culture of the Home to Increase Student Success at School." *Societies 5* (3): 664–685. http://www.doi.org:10.3390/soc5030664

Long, J. & Cann, G. (2017, October,13). *'Flexible learning': an education fad, or a positive move for kids?*. stuff. https://www.stuff.co.nz/national/education/97739748/flexible-learning-an-education-fad-or-a-positive-move-for-kids

Lourie, M. (2018). '21st century practice in teaching and learning' in New Zealand education: 21 Strategic intention statements 2010-2016. *The Journal of the Pacific Circle Consortium for Education, 30,* 21-32. http://www.pacificcircleconsortium.org/uploads/1/1/9/5/119542233/pae_301final18.pdf#page=25

Lourie, M. (2020). Recontextualising twenty-first century learning in New Zealand education policy: The reframing of knowledge, skills and competencies. *New Zealand Journal of Educational Studies*, *55*(1), 113-128.

Magon, A. J. (2009). *Gender, the brain and education: Do boys and girls learn differently*? A project report submitted in partial fulfillment of the requirements for the degree of Master Of Education in leadership studies. Department of Educational Psychology and Leadership Studies. University of Victoria.

Mahat, M., Bradbeer, C., Byers, T. & Imms, W. (2018). *Innovative Learning Environments and Teacher Change: Defining key concepts*. Melbourne: University of Melbourne, LEaRN. http://www.iletc.com.au/publications/reports

Major, J. (2018). Bilingual identities in monolingual classrooms: Challenging the hegemony of English. *New Zealand Journal of Educational Studies, 53*(2), 193-208.

Male, T. & Palaiologou, I. (2017). Pedagogical leadership in action: two case studies in English

schools. *International Journal of Leadership in Education, 20*(6), 733-748. https://doi.org:10.1080/13603124.2016.1174310

Malone, D. (2015). Socioeconomic status: A potential challenge for parental involvement in schools. *Delta Kappa Gamma Bulletin, 83*(3), 58-62.

Matapo, J. (2019). A pasifika perspective on global citizenship education. *Curriculum Matters, 15*, 104-108.

May, S. (2002). Accommodating multiculturalism and biculturalism in Aotearoa New Zealand: implication for language education. *Waikato Journal of Education, 8*, 5-26.

McDowall, P. S., Taumoepeau, M. & Schaughency, E. (2017). Parent involvement in beginning primary school: Correlates and changes in involvement across the first two years of school in a New Zealand sample. *Journal of School Psychology 62*, 11-31.

McDowall, S., & Hipkins, R. (2018). *How the key competencies evolved over time: Insights from the research*. NZCER.

Meyer, M. W., & Norman, D. (2020). Changing Design Education for the 21st Century. *She Ji: The Journal of Design, Economics, and Innovation, 6*(1), 13-49. https://doi.org/https://doi.org/10. 1016/j.sheji.2019.12.002

Miles, M. & Huberman, A. (1994). *Qualitative Data Analysis* (2nd ed.). SAGE Publications.

Milne, A. (2009). Colouring the white spaces: Cultural identity and learning in school, Report to ASB/APPA Travelling Fellowship 2009.

Milne, A. (2013). Colouring in the white spaces: Reclaiming cultural identity in whitestream schools. [Unpublished doctoral thesis]. University of Waikato.

Ministry for Pacific Peoples. (2018). Pacific Aotearoa Lalanga Fou. https://www.mpp. govt.nz/assets/Uploads/Pacific-Aotearoa-Lalanga-Fou.pdf

Ministry of Education. (1993). The New Zealand Curriculum Framework. Ministry of Education.

Ministry of Education. (2006). *Pasifika Education Plan 2006-2010*. https://www.mcguinnessinstitute.org/wp-content/uploads/2021/04/140.-Pasifika_Education_Plan_2006-2010.pdf

Ministry of Education. (2007). *The New Zealand Curriculum*. Learning Media.

Ministry of Education. (2009). *Pasifika education plan (2009–2012)*. Ministry of Education.

Ministry of Education. (2013). *Pasifika Education Plan (2013–2017)*. Ministry of Education.

Ministry of Education. (2014). *Shaping education – Future directions.* http://www.shapingeducation.govt.nz/2-0-future-direction-of-education/property-

programme.

Ministry of Education. (2015). *Designing learning environments*. Ministry of Education.

Ministry of Education. (2016). Community of Learning: Guide for schools and kura. Ministry of Education.

Ministry of Education. (2018). *Tapasā Cultural competencies framework for teachers of Pacific learners*. Ministry of Education.

Ministry of Education. (2019). *Best practice for teaching Pacific learners: Pacific Evidence Brief 2019*. https://www.educationcounts.govt.nz/_data/assets/ pdf_file/0011/199685/Best-practice-for-teaching-Pacific-learners-Pacific-EvidenceBrief-2019.pdf

Ministry of Education. (2020). *Action Plan for Pacific Education 2020-2030*. https://conversation.education.govt.nz/conversations/action-plan-for-pacific-education/

Ministry of Education (2021). *Property design standards and legal requirements.* Ministry of Education.

Ministry of Education. (n.d.). *National Administration Guidelines* (NAGs). https://www.education.govt.nz/our-work/legislation/nags/

Ministry of Education. (n.d.). *National Education Goals* (NEGs). https://www.education.govt.nz/our-work/legislation/negs/

Ministry of Education. (n.d.). *School deciles.* https://www.education.govt.nz/school/funding-and- financials/resourcing/operational-funding/school-decile-ratings/

Moir, J. (2015, January, 14). *Kids wrongly labelled as disruptive, audiologist says.* stuff. https://www.stuff.co.nz/national/education/64957204/kids-wrongly-labelled-as-disruptive-audiologist-says?rm=m

Morris, T. H. (2019). Self-directed learning: A fundamental competence in a rapidly changing world. *International Review of Education, 65*(4), 633-653.

Munn, I. (2018). L is for learning: The challenge of the modern learning environment. *English in Aotearoa,* (93), 12-16.

Muscalu, E., Todericiu, R., & Fraticiu, L. (2013). Efficient organizational communication–A key to success. *Studies in Business and economics, 8*(2), 74-78.

Mutch, C. (2013). Doing educational research: a practitioner's guide to getting started (2nd ed.) NZCER Press

Nagaraj, N.K., Magimairaj, B.M. & Schwartz, S. Auditory distraction in school-age children relative to individual differences in working memory capacity. *Atten Percept Psychophys*

82, 3581–3593 (2020). https://doi.org/10.3758/s13414-020-02056-5

OECD. (2010). *The nature of learning: Using research to inspire practice*. https://www.oecd.org/education/ceri/thenatureoflearningusingresearchtoinspirepractice.htm

OECD. (2013). *Innovative Learning Environments, Educational Research and Innovation*. https://doi.org/10.1787/9789264203488-en

OECD. (2015). Schooling redesigned: Towards innovative learning systems. *Paris: Organisation for Economic Cooperation and Development.* http://doi.org:10.1787/9789264245914-en

OECD. (2017). *The OECD handbook for innovative learning environments*. http://www.oecd.org/education/the-oecd-handbook-for-innovative-learningenvironments-9789264277274-en.htm

OECD. (2018). *Teaching for the Future: Effective Classroom Practices to Transform Education*. http://dx.doi.org/10.1787/9789264293243-en

Olssen, M., & Matthews, K. M. (Eds.). (1997). *Education policy in New Zealand: The 1990s and beyond*. Dunmore Press.

Ongley, P., & Pearson, D. (1995). Post-1945 International Migration: New Zealand, Australia and Canada Compared. *International Migration Review*, *29*(3), 765-793. https://doi.org/10.1177/019791839502900308

Osborne, M. (2013). *Modern learning environments*. CORE Education White Paper. http://www.coreed.org/sites/core-ed.org/files/Modern-Learning-Environments-v.1.pdf

Osborne, M. (2016). *Innovative learning environments.* CORE Education White Paper. http:// www.core-ed.org/legacy/sites/core-ed.org/files/Innovative-Learning-Environments-FINAL-web.pdf?url=/ sites/core-ed.org/files/Innovative-Learning-Environments-FINAL-web.pdf

O'Toole, L., Kiely, J., & McGillicuddy, D. (2019, March, 7). *Parental involvement, engagement and partnership in their children's education during the primary school years*. National Parents Council. http://hdl.handle.net/10197/9823

Parr, C. J. (1963). Maori literacy 1843-1967. *The journal of the Polynesian society, 72*(3), 211-234.

Pickard, A. (2013). *Research methods in information* (2nd ed.). Facet Publishing.

Politi, M., & Street, R. (2011). The importance of communication in collaborative decision making: Facilitating shared mind and the management of uncertainty. *Journal of Evaluation in Clinical Practice, 17*(4), 579-584.

Punch, K.F., & Oancea, A. (2014). *Introduction to research methods in education* (2nd edition). SAGE Publications Ltd.

Ravulo, J., Said, S., Micsko, J., & Purchase, G. (2020). Promoting widening participation and its social value amongst Pacific people in Australia. *Pacific Dynamics: Journal Articles*. https https://dx.doi.org/10.18124/cjs6-ze19://dx.doi.org/10.18124/cjs6-ze19

Redmond, A. (2017, November, 2). *'Difficult to justify' investment in modern learning environments, ministry-funded study says*. stuff. https:///www.stuff.co.nz/national/education/98176286/difficult-to-justify-investment-in-modern-learning-environments-ministryfunded-study-says

Reichert, Michael, and Richard Hawley. "Relationships play primary role in boys' learning." *Phi Delta Kappan* 94, no. 8 (2013): 49-53. https://doi.org/10.1177/003172171309400812

Reparaz, C., & Sotés-Elizalde, M. A. (2019). Parental involvement in schools in Spain and Germany: Evidence from PISA 2015. *International Journal of Educational Research, 93*, 33-52.

Reynolds, M. (2018). "They Always Have My Back: A Strengths-Based Approach to Understanding the Value(s) of Pasifika Brotherhoods in Education in Aotearoa New Zealand. *International Journal of Multicultural Education, 20*(2), 1-23.

Rincón-Gallardo, S. and Fullan, M. (2016). Essential features of effective networks in education. *Journal of Professional Capital and Community, 1* (1), 5-22. https://doi.org/10.1108/JPCC-09-2015-0007

Roberts, P. (1998). The politics of curriculum reform in New Zealand. *Curriculum Studies, 6*(1), 29-46. https://doi.org/10.1080/14681369800200027

Samu, T. W., Mara, D., & Siteine, A. (2008). Education for Pacific Peoples for the 21st Century. In V. Carpenter, M. Stephenson, P. Roberts, & J. Jesson (Eds.), *Nga Kaupapa here: connections and contradictions in education* (pp. 145–157). Cengage.

Samu, T. W. (2010). 'Pasifika education: An oceanic perspective'. In *Pacific research in education: New directions.* MAI Review, Issue 10.

Samu, T. W. (2020). Charting the origins, current status and new directions with Pacific/Pasifika education in Aotearoa New Zealand. *New Zealand Annual Review of Education (2020)* 26, 197-207. http://doi.org:10.266686/nzaroe.v26.7138

Sawyer, S. M., Azzopardi, P. S., Wickremarathne, D., Patton, G. C., (2018). The age of adolescence. *Lancet Child Adolesc Health 2018, 2*(3), 223-228.

Schleicher, A. (n.d.). *A case for 21st-century learning.* OECD. https://www.oecd.org/general/thecasefor21st-centurylearning.htm

Selvaraj, J. (2016). *Inclusion in New Zealand secondary schools: Policy and practice* [Doctoral thesis, University of Auckland]. University of Auckland ResearchSpace.

https://researchspace.auckland.ac.nz/bitstream/handle/2292/29647/whole.pdf?sequence= 2

Shanahan, A. (2012, December, 22). *Education system is biased towards girls—yet we do nothing*. The Australian.

Sharp, T., Samu, T., Trotman, R., Cram, F. & Theodore, R. (2021). Pacific educational success in Aotearoa New Zealand: comparing Ngā Tau Tuangahuru study findings with policy directions and research. *Pacific-asian education - A journal of the Pacific circle consortium for education* 32, 59-74. http://www.pacificcircleconsortium.org/pae-journal.html

Si'ilata, R. (2014). *Va'a Tele: Pasifika learners riding the success wave on linguistically and culturally responsive pedagogies* [Doctoral thesis]. The University of Auckland, 2014.

Si'ilata, R., Samu, T. W., Siteine, A. (2018). The va'atele framework: Redifining and transforming Pasifika education. In E. McKinley, L. Smith (Eds), *Handbook of indigenous education.* Springer,

Si'ilata, R. (2019). Va'atele: Enabling Pasifika literacy success. *Literacy forum N.Z. 34*(1), 13-24.

Sikorska, M. (2020) 'Addictive' for children and 'helpful' to parents: electronic devices as a non-human actor in family relations. *Journal of Family Studies*. https:///doi.org:10.1080/13229400.2020.1759446

Simon, J. (2000). Education policy change: historical perspectives. In J. Marshall., E. Coxon., K. Jenkins. & A. Jones (Eds.), *Politics, policy, pedagogy: education in Aotearoa/New Zealand* (pp. 25-70). Palmerston North, New Zealand: Dunmore Press.

Statistics New Zealand. (2014). *2013 Census QuickStats about culture and identity*. https://www.stats.govt.nz/reports/2013-census-quickstats-about-culture-and-identity

Statistics New Zealand. (March 6, 2018). *Census of population and dwellings counts*. https://www.stats.govt.nz/information-releases/2018-census-population-and-dwelling-counts

Taylor, M. (2019). What do flexible learning spaces mean for curriculum organization in secondary schools? *Curriculum Matters, 15*(2019), 30-41. https://doi.org/10.18296/cm.0035

Taylor, P.C., & Medina, M.N.D. (2013). Educational research paradigms: From positivism to multiparadigmatic. *Journal for Meaning-Centered Education, 1*. http://www.meaningcentered.org/journal/volume-01/educational-research-paradigms-from-positivism-to-multiparadigmatic/

Tiatia-Seath, S. (1998). *Caught between cultures: a New Zealand-born Pacific Island perspective*. Christian Research Association.

Timperley, H., Ell, F., & Le Fevre, D. (2017). Developing adaptive expertise through professional learning communities. In A. Harris, M. Jones, & J. B. Huffman (Eds.), *Teachers Leading*

Educational Reform: The Power of Professional Learning Communities (pp. 175-189). Routledge.

Tschannen-Moran, M. (2001). Collaboration and the need for trust. *Journal of Educational Administration, 39*(4), 308-331.

Tuitama, R. F. (2020). Digital spaces: Pasifika parents and caregivers talanoa on the impact of digital technologies (Master's thesis).

Turner, H., Rubie-Davies, C. M. & Webber, M. (2015). Teacher Expectations, Ethnicity and the Achievement Gap. *NZ J Educ Stud 2015 50*, 55-69. https://doi.org:10.1007/s40841-015-004-1

Twyford, K. (2016), Risk or resistance: Understanding teachers' perceptions of risk in professional learning (Unpublished doctoral dissertation). University of Auckland, Auckland, New Zealand.

Twyford, K., Le Fevre, D., & Timperley, H. (2017). The influence of risk and uncertainty on teachers' responses to professional learning and development. *Journal of Professional Capital and Community*, *2*(2), 86-100.

Vaioleti, T. (2013). Talanoa: Differentiating the Talanoa Research Methodology from phenomenology, narrative, Kaupapa Maori and feminist methodologies. *Te Reo, 56*(57), 191–212. https://search.informit.org/doi/10.3316/informit.674853083445219.

Vaioleti, T.M. (2006). Talanoa research methodology: A developing position on pacific research. *Waikato journal of education, 12*(2006), 21-34.

Vinopal, K. (2018). Understanding individual and organizational level representation: The case of parental involvement in schools. *Journal of Public Administration Research and Theory, 28(*1), 1-15.

Wall, G. (2014). *Modern learning environments to support priority learners*. Ministry of Education. http:www.educationcounts.edcentre.govt.nz/

Wall, G. (2016). *The impact of physical design on student outcomes*. Ministry of Education. http://www.education.govt.nz/assets/Documents/PrimarySecondary/Property/School-property-design/Flexible-learning-spaces/FLS-Theimpact-of-physical-design-on-student-outcomes.pdf

Walters, L. (2015). *Top schools give multi-million dollar classrooms a fail-grade*. stuff. http://www.stuff.co.nz/national/education/73042309/top-schools-give-multimillion-dollarclassrooms-a-fail-grade

Wendt, A. (1996). New Zealand electronic poetry centre. *Tatauing the post-colonial body, span 42*(43), 15-29. http://www.nzepc.auckland.ac.nz/authors/wendt/tatauing.asp

Wendt Samu, T., Mara, D., & Siteine, A. (2013). Education for Pacific people for the twenty-first century. In O'Connor P, S. L. Sauni (Eds.) *Within and beyond the reef of Pasifika*

education. Pearson.

Wilson, M., (2015). *Investigating the effectiveness of modern learning environments on improving student learning and achievement*. Ministry of Education. http://wwwWright, N. (2018). Framing Learning Spaces: Modern Learning Environments and 'Modern'Pedagogy. In Becoming an Innovative Learning Environment (pp. 21-45). Springer, Singapore.educationalleaders.govt.nz/.../Mark%20Wilson%20Sabbatical%20Report%20 2015%20%20Investigating%20the%20Effectiveness%20of%20Modern%20Learning%2 0Environ ments%20.pdf

Wineburg, S. (2018). *Why learn history (When it's already on your phone).* University of Chicago Press.

Wright, N. (2018). Framing Learning Spaces: Modern Learning Environments and 'Modern' Pedagogy. In *Becoming an Innovative Learning Environment* (pp. 21-45). Springer, Singapore.

Appendices

Appendix 1 – Sample Participation Information Sheet

Critical Studies in Education
Akoranga Matauranga
Te Kura o te Kōtuinga

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STUDENT PARTICIPANT INFORMATION SHEET
(Student - Pacific boys)

Project title: Exploring Pacific boys' and their parents/caregivers' perceptions and experiences of modern learning environments (MLEs).

Principal Investigator/Supervisor: Dr Tanya Samu
Co-investigator/Supervisor: Dr Kerry Lee
Student Researcher: Oloataua Fa'amamafa

Who is the researcher?

My name is Oloataua Fa'amamafa and I am a fulltime teacher at Peninsula Primary School. I am having time off this year to do my Master of Educational Leadership study at the University of Auckland. Dr Tanya Samu and Dr Kerry Lee are helping me to do this study.

What is the study about and why have you been asked to take part?

The aim of this study is to look at what you as a 9-10-year-old Pacific boy (Year 5/6) and your parents/caregivers think about modern learning environments (MLEs). I will also ask you to share some of the things you do in MLEs, and how those things help you with your learning and behaviour.

This piece of paper asks you to be part of this study because you are a Pacific boy aged 9-10 working in a Year 5/6 MLE.

Please note that when I use the word 'data' it means your answers to the questions.

What am I asking you to do?

This study has 2 parts.

Part 1: Online questionnaire

When your parent/caregiver gives you the link for the questionnaire, it shows that they are letting you take part in this part of the study. Doing the questionnaire will show that you understand what the study is about, and that you agree to take part in Part 1.

Part 2: One-on-one interview (Talanoa):

At the end of the online questionnaire, you will be asked if you would like to take part in the interview. If you say yes, you can click on the link that will take you to a new page where you can write down your contact details. You can choose to be interviewed on the phone, on ZOOM or face to face. If it is face to face, you can choose to have it at your church or a place where you will be comfortable. The first 6 boys to send the link details back to me will be chosen for the interview. If you are chosen, I will send your parent/caregiver a permission (consent) form to sign to show they are letting you do it. I will also send your own permission form (Assent) for you to sign to show you are willing to take part in the interview. If you are not chosen because we have already got 6 boys, then you will be sent an email thanking you for willing to take part.

The interview will take about 1 hour (60 minutes) and if you agree, it will be sound recorded to make sure that I do not miss any important information. When the data is all written out you will get a copy of your answers to check. You will have 2 weeks to change your answers or ask for another interview. I will start to sort out the data (data analysis) 1 week after getting your answers back, so you will not be able to change your answers or remove your data at that time.

If you are chosen for the interview, you will be given a $20 Warehouse Stationery voucher as a "Thank you" gift for being part of this study.

How will your data be used/kept/destroyed?

Data from the online questionnaire and interviews will be used to write a report about what I found out from the study. I hope it may help schools plan ways to help other boys like you make the most of learning in MLEs. You can have a short version of the report if you wish.

All data for this study will be kept safely on a password protected computer, and papers will be locked in a cupboard in a University office, then they will be destroyed forever after 6 years.

Do you have to take part?

Choosing to take part or not is up to you and your parent/caregiver. You do not have to take part even if your parent/caregiver wants you to. If you take part or not, it will not change your schooling in any way. You have the right not to answer any question or to finish and send in the questionnaire. You can leave the interview at any time without giving any reason. Also, you have the right to remove yourself from the study, or to remove any data that you have given at any time up to late November. After this, the data will be sorted so you will not be able to remove yours.

Who will know about your part in this study?

All the information that you give us will be private. Your name and your parent/caregiver's name will not be used in any way. If you do the interview, you will be given a fake name to use in the study. If you only do the online questionnaire, no one will know about your details, not even me.

The interview recordings will be transcribed (put into words on paper) by a third party, someone who does this under the University of Auckland. They will be asked to sign a form to promise that they will keep all recordings private and safe, and delete all copies they have made at the end of the study.

Please show this paper to your parents and talk with them about what this study is about, and what you have been asked to do.

Please contact me, or my supervisors, or the head of school if you have any questions about this study.

CONTACT DETAILS:

Student Researcher: Oloataua Fa'amamafa	ofaa004@aucklanduni.ac.nz	
Principal Investigator/Supervisor: Dr Tanya Samu	t.samu@auckland.ac.nz	ph 09 623 8899 ext 48339
Co-investigator/Supervisor: Dr Kerry Lee	k.lee@auckland.ac.nz	ph 09 623 8899 ext 48529
Head of School: Prof John Morgan	john.morgan@auckland.ac.nz	ph 09 373 7999 ext 46398

For any concerns regarding ethical issues you may contact the Chair, the University of Auckland Human Participants Ethics Committee, Office of Strategy Research and Integrity, University of Auckland, Private Bag 92019, Auckland 1142. Telephone 09 373-7599 ext. 83711.

Email: humanethics@auckland.ac.nz

Approved by the University of Auckland Human Participants Ethics Committee on July 24th 2020 for three years. Reference Number UAHPEC1465.

Appendix 2 – Sample Consent Form

Critical Studies in Education Te Kura o te Kōtuinga Akoranga Mātauranga

Epsom Campus
Gate 3, 74 Epsom Ave
Auckland, 1023, New Zealand
T +64 9 373 7999
W www.education.auckland.ac.nz
The University of Auckland
Private Bag 92601
Symonds Street
Auckland 1135
New Zealand

CONSENT FORM
(Parents/Caregivers)

THIS FORM WILL BE HELD FOR A PERIOD OF 6 YEARS

Project title: Exploring Pacific boys' and their parents/caregivers' perceptions and experiences of modern learning environments (MLEs).

Principal Investigator/Supervisor: Dr Tanya Samu
Co-investigator/Supervisor: Dr Kerry Lee
Student Researcher: Oloataua Fa'amamafa

I have read the Participant Information Sheet and I understand what the research is about and why I have been chosen to take part. I have had the chance to ask questions and I am pleased with the answers.

- I agree / do not agree to take part in the interview.
- I agree / do not agree to be sound recorded
- I understand that:
  - I do not have to take part if I do not want to.
  - if I choose to take part or not, it will not change my relationship with the church minister and elders, as the minister and the Parish Council have given their word (assurance) on this.

- data from the online questionnaire and interview will be used for this study.
- I can choose to use a phone, Zoom, or a face-to-face interview at a time that is good for me.
- I can choose not to answer any questions, stop the interview at any time, or ask to have the recorder turned off without giving any reason.
- I will be given a written copy of my answers (transcript) and I can ask for a new interview or change my answers up to 2 weeks of receiving it.
- I can have a report of the study (summary of findings) if I ask for it.
- all sound recorded and electronic data will be stored safely on a password-protected computer. Paper data will be stored in Dr Tanya Samu's locked cupboard in her University of Auckland office. After 6 years all data will be destroyed and deleted forever.
- I can remove myself from the study at any time up until late November.
- I will be given a fake name within the study so no one will be able to identify me.
- all information will be confidential and only the research team will see it.

● I wish / do not wish to get a summary of findings.

Please send it to_______________________________

My Name: ………..…………………………………………………………

Signed: ……………………….. Date: ………………………………...

Approved by the University of Auckland Human Participants Ethics Committee on July 24th 2020 for three years. Reference Number UAHPEC1465.

Appendix 3 – Sample Assent Form

EDUCATION AND SOCIAL WORK

Critical Studies in Education Te Kura o te Kōtuinga Akoranga Mātauranga

Epsom Campus
Gate 3, 74 Epsom Ave
Auckland, 1023, New Zealand
T +64 9 373 7999
W www.education.auckland.ac.nz
The University of Auckland
Private Bag 92601
Symonds Street
Auckland 1135
New Zealand

ASSENT FORM
(Boys)

THIS FORM WILL BE HELD FOR A PERIOD OF 6 YEARS

Project title: Exploring Pacific boys' and their parents/caregivers' perceptions and experiences of modern learning environments (MLEs).

Principal Investigator/Supervisor: Dr Tanya Samu
Co-investigator/Supervisor: Dr Kerry Lee
Student Researcher: Oloataua Fa'amamafa

I have read the Participant Information Sheet and I understand what the study is about. I have had the chance to ask questions and I am happy with the answers.

- I agree / do not agree to take part in the interview.
- I agree / do not agree to be sound recorded
- I wish / do not wish to get a copy of this study's report.
- I understand that:
  - I do not have to take part even if my parents/caregivers would like me to.
  - if I do **or** do not take part, it will not change my relationship with my church.

- data from the online questionnaire and interview will be used in this study.
- I can choose not to answer any questions, stop or leave the interview at any time, and ask to have the recorder turned off without giving any reason.
- I will have 2 weeks to ask for a new interview or change my answers when I get a copy of my answers to check.
- I can remove myself from the study anytime up until late November.
- after 6 years, data will be destroyed and deleted forever.
- if I choose to be interviewed, I will be given a fake name to use in the study.
- all information about me will be private, and only the research team will ever see it.

My name: ________________________________

Signed:________________**Date:** _____________

Approved by the University of Auckland Human Participants Ethics Committee on July 24th 2020 for three years. Reference Number UAHPEC1465.

Appendix 4 – Sample Online Questionnaire

Project Title: Exploring Pacific boys' and their parents/caregivers' perceptions and experiences of modern learning environments (MLE).

Boys' Questionnaire

Questionnaire: The following questions are to find out your views and experiences of MLE. It is important for you to know that you do not have to answer all the questions, you can stop it any time, and you do not have to finish it. For more information click this link to the Participant Information Sheet (PIS).

Important note: Filling and sending in this questionnaire will show that you have agreed to take part in this first part of the study.

Section 1: *School Information*

1) Is your school a_________? (Please tick)

    a. Primary (Years 0-6) b. Full Primary (Years 0-8)

2) How long have you been in the MLE? (Please tick)

    a. 1-year b. 2 years c. 3 years. d. since I started school.

3) What is your nationality? ___________

4) How old are you? __________

Section 2: *Positive experiences or challenges you have faced in MLE*

5) On the scale of 1-5, rate your agreement with the following statements. **(1 = Really Disagree, 2 = Disagree, 3 = Can't Decide, 4 = Agree, 5 = Really Agree).**

	Rate your agreement with these statements.	**Use the scale 1- 5 to rate your experience**
1	I love going to school	
2	The teacher is usually available when I need help	
3	Learning in MLE helps me work with others	
4	I can complete most of my work on my own	

5	I know how to get help if I need it	
6	I hate going to school	
7	The teacher is usually too busy when I need help	
8	I find it very hard to work when the noise in our learning space is too loud	
9	I know what to do when I am stuck	
10	The teacher can usually tell if I am not on task	
11	My teacher can easily manage the noise level in our learning space	
12	I can still do my work even if the noise level is too loud	
13	I do not like learning in MLE	
14	I have lots of friends at school	
15	I would rather learn in a single cell classroom than MLE	
16	I like learning in MLE better than a single cell classroom	
17	I have had lots of unhappy/negative experiences in MLE	
18	I have had lots of happy/positive experiences in MLE	
19	I get into trouble a lot in MLE because I can't keep up with the learning	
20	MLE makes learning hard for Pacific children especially for boys	
21	I like having the teacher tell me what I need to learn instead of having to choose for myself what I think I need to learn	

22	I do not like using technology and devices	
23	I am usually confident to choose what I need to learn	
24	I am able to use technology and devices on my own	
25	I like having to choose where I work best instead of the teacher telling me where to sit and work	
26	I like using technology and devices	
27	I am making better progress with my learning in MLE than when I was in a single cell classroom	
28	MLE makes learning easy for Pacific children including boys like me	
29	I feel comfortable talking to the teacher when I am worried about my learning	
30	Using technology and devices for learning makes me nervous	

Section 3: *Sharing your views and experiences of MLE*

6) In your own words, tell me what you think about MLE.

____

____

____

7) What unhappy/negative experience(s) have you had in MLE?

____

____

____

8) What happy/positive experience(s) have you had in MLE?

____

____

____

9) In your opinion, what kind of students do you think work best in MLE? Why?

____

____

____

10) How do you think working in MLE has affected your learning and behaviour?

____

____

____

11) Would you like to participate in a one-on-one interview to talk more about some of your answers?

a) Yes (click on the link below) b) No

Link for contact and interview details

Thank you for the time that you have put into answering these questions. Your input in this part of the study is greatly valued. .

Approved by the University of Auckland Human Participants Ethics Committee on July 24th 2020 for three years. Reference Number UAHPEC1465.

Appendix 5 – Sample Indicative One-to-one Interview

Project Title: Exploring Pacific boys' and their parents/caregivers' perceptions of modern learning environments (MLE).

Indicative semi-structured interview questions for **boys** using *talanoa*

School:
Year:
Nationality:

Talofa lava. How are you? Thank you for agreeing to take part in this interview. I am interested to find out what you think about MLE. I would also like to know how you think working in MLE is helping you with your learning and your behaviour. During the interview I will ask you to explain in detail any of the answers you gave in the questionnaire that you want to talk about.

There are no right or wrong answers in this interview because it is your story that I want to hear.

2). Tell me what you think about MLE.

___

___

___

(i) Why do you think that?

___

___

___

3). Can you please describe some of the positive or successful experiences you have had in MLE?

___

___

___

4). Have you ever had any negative or challenging experiences in MLE?

___

___

___

(i) How did this experience make you feel?

____

____

____

(ii) How could the school or the teacher have helped with that?

____

____

____

(iii) What are some possible changes or things that the school or the teacher could do to help you, if that ever happens again?

____

____

____

5). In your opinion, how is working in MLE affecting your learning? Does it make learning easier or harder? Please explain.

____

____

____

6). How is working in MLE affecting your behaviour?

____

____

____

(i) Have you ever got into trouble for not being on task or not completing your work?

____

____

____

(ii) Have your parents ever been contacted about something you have done? Please tell me about it.

____

____

____

7). Based on your experiences in MLE, do you think these types of learning spaces are good for Pacific boys or not?

____

____

____

(i) Why do you think that?

____

____

____

(ii) What advice would you give to other Pacific boys about working in MLE?

____

____

____

8). If you were a principal of the school about to design new classes, would you choose an MLE? Why?

____

____

____

9). In your opinion, what kind of students work best in MLE? Why do you think that?

____

____

____

10). What kind of students do not do well in MLE? Why do you think that?

____

____

____

11). In your opinion, do you think modern learning environments are good learning spaces for Pacific students? Why/Why not?

____

____

____

Is there anything else you want to talk about?

____

____

____

Thank you very much for being part of this study. I appreciate your time and sharing your story. I will send you your written copy of the interview (transcript) to check and send back to me within two weeks after you have received it.

Approved by the University of Auckland Human Participants Ethics Committee on July 24th 2020 for three years. Reference Number UAHPEC1465.