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**Supporting English language learning by bridging from
childrens' first languages in Papua New Guinea: An analysis of
Grade 3 teachers' conceptions and practices**

by

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ABSTRACT

This is a descriptive study that was conducted with selected Grade 3 teachers in the East New Britain Province of Papua New Guinea. Grade 3 teachers implement bridging in bilingual education using the children's local vernacular language and/or Tok Pisin to help the learning of English. Three main reasons underpin this study. First, the study aimed to identify the participants' conceptions and beliefs about bridging. Second, the study wanted to document and analyse the bridging strategies and practices that teachers were employing to support the children's English learning, and third, the study was interested in identifying effective strategies and practices that could be recommended for all teachers in Papua New Guinea involved in bridging between the languages children know and English.

A qualitative approach was used with focus group interviews, classroom observations, and a post-observation interview. The data generated from these methods captured teachers reporting what they do, what they think about bridging, and what they think are factors affecting implementation of effective bridging. The data also showed what teachers actually did in their classrooms, and how they explained what they did.

When teachers talked about their conceptions of bridging and how they implemented bridging, the model of bilingual education that seemed to be guiding the participants' idea of bridging is the Transitional Bilingual model, where the L1 is replaced by the L2 over a period of time. When teachers talked about how they implemented bridging, they represented it mainly as a process of translation from one language to another. Teachers also talked about the use of both Tok Pisin and the vernacular in terms of scaffolding learning of new words. When asked what they thought about bridging, it seemed that many did not see a value in continued support of the L1 in that bridging was to get the children to learn English as soon as possible. They did not express very positive attitudes about the use of the vernacular or Tok Pisin. Teachers identified issues to do with language complexity and diversity as being the most important in terms of affecting implementation of effective bridging. Teachers also identified lack of resources and a lack of clear guidelines from the Department of Education as issues. When observed, teachers made no use of the vernacular. Students in their classrooms spent a great deal of the time listening to teacher monologue, or involved in teacher-led questioning sequences that focused on getting students to produce language

forms, particularly vocabulary. Of the discourse strategies observed, direct translation and metalinguistic comparison were common. Teachers also provided elaborated metalinguistic explanations, and at times they codeswitched extensively in these explanations.

The research has pointed to the fact that, while teachers use some effective strategies, they would be better supported by having research-informed professional development and resources in the area of bilingual education and bilingual instructional strategies. There is a need for all, including teachers, schools, the Provincial Educational Authorities and the Department of Education to work together to get the best language and educational outcomes for children in PNG.

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CHAPTER 1: INTRODUCTION

English is the language of the educated elite, of formal business, of the professions and is widely used by the national news media and in debates in the national parliament. Politically, English plays a neutral role. It acts as a unifying force in a country where antagonism and suspicion amongst indigenous linguistic groups have resulted in ethnocentric attitudes toward each others' languages.

The attitude of students and parents toward English has changed because it is now regarded as an asset which must be acquired in order to succeed in school. As a matter of fact, the acquisition of literacy in English is now seen as a measure of one's level of educational attainment.

However, even though English has been embraced as the medium of instruction for the last three generations, it has failed to live up to the expectations of the majority of Papua New Guineans, both as an appropriate medium of communication and as the language of education. (Tafawa, nd, p. 2)

The opening remarks highlight both the desperate need to learn English for many Papua New Guineans and the ambivalence felt towards it. People have recognised that English language plays an important role in schools, and in society. Having the ability to speak and use English is a means for success in one's educational attainment. Although, Papua New Guinea (PNG) exhibits diversity of local languages and cultures, the people have the desire in the future for their children to be educationally successful through knowledge of English.

1.1 Statement of the problem of English learning in PNG schools

In PNG, English is learnt only through formal school settings and teachers have much responsibility to support not only children's content knowledge but also the ability to speak and write in English (Gould, 2004). Children begin their formal schooling in elementary schools with the use of the child's local vernacular (one of the many indigenous languages spoken by people in PNG)¹ which is the language of the community where the child is situated, and therefore is the child's first language. This is unproblematic as most classroom

¹ The indigenous languages are referred to as "tok ples" in PNG.

activities are usually orally based. After completing three years at the elementary school, children proceed into Grade 3 in the primary school where the learning of English begins. It should also be noted however that for some children, either Tok Pisin or Hiri Motu, is their first language.

A move by the National Department of Education (NDOE) in PNG to accommodate the use of the local vernacular to ease the transition to learn the English language has been in place in the last decade (Waiko, 1999). This shift means that Grade 3 teachers are mainly responsible to support English learning through the Transitional Bilingual Education (TBE) model known as 'bridging'. The purpose of bridging is to utilise children's first language (L1) to support the learning of the second language (L2) which is English. The bridging process refers to the use of particular teaching practices that link L1 and L2.

The effectiveness of bridging in the Grade 3 classroom sets the foundation for future English language and literacy learning. Learning to use English is necessary as English has become the official language in PNG's primary and secondary schools. However, the concern is that the children's English level has not equipped the children to function in English literacy after Grade 3. This raises the question as to how the teachers have executed the bridging programme. However, before exploring this further, it is necessary to provide some background about PNG culture, education and language use.

1.2 Background context of Papua New Guinea

Papua New Guinea is a Melanesian island country located between the Coral Sea and the South Pacific Ocean, to the north of Australia and the east of Indonesia. The geography of the country encompasses rugged terrain, huge rain forests and some long and swampy rivers. PNG has 21 provinces with each province having a town. According to the 2000 national census (National Statistical Office of PNG, 2003) the population at that time was 5.2 million with 80% of the people residing in their rural villages. In a PNG rural community, one would find several groups of villages located together in a surrounding area who also share a common indigenous language. Social units are based on the family, clan and tribe.

1.2.1 The culture of Papua New Guinea

Certain researchers identify PNG as a land of diversely complex cultures because of the different practices observed around the country (for example, see Cooper & Nagai, 2005; Foley, 1986). The ceremonies, rituals, beliefs and customs, and languages are unique to different tribes and clans. Indigenous knowledge and skills are passed on from the older generation to the younger generation through traditionally accepted ways like storytelling and cultural initiations. What one tribe or clan values and practises culturally may not be important to another group of people.

1. 2. 2 Language use in Papua New Guinea

According to Foley (1986), PNG has two radically different indigenous language types, the Austronesian, or Melanesian and the non-Austronesian or Papuan. Foley (1986) defines an Austronesian language as genetically related from one ancestral language that is believed to have migrated from South East Asia. It is characterised by a subject, verb, and object word order in sentence structure. In contrast, non-Austronesian languages, of which there are more than 60 distinct language families, use a subject, object, and verb word order. This would suggest some significant distance (Elder & Davies, 1998) between the two language types that might cause difficulties in learning multilingually.

PNG has more than 800 living languages and three lingua francas: Hiri Motu, Tok Pisin or English. Because of the multiplicity of languages, Tok Pisin has developed as the most common lingua franca throughout the country while Hiri Motu is specifically spoken by people around the Port Moresby area. Every individual in PNG will probably be able to speak at least two languages to some degree, as most also speak a local vernacular (Wroge, 2002), together with some knowledge of Tok Pisin or Hiri Motu.

Many researchers who have studied languages in PNG have found that the older generation of people speak mostly the local language or vernacular, although some of them have passed away leaving the younger generation of people with less usage of their local vernacular (Cooper & Nagai, 2005; Gould, 2004; Lindström, 2005). With people moving into urban areas, and intermarriages, the new generation of people may not be fully conversant in their local vernacular and familiar with its vocabulary. In daily communication many young people and children borrow appropriate English or Tok Pisin words to use with their local

vernacular (Lindström, 2005), and may use code switching or mixing on a regular basis (Cooper & Nagai, 2005).

1.3 The PNG education system

1.3.1 PNG education reform

In 1993, PNG's education system was reformed. According to NDOE (1986) the introduction of the educational reform was PNG's first attempt to introduce an education system that was Papua New Guinean in perspective and not from a foreign idea of education as instigated by the earlier colonisers of PNG. The philosophy of the education reform was outlined as a ministerial report known as the 'Matane Report' (NDOE, 1986). This report was named after its chairman Sir Paulias Matane (Litteral, 1999).

The Matane report was inclusive of two main aspects of the Education Reform; the 'structural reform' and the 'curriculum reform'. The structural reform specified that children have 3 years elementary schooling and then move into the primary schools to do Grades 3 to 8 and then can proceed into secondary schools to do Grades 9 to 12. After Grade 12, students move into universities or colleges pursuing tertiary training. In the curriculum reform, teaching resources such as the teachers' guides and the syllabuses were also developed for the different grades. One of the main features of the curriculum reform was the focus to prepare students to maintain their culture and language, and tho this aim it introcuded 'vernacular education' (National Curriculum Statement, 2003).

1.3.2 PNG language in education and language policy

Prior to the reform, the language used in PNG schools at all levels from primary to secondary schools was English only. After the establishment of the education reform, there was an agreement between the PNG government, AusAID and the Asia Development Bank (ADB) that the children's local languages would be used in classroom learning. At the same time the National Department of Education in PNG advocated that the local vernacular was to be used in the preparatory, grade 1 and grade 2 at the elementary schools (Gould, 2004, p. 206). This language policy is elaborated in Waiko (1999) where the use of the local language would be used as the language of instruction for teaching and learning to connect the local knowledge

and cultures of the children into the classroom learning referred to as the bridging process. It is believed that vernacular education should help children to develop oral, written and reading skills which will then be transferred into the learning of English.

The majority of children who enter Grade 3 classes in primary schools have little or no knowledge of English at all. The teachers are expected to use the bridging process to support the children to learn English. This early phase for English learning is critically important at the Grade 3 levels of PNG's primary schools because it sets the foundation for subsequent learning and usage of English. The teachers support content learning as well as supporting the transition from the children's first language (L1) to learn the English language (L2).

After some years of implementing the vernacular policy and the use of bridging to support the learning of English, many people in schools and local communities are not convinced that the use of the local vernacular is helpful at all. This is evident from the numerous complaints in the viewpoint sections of the PNG's newspapers, for example, Rambli (2008). Many believe that the use of the local vernacular is not helping children to speak English. Many of these sceptics have learnt English in a monolingual way and believe that this is the most appropriate method.

My oral communication with villagers, teachers and parents also suggests that there is a strong opposition to the use of the local vernaculars in the classroom. These critics very much doubt the effectiveness of the use of the local languages to support the learning of English (Honan, 2003). Primary school teachers also find that their children are not able to function in the English language. In addition, most parents and community members are also concerned that their children are wasting their time in the local vernacular and not getting the proper English support that would equip them in the subsequent learning (PNG Post Courier, 2008). There is then considerable dissatisfaction and scepticism about the use of the local vernacular in the teaching of English. There is also concern about the declining level of speaking and reading in English (PNG National News, 2008; PNG Post Courier, 2008).

While I have described 'the vernacular policy' as if the use of the vernacular is a given and not problematic, this is certainly not the case. It also has to be recognised that Tok Pisin plays an important role in society and therefore needs to be accounted for in classrooms and in the vernacular policy. It is unlikely to be the case that it is not used alongside the vernacular. It is essential to understand how the teachers' bridging practices have worked with respect to the

vernacular as well as Tok Pisin. There is no research describing how, or even if, Grade 3 teachers use the vernacular systematically, and no detailed research of their use of Tok Pisin. From this background, I will now describe the present study that aims to address the lack of detailed descriptive research.

1.4 The present study

This is a relatively small scale predominantly qualitative study to investigate the teacher's implementation of bridging of the L1 (the vernacular or Tok Pisin) to the L2 and to describe the use of languages and the specific strategies teacher use in bridging to support the learning of English.

Although there are numerous reasons for undertaking the study, I will focus on the most important of these reasons. My own experiences as a parent of a Grade 3 child and primary school teacher involved in bridging have led me to recognise many struggles in supporting the learning of the English language in PNG schools. I also recognise the advantages of providing on-going learning of the vernacular and Tok Pisin, and I am therefore interested in bridging because it has more chance of doing this than the early introduction of English.

I wanted to investigate the teachers' conceptions and beliefs about bridging. Pratt (1992) describes conceptions as "a dynamic and interdependent trilogy of *Actions, Intentions, and Beliefs*" (p. 206). A person's beliefs, intentions and actions are intertwined, or inseparable, and together they express his or her personal conception or way of understanding something. Included in this notion of conceptions and beliefs are attitudes – a positive or negative evaluation of a phenomenon. Examining the conceptions and beliefs of the teachers who implement the bridging tasks can provide insights into the teachers' strategies and practice.

Second, I wanted to identify which languages are used and how often. The use of the different languages in the classroom is of interest as which language is used most, and how language is used together (code switching) can help to understand how children are supported in not only learning English but also in making use of their vernacular and Tok Pisin.

Third, I wanted specifically to identify the practices and strategies used to bridge, what teachers say they do and what they do in practice. Observing the teachers' bridging strategies and practices will bring to light what is actually happening in classrooms to support the

learning of English. In particular in this area, the study looked at the way teachers talk about language, (their metalanguage use), including translation and comparing and contrasting two (or three) languages.

With this in mind, I believe that investigating the Grade 3 teachers' bridging strategies could benefit the teachers, the people, and the future children of PNG. I also believe that this study will bring to light some knowledge about bilingual education and the reasons for using the L1 to support the learning of English in PNG. The findings can also lead to understanding effective bridging practices that are suitable in the PNG context. Besides, this study may identify the hindrances to the bridging programmes and provide ways that Grade 3 teachers can better implement bridging to help children to learn English more effectively while maintaining their first language.

The study was conducted with selected Grade 3 teachers and classrooms in two schools in East New Britain Province, in the New Guinea Islands region of PNG. This region represents a group of islands provinces that are not connected to the mainland. The schools in this study have been chosen because of their vicinity: one in a remote area and the other in an urban area. The schools were also chosen for the reason that their teachers are demonstration teachers known to provide support to the teacher trainee students at the colleges that they are located. These two schools also pioneered that education reform ahead of all the other schools in East New Britain Province.

1.5 Overview of the thesis

Chapter one has provided the introduction and brief context of the study. Chapter two is a review of the literature for that guided the study. Chapter three describes the methodology used in this thesis. Chapter four presents the findings. The themes that emerged from this chapter are supported by direct quotations from the interviews and also the classroom observation. Chapter five considers the research findings and seeks to explain and interpret them. It also considers how the findings might impact on the language learning of the Grade 3 children in bridging programmes. Chapter six is the last chapter in this thesis and concludes with the implications of the study. Some recommendations for practice have also been included with some areas for further study suggested.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter presents the literature related to the use of bridging of the first language (L1) to support children who speak English as their second language (L2). Three main areas will be explored in the literature: a detailed description of language use in Papua New Guinea, the teachers' role in language education, and ways of supporting multilingual learning. Firstly, I will describe language use in PNG relating to the sociolinguistic context, the choice and uses of the languages in PNG schools, and current education reform and the language policy. I will also explore the issues and cultural impact surrounding English learning in PNG. Secondly, I look at the literature in line with teachers' roles in language education expanding to areas of teachers' knowledge about language, and their conceptions and beliefs about bilingualism and multilingualism. In the third section, I review literature supporting multilingual learning. This will include literature about models of bilingualism and learning a second or additional language. I will also survey literature associated with creating conditions for effective language and literacy learning. The area of scaffolding language and the nature of effective interaction will also be examined. An important area to investigate is the literature that contributes to our understanding of the different teaching approaches and strategies for effective language and literacy learning, and strategies that connect two languages, such as metalinguistic comparison.

2.2 Language use in PNG

2.2.1 The sociolinguistic context of PNG

The sociolinguistic context of PNG has been studied by many authors, all of whom recognise its complexity. According to Kale (1990) Wroge (2002) and Wurm (2003), PNG is one of the world's most linguistically diverse nations with more than 800 living languages and three lingua francas, Hiri Motu, Melanesian Tok Pisin and English, spoken by a population of 5.2 million people identified in the 2000 PNG census. Only 50,000 people speak English as their first language and these speakers mostly reside in the urban areas. Children may display monolingualism, bilingualism or multilingualism. Monolingual children whose parents speak

the same local vernacular live mostly in the rural areas. Bilinguals and multilinguals are children whose parents speak different local vernaculars, are out of their rural villages and have to use Tok Pisin to be able to converse with speakers of other local vernaculars (Honan, 2003). Wroge (2002) notes that 80% of the PNG population resides in the rural areas where a dialect is common. Most of these rural areas have been exposed to both English and Tok Pisin. The movement of people into urban centres and marriages across cultural, linguistic and ethnic boundaries are the main reasons behind the complex use of languages by individuals in PNG.

Tok Pisin is the main common language that speakers of the different indigenous languages in the north of PNG use (Wurm, 2003). Speakers in the New Guinea Islands region of PNG, the Highlands regions and the Northern regions use Tok Pisin more than those in the Southern region of PNG who use Hiri Motu as their common language. According to Myers-Scotton (2006, p. 107), only 10% of people in the area close to Port Moresby speak Hiri Motu. Foley (1986), who has done extensive study on the Papuan languages of New Guinea, states that Hiri Motu is not an indigenous language but a pidginized version of the Austronesian language, Motu. Hiri Motu developed between speakers of other language backgrounds, especially members of the police, in the 1900. So while it is true to say there are two pidgins, Tok Pisin is much more extensively used. Laycock explains the importance of Tok Pisin:

Tok pisin appears already to be functioning as a national language, serving as a vehicle for the expression of national aspirations, promoting national unity as it provides a viable interface between the traditional culture and that of the former coloniser. It grew to maturity on Papua New Guinea soil; it was developed and spread by indigenous speakers and is now their property and their language. (Laycock, as cited in Kale, 1990, p. 191)

The development of Tok Pisin in the three Northern regions of PNG was a result of the early Germans' employment of the locals as labourers (Cooper & Nagai, 2005) and others who became labourers in the plantations in Queensland and other Pacific islands (Romaine, 1992). The expansion of Tok Pisin within PNG was due to the movement of people into the town areas where Tok Pisin was mostly spoken and used in intermarriages between couples who did not share a common language. According to Laycock (as cited in Kale, 1990, p. 184) and Romaine (1992), Tok Pisin is an English-based creole that developed out of a number of pidgins and is mainly phonetic with a large number of English words and includes some indigenous language features for the purpose of communicating meaning. Seigel (1997)

defines a creole as a “language that arises as a mother tongue of a newly formed community of people who do not have a common language other than an emerging or already established pidgin” (p. 86).

Tok Pisin varies in different contexts. Romaine (1992) found differences in the degree of fluency between Tok Pisin speakers from the rural areas and the urban areas. While this is a relatively old study, many of the observations hold true today. Some speakers would use more English in the Tok Pisin but the majority would speak a more rural Tok Pisin. Romaine (1992) observed, “In town, standard English, English spoken as a second language with varying degrees of fluency, highly anglicized Tok Pisin, more rural Tok Pisin of migrants, and creolised Tok Pisin of the urban-born coexist and loosely reflect the emerging stratification” (p. 323).

2.2.2 The choice and use of languages in PNG schools

The choice of an appropriate language to use in the formal schooling of Papua New Guinea is problematic and has not been consistent (Kale, 1990). In the 1940s, teaching and learning were done in the local vernaculars. When PNG got its independence in 1975, there was a change from the use of the local vernacular to the use of English as the medium of instruction in the schools. More and more PNG children were educated in English but only to a low proficiency. Children returned to the villages and the English that they had learnt was inappropriate and irrelevant in the rural areas (Kale, 1990).

In the 1990s, as already noted, the new vernacular policy was set up where children would begin their formal schooling with the use of their mother tongue. This was to be supported by the implementation of the bilingual transition process to support English acquisition because English was officially declared the language for all subsequent learning in PNG schools. It has been in the last decade with the current language policy that the concept of bilingual education and bridging of the local vernacular to learn English came about. Having discussed the importance and significance of Tok Pisin, it would seem that it must also be included in any successful model of bilingualism or multilingualism

2.2.3 Current PNG education reform and language policy

In the current PNG structural reform of education, all new entrants begin formal schooling at the age of 6 to 8 years at the elementary schools in the villages. Children do a year in a preparatory class, and then move into Grade 1 and Grade 2. After their three years at elementary school, they go to primary school which are usually outside the village to do Grades 3 to 8. After completing Grade 8, children do a National Basic Skills Exam and only those who perform at a high level are allowed to continue into secondary school to do Grades 9 to 12. From Grade 12, the students can move on to universities, teachers' colleges and other career pathways. Usually, the elite of the Grade 12 get to continue while the rest take up vocational skill training or return to the villages (refer to Figure. 1).

School	Grade levels	Language of instruction	Description of teachers and teaching
Elementary	Preparatory Grade 1 (E1) Grade 2 (E2)	Vernacular	Located in small communities. Teachers selected by the communities. Must be Grade 10 graduates, have knowledge of local language and community culture.
Primary schools Lower primary	Grade 3 Grade 4 Grade 5	Vernacular and English	Grade 3 teachers known as 'bridging' teachers who must use both languages in their classrooms
Primary schools Upper Primary	Grades 6 Grade 7 Grade 8	English	While use of vernacular is still encouraged, the emphasis is on English as the language of instruction

Figure 1. Grade levels and nature of language instruction in PNG schools (adapted from Honan, 2002)

Figure 1 above shows the school settings, the grade levels (1-8) and the language of instruction that is to be used in teaching. Note however, that this does not describe actual use, only what is prescribed in policy. The figure also shows the teachers and their roles in language use in the children's first eight years of schooling.

According to Waiko (1999) the teachers and the children should use the local vernacular or the language of the community (which may be Tok Pisin) in the school and classroom

teaching and learning. The local vernacular should be used not only to facilitate learning but also to build a cultural bond with the children's indigenous content and cultures. This policy was explained in the Ministerial Policy Statement on Language in Schools (Department of Education, 1999).

2.2.4 Issues concerning PNG children's language learning

The current language policy has given rise to some problems. Honan (2003, p. 43) specifically highlights a concern with the "leap from the use of the local languages to the use of literacy". Most of the local languages are not written down and the teachers find it difficult to write materials to teach. Although there have been efforts by the Summer Institute of Linguistics (SIL) to translate the bible into a number of local languages, Litteral (1999) and Paraide (1998) note that statistics on languages in PNG reveal that more than a third of the 800 languages of PNG have no written forms. There are therefore significant problems with the development of teaching materials in the local vernaculars for all the languages of PNG.

Another challenge is that many children move to an area that speaks a different L1 from that of their parents and they have to adjust to learn a new language in schools. These children attend an elementary school that uses a local vernacular that they are not familiar with. In my experience, there are children from other provinces in PNG who are attending an elementary school in East New Britain Province and all have been taught using the Baining language that is different to their L1. In Grade 3, the teachers speak to them in the Baining language, because the Baining language is the L1 of the majority of the children in the class.

The third issue is the lack of support from parents. As identified earlier, the learning of English in PNG mainly occurs in the classroom setting (Gould, 2004; Honan, 2003) and when school is over the children switch back to speak their local vernacular or Tok Pisin because these languages are commonly spoken and used in the neighbourhood. There is no continued support for the oral use of English and for its use in literacy in the homes. Moreover, most parents are not able to support the children's English homework because of their lack of English.

Another problem relates to the implementation of bridging and how it can be used in other contexts. Early work in PNG in the 1980s, in relation to the 'tok ples' (vernacular language) programmes in the North Solomon Province, suggested that children who became literate in

their vernacular language did better in the Primary Education Certificate Examination at the end of Grade six than those who did not attend the tok ples programme (UNESCO, 2006). The results of this research led to the decision to implement the use of the local vernacular as a bridge for learning the English language for PNG primary schools. The North Solomon Province study appears to use the sequential transitional model. What worked in the North Solomons Province could possibly work for the other 800 languages in PNG, but this cannot be assumed.

A final issue relates to the lack of monitoring of the bridging practices and strategies used by teachers. UNESCO (2006) claims that current elementary schools in PNG should have little difficulty replicating the good work of the 'tok ples priskul' (vernacular language pre-school) movement in the North Solomons Province. However, UNESCO also acknowledges that there is no systematic educational research to determine the success of the current bridging system and it is therefore difficult to assess the effectiveness of the elementary programme in PNG. This issue needs a more proactive attitude to monitor the implementation of bridging in the linguistically diverse context of PNG.

In general, there has been little research into bilingual practices in the Pacific region where English is learnt in a foreign context. This has been acknowledged. In fact, when the Pacific representatives of Pacific languages met in 1990, they suggested that there should be more empirical evidence to support effective bilingual education undertaken in Melanesia where many languages were spoken. This meeting emphasised the need to identify best possible methodological, organisational and pedagogical approaches to support the L2 learning (Liddicoat, 1990). The issues raised in 1990 are still relevant today.

2.2.5 The cultural impact on the learning of English language in PNG

The culture of the people can impact positively or negatively on the learning of English. As mentioned in the introduction, there are culturally appropriate ways of learning new knowledge and skills in PNG. The use of oral stories between the elders to the younger people is respected as a way of learning. Pickford (2005), who explored the issues of linguistic and cultural continuity in PNG, found that the student teachers in his study used storytelling, contextualised cues, and signalling mechanisms to help the children to understand a story's context and events. This was evident when the student teachers accompanied the stories with gestures and facial expressions that linked to places and events

and the formation of images. Such cultural practices can be transferred to different genres in teaching English.

Other practices can hinder language and literacy development of English. Gould (2004) describes how the PNG “culture to listen” can affect communication. People tend to listen more without responding to the speaker. This cultural value can hinder the exchange of language resulting in a lack of language production. Many second language acquisition researchers have made the case for the importance of using language rather than being a passive listener. Crandall (1997) for instance argues that producing language encourages learners to process the language more deeply than just simply listening. Therefore, it is important for English language learners to have opportunities to produce language. Encouraging more communication from children would be a positive support to get the children of PNG to speak English. Initiating effective interaction is an important skill that PNG teachers need to develop to engage the children in communication that practises the new language. This will give the learners the opportunity to clarify their intended meaning and negotiate or re-word what they are trying to say (Gibbons, 2002).

Another aspect of the culture that can affect the learning of English in PNG is shyness. When children feel shy they cannot feel confident to speak in the classroom. Children feel shy for several reasons. The cultural influence restricts children from talking so as to respect the older people who are talking. This is generally also the case with other Pacific Islands learners of English. Tuafuti (2004) identifies how the culture of respectful silence can affect Samoan learners of English. Children can also feel inadequate to speak (National Curriculum Statement, 2003) because of their lack of knowledge about the ideas being discussed or lack of proficiency in the language that is being used. Also children’s efforts to speak in English are often thwarted when others laugh at them for making errors in speaking. I have seen people being teased when they speak English in public places because it is a superior and ‘a white man’s language’. This cultural practice is also happening commonly among children in schools and it is a dangerous attitude that can hinder the children’s motivation to speak in English.

In summary, the cultural impact on the learning of the English language in PNG is a concern that needs to be addressed if English is to be respected and its use encouraged. The school communities will need to understand that making mistakes is acceptable in the process of

learning the English language. The teachers must also encourage the children in their use of English.

2.2.6 Learner factors that can affect the success of learning a second language

We must not forget that learners are also individuals who bring their own personalities and experiences to learning a second or additional language in a school setting (Lightbown & Spada, 1999). Lightbown and Spada identify some characteristics that can contribute to their efforts to learn English. They are the learners' personality, aptitude, motivation and attitudes towards the learning of the L2.

The children's personality includes extroversion or being assertive and adventurous. Children who have these qualities are likely to learn English sooner because they are more inclined to practise English. The learner's aptitude is identified if the child is able to learn language quickly through the ability to pick and identify and memorise new sounds. Moreover, the aptitude can be evident when English learners show their ability to understand the function of particular words that are used in sentences and to figure out grammatical rules from language samples and memorise new words.

I will look in depth at beliefs of teachers, however, beliefs of learners are also important. Attitudes refer to the dispositions of the English learner, whether the child is willing to learn the L2. The child's motivation in learning the L2 refers to a sustained interest in the learning of English. According to Lightbown and Spada (1999), learners who want to learn tend to do better than those who do not have the interest to learn. One of the teacher's tasks would be to provide positive motivation in the learning of the L2. The most effective way that teachers can influence learners' motivation is by "making the classroom a supportive environment in which students are stimulated, engaged in activities which are appropriate to their age, interests and cultural, and most importantly, where students can experience success" (p. 163).

2.3 The teachers' role in language education

In this section of the literature review, I explore the teachers' role in language education because of its significance in supporting the children to speak English, and in supporting ongoing use of the vernacular or Tok Pisin. Unlike teachers who are native speakers of English, non-native English language teachers who teach bilinguals and multilinguals are

faced with additional roles. First, it is important to consider the teachers' different knowledge level about English, their proficiency in using English, and the beliefs that they themselves hold about the learning of English, and the place of the L1 in this process. The teachers' beliefs about bilingualism and multilingualism can also shape their role as language teachers in the classroom. The teachers' role in language education can also be connected to their language and cultural backgrounds, and experiences.

2.3.1 Teachers' knowledge about language

PNG primary teachers have 10 or 12 years of schooling and 2 or 3 years of training to become a teacher, previously with a certificate and recently with a diploma in primary teaching. These teachers are selected by the community leaders (refer to Figure. 1 in section 2.2.3) through criteria of merit and recognition in the village and have at least completed Grade 10 to be eligible to complete their teacher training programme.

The level of knowledge about English and language teaching skills for PNG teachers comes from their past experiences of using English. Teachers of different ages also display some disparity in the level of English knowledge because of their past training and exposure to English. Unlike newer teachers who have had more current learning and exposure in English, the older teachers may use English less, and have less English language proficiency. In the past, the main way of learning English was mostly decontextualised, involving much rote learning and repetition.

The knowledge teachers gain from their training programme needs to provide explicit instruction and to facilitate new understandings about the relationship between English and the local languages (Gould, 2004). There is a need for these teachers to undergo thorough training to be knowledgeable not only about the local vernaculars but also in English language and effective bilingual practices. According to Litteral (1999) though, the training is lecture orientated and lacks hands-on application in the development of vernacular materials and teaching. The lack of knowledge and skills necessary to provide effective bilingual education can limit the bridging process these teachers use in their classes.

An additional issue is that many local vernaculars do not have written forms (Honan, 2003; Gould, 2004). Gould claims that instructors, teachers and people do not understand their own vernacular orthographies, and are confused about how to write and read their own vernacular.

People can speak their languages but they have no way of writing it. The lack of orthographical knowledge and bilingual knowledge from teachers can slow down the bridging process as teachers are also learning.

Moreover, the teachers' proficiency in the languages (English, Tok Pisin and their local vernacular) can vary. The difference in the level of proficiency for the languages can result in the teachers using one language more than the other, and ignoring the language needs of the children. Furthermore, although most teachers are able to speak the languages, some teachers may lack knowledge about the different aspects of language such as the phonemes, syntax and grammar which they need to effectively support students to transfer skills between the L1 and English.

A positive aspect of the teachers' knowledge and uses of languages in PNG is that common languages can be spoken by the teachers and the children. Kottler, Kottler and Street (2008) identify that common cultural communication patterns and pragmatics and the local interaction styles support cultural continuity and understanding and learning. The teacher can demonstrate greater understanding and sensitivity to the children's behaviour while supporting the learning of the second language. This is favourable for PNG elementary and primary school children as most teachers are able to understand their children because of the cultural and linguistic backgrounds that they share.

2.3.2 Teachers' beliefs

Most English language teachers know that their most important task is to help the children to speak English and so out of their professional duties and experiences they will approach teaching in any way they think might help the children to speak English (Richards, Tung & Ng, 1992). However, teachers' beliefs and past experiences related to language learning and teaching cannot be overlooked when taking into account the task of supporting English teaching in PNG.

Teachers' beliefs undoubtedly influence their language teaching (Borg, 2003; Fukami, 2005; Holt Reynolds, 1992). Borg (2003) who reviewed articles on teacher cognition found that what the teachers think, know and believe contribute to the way that they teach language in the classroom. Teachers' beliefs are also backed up by their past memories and experiences. A particular example is Fukami's (2005) research. Fukami conducted a study on a Japanese

speaker who taught English as a second language and found that the participant used her past experiences in her teaching. When the participant introduced her lessons she used topics connected to the students' everyday lives, something she had experienced as a student. She also shared her own experiences with the students about what worked best for her in learning English and what did not.

2.3.3 Teachers' conceptions and beliefs about bilingualism and multilingualism

Many contemporary educators and researchers in bilingualism and multilingualism have found that the teachers' conceptions and beliefs about bilingualism and multilingualism in particular impact on their language teaching.

Probyn (2009) showed that the teachers' views about using language in bilingual classrooms in South Africa were influenced by the past English colonial government and the experiences of apartheid in South Africa. They felt they wanted to use the banned vernacular, and so found themselves 'smuggling' it into the English classroom. This practice was associated with the use of extensive code switching. Shameem (2004) who investigated the use of languages in Fijian bilingual and multilingual school contexts, found that, although the current use of language in Fijian schools was greatly influenced by past colonial history, the participants appeared to acknowledge the multilingual functions of languages in Fiji. The attitudes of the participants in Shameem's study were generally positive about the use of all the languages in Fijian schools and acknowledged that the different languages played different roles in their multilingual context. However, there was more support for the use of English to be introduced in the school with monolingual English instruction only. This would be similar in PNG.

In PNG, the teachers' conceptions and beliefs about language teaching are influenced by pressure from the policies, parents and school teachers. In the introduction chapter, the community's negative attitude towards the use of the vernacular was mentioned. However, attitudes towards Tok Pisin as investigated in research seem more positive. Nidue (1988), who surveyed the attitudes of teachers toward the use of Tok Pisin in PNG primary schools, found that Tok Pisin was commonly favoured by the teachers to facilitate the teachers' and children's oral communication and to improve the children's understanding of subject matter. Although, this study is quite old, a more recent study by Seigel (1997) who studied the use of Tok Pisin in early literacy, found a similar trend. Seigel's study found too that the teachers were also in favour of the use of Tok Pisin because the children were cooperative and learned

more quickly when it was used. The children also performed better academically and participated more.

2.4 Supporting multilingual learning

As discussed in section 2.2.1, many if not most children in PNG are multilingual. These children are knowledgeable in the first language and the lingua franca, Tok Pisin or Hiri Motu. They are able to communicate about daily life, and familiar aspects of their life in their families and communities. However, they find the language of schooling, English, difficult. This means that they will need support to learn English as the language of instruction, and that this support will need to be provided through their first language.

2.4.1 Models of bilingualism

I will now examine the models of bilingualism that can be used to support the transition from the L1 to the L2. Freeman (2007) describes two models of bilingual education: the transitional or sequential model, and the simultaneous or the dual model. In the transitional model the children of the minority language are taught to read and write in a language they understand before the transition to reading and writing in their second language. Genesee (as cited in Villarreal, 2007, p. 64) identifies that the “transitional bilingual model is the most common form of bilingual education” where English language learners learn in their local vernacular and gradually are introduced to the English language. In the process of using the L1 in communication, it is believed that the skills from the first language can be used to support the learning of the L2. The primary language is used only until the children have acquired sufficient English to transition to the mainstream English-only classroom. However, although the transitional model is more common, research shows that it is less effective for English language learners than the simultaneous or dual language programmes (Thomas & Collier, as cited in Freeman, 2007) because the transitional model provides no continued support for the L1 with an early exit to English.

Learning a second or additional language for the purpose of school is perceived by some educators as an additional struggle in the bilingual classroom, as Ruiz (1984) claims. Ruiz particularly refers to the transitional models as being characterised by a ‘language as a problem’ view because the first language is viewed as a problem to overcome. Ruiz also

notes that the dual language programmes by contrast are characterised by a ‘language as a resource’ orientation that sees languages other than English as a resource to be developed rather than problems to be overcome.

The simultaneous model of bilingual education is evident when the L1 is used together with the L2. According to Freeman (2007, p. 5) the dual model of bilingual education includes three other programmes: second or foreign language immersion programmes for English speakers; one-way developmental bilingual education programmes for English language learners; and two-way immersion programmes for English speakers and speakers of another language. Ultimately, the aim of the dual model of bilingual education is bilingualism, biliteracy development and academic achievement in two languages (Freeman, 2007). This model is regarded as more effective than the transitional model because children have a much longer time to learn the two languages, and what is learnt in one language contributes to the learning in another.

Ultimately, the choice of a model of bilingualism for any context should consider whether the first language is to be maintained, or to be phased out. The model that underlies PNG educational reform is transitional bilingualism.

2.4.2 Creating conditions for effective language and literacy learning

In this section of the literature review, I will examine various ways of creating conditions for effective language and literacy learning, that teachers can draw from in a bilingual context. Van Lier (2004) and Cummins (2007a, p. 126) identified “external factors which were referred to as aspects of the input”. Learners’ exposure to quality language input can provide opportunities for output when children actually produce the English language. I will also look at scaffolding language and providing feedback to support the children to respond in communication.

2.4.2.1 Providing quality language input

Language input refers to all sources of languages that a learner can be exposed to both inside and outside the classroom. The research tells us that learners need lots of input. Lee and VanPatten (2003) describe the importance of input in terms of the following analogy of

“input is to language acquisition what gas is to a car” (p. 26). If there is no gas then the car will not run. Similarly, if there is no language input, then language acquisition will not occur.

Krashen (1985) even went as far as to claim that input itself was enough to learn a language. He called this the ‘Input Hypothesis’. Krashen based his Input Hypothesis on some of the following evidence:

- input is the way children learn their first language.
- a lack of input slows down both first (L1) and second (L2) language acquisition
- the fact that younger learners of a second language learn faster than adults can be explained by the greater amount of input that younger learners get.

Hart and Risley (1995) showed that children who engaged in more communication and therefore were exposed to more input from their caregivers acquired better language while those children who received less input had lower language skills (p. 472).

However, the input needs to have certain features to support the learning of a new language. Krashen claimed that input should be just beyond the learner’s level of proficiency. He called this comprehension input + 1. Krashen based his ideas about the nature of input on the fact that:

- parents, caregivers and adults in general naturally speak to children in special ways adjusting their language to the children’s level
- people naturally speak to L2 learners in special ways, also adjusting their language to the learners’ level.

Krashen’s views on input have been added to, and researchers have considered how quality input can be provided. Cummins (2007a) asserts that good language input is that which is clearly spoken with good sentence structure and delivers a clear meaning that can clearly be understood. Huttenlocher, Vasilyeva, Cymerman and Levine (2002) showed that when teachers used more explicit grammatical arrangement of words (syntactic) in their input for their students, they achieved greater syntactic growth. Lee and VanPatten (2003) maintain that language that is simplified and uses visual aids such as photos or pictures can anchor the

input as the teachers and the children can refer to the pictures to learn vocabulary of concretes in the pictures.

For a bilingual context like PNG, quality English input can be delivered mostly by their English language teachers in the classroom, and teachers will need to constantly use new English words in the classroom if students are going to use them as part of their vocabulary. Failing to maintain or retain the English knowledge can become a concern and can be seen when the new English words that have previously been learnt is forgotten and not used by the children. Cummins (2007a) points out that some English learners quickly pick up the English phonology of some English words but may lack the English knowledge and usage to learn other English words. It is therefore important for teachers to provide avenues for the use of repetition and much input to support the children's English use of the words, and other aspects of language.

2.4.2.2 Providing opportunities for output

Providing input is not enough for children to learn English. They must be given the opportunities to speak in English language. The 'Output Hypothesis' (Swain, 1985) states that while comprehension input is necessary for learning a second language, learners also need to engage in output. Language output refers to learners using language in speaking and writing.

Teachers engage in a lot of talk, but often learners engage in very little themselves. Teachers must set up the opportunities for students to use language in the classrooms and learners must have opportunities to produce newly learned language forms so that they can correct and adjust their hypothesis about how the language works. This is called hypothesis testing.

We also know that there are particular language benefits from interacting with others. If learners are using language in the context of an interactive activity conducted in the second language, they struggle to make their output comprehensible to their listener or listeners. Therefore interaction is a productive context in which learners work to make input comprehensible to others.

Lee and VanPatten (2003) identify a learning process that children experience in their attempt to speak English. This process takes four steps from input to intake to developing system to output. Children must listen and take in the input, then think through it and respond. These

learning processes involve two abilities: (a) “the ability to express meaning using a particular form or structure; and (b) the ability to connect and deliver the forms or structure of words or ideas in the correct way” (Lee & VanPatten, 2003, p. 169).

Anthony (2008) categorises output as involving ‘access’ and ‘production’ strategies. Access involves the child thinking and searching for appropriate words to express a particular meaning. For example, an English learner would need to search through their lexicon to find the appropriate English word *dog*. Access in a child’s L1 can occur automatically; however, access in a second language requires conscious attention.

Production strategies are used when the child attempts to form a sentence or utterance by putting together appropriate order of words to express an idea. For example, a child may say, *The dog barked*. The expression of this idea using the accessed vocabulary is the output (Swain, 2005; Swain & Lapkin, 1998). This output is important for English learners particularly, when learning to use correct word orders (syntax) and word forms (morphology) of the new language (Nunan, 2005).

Children’s output of language can be seen in, and supported by, their use of cognitive strategies such as repetition, rehearsing orally, and writing (O’Laoire, 2007). Repetition and rehearsing orally are somewhat similar in nature. While O’Laoire found all of these strategies effective in language learning, the learners learnt most effectively through the written expression (O’Laoire, 2007).

2.4.2.3 Providing opportunities for interaction

In this section, I will discuss the opportunities for oral interaction between the teacher and students and between students and their peers. Effective interaction is more than getting the children to respond to a teacher’s question. It is a continuous process of exchanging words between someone who initiates language and a responder (Malamah-Thomas, 1987).

Teacher-student interaction

There are many advantages in the teacher-student interaction which must be utilised carefully to support the English learners to produce language. Some English learners may feel comfortable in group and whole class situations, or an individual child may be uneasy about interacting with the teacher. It is up to the teachers to pick out which form of interaction is

comfortable for children and to initiate interaction opportunities that learners can take up. Sometimes, the teachers can fail to see the opportunities that can be utilised to support learners to speak English and to engage in interaction. Teachers who are vigilant about the language needs of their English learners can make best use of the opportunities for oral communication with the children.

Student-student interaction

There can be many avenues for interaction between students. According to Gibbons (2002) group work offers benefits to second language learners in three ways. First, English learners can increase their English input when they are exposed to more language. Working in smaller group work situations can also increase the English input for the learners when more children are involved in group input and output. Secondly, English learners who interact more can have an increased input and output of language. Learners tend to have more turns in smaller groups or with their friends, and in the absence of the teacher have more responsibility for clarifying their meanings. In other words, it is the English learner themselves who become involved in language learning clarifying their language with their peers when meaning is not clear (Gibbons, 2002). Students may also find more comfort in using and attempting new English language in the student to student interaction because they know that their peers are also attempting English. Thirdly, what learners hear and what they learn is contextualized in the language that is heard and used meaningfully for a particular purpose, which can also support the understanding of what is being said.

In the section above it is clear that interaction contributes to language development simply by providing opportunities to practice language. Through classroom interaction activities, involving various forms of practice, learners can become skilled at actually doing the things they have been taught about (turning ‘knowledge that’ into ‘knowledge how’). It is also clear that it is a way of providing learners with more input that is gained from not only the teacher, but also other students. In addition to this, there are specific ways in which interaction functions to support language learning. In teacher-led classrooms, we know that students have few opportunities to talk. When they talk with peers, learners can try out new language forms - hypothesis testing. In trying out newly learnt language items, learners may notice a gap between what they have said and what the target language form is. As a result of noticing this gap, learners realise they need to gain control over a particular feature of grammar or particular vocabulary item.

Classroom interaction in the target language does not just offer language practice nor just learning opportunities, but actually constitutes the language development process in itself. In this view of interaction, two-way person-to-person communication is crucial to language learning i.e. if the task or activity encourages negotiation of meaning. This occurs when there is a breakdown in the communication, partners in the interaction fail to understand what the other is saying, and there is an interruption in the interaction in order for them to gain understanding. The speakers can do a number of things:

- check the understanding of their partner e.g. *Ok?*
- check their own understanding e.g. *Did you say...?*
- request clarification e.g. *What did you say?*
- request repetition e.g. *Can you say that again?*

These types of feedback are effective in that they are focussed, at an appropriate level for the speaker, timed just after the speaker's error, they let students know if they are using incorrect or inappropriate or unclear language, and they push learners to provide alternative form and modify their output.

2.4.2.4 Scaffolding language

Scaffolding language is a strategy for effective language and literacy learning. The idea of scaffolding first came from Vygotsky (1962). He stated that children can learn new knowledge and capabilities through their collaborations with adults and other more competent peers. This new knowledge is then internalised by the child and becomes part of his/her psychological world.

The transfer of ability from the shared environment between the teachers to the individual occurs at the zone of proximal development (ZPD). Vygotsky defines the ZPD as the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers (p. 26). The teacher is knowledgeable and can use interaction that helps the child to solve a problem and acquire new knowledge at the next level.

The role of the adults would be to provide the experiences that are in the child's ZPD - activities challenging for the child but achievable with sensitive adult guidance. Working in the ZPD means that the learner is assisted by others to be able to achieve more than he or she would be able to achieve alone. Through collaboration and interaction with adults the children can actively construct new cognitive abilities. (Berk & Winsler, 1995, p. 24)

In the ZPD, the teachers can utilise known concepts and language that children have already acquired in their mental operations or slightly above their level of independent functioning (Berk & Winsler, 1995).

Walqui (2007) develops the idea that spoken interaction provides an avenue for scaffolding language when the utterance of a child is completed and taken further by the utterance of another participant. "The teacher intends on letting the students speak for themselves and encourages them to be precise and to present clear argument" (Walqui, 2007, p. 206). Research by Nassaji and Wells (2000) into teacher-child interaction also suggests that in the teacher-child interaction the teachers can create a greater quality of participation from the children by the way they build on children's responses. Furthermore, Nystrand and Gamoran (1997) advocate that teachers pay more attention to the way they evaluate children's responses so that they can use the children's responses to form subsequent questions. In this way, the teacher can encourage more responses and initiated ideas from the children that can consequently promote higher-order thinking rather than teacher-led rote and recitation where children are asked to recall information.

This discussion has focussed on the potential of teacher-student interaction to provide scaffolding, especially through the use of effective teacher feedback – and feedforward. Feedback is discussed in more detail in the following section. It should also be noted that scaffolding can occur in student-student interaction. However, before moving to feedback, it is useful to focus on the type of support that can be provided through scaffolding. This can be:

- linguistic support so that students do not have to rely entirely on their memory of words and phrases they have learned
- cognitive support so that students are working with ideas that are interesting and understandable
- procedural support so that students know what to do

- emotional support so students feel comfortable trying out new language.

2.4.2.5 Providing feedback

Providing feedback in classroom interactions with children can support the learning of the second language. Smith and Higgins (2006) argue that more emphasis should be placed on the way teachers react to the students' responses. Some teachers initiate questions and accept the given answer and do not make use of the language learning opportunities in the conversations. Many writers have described the common form of interaction between the teacher and the children. This type of interaction is known as 'dialogic teaching' (Wells, 1999) and is made up of a three-part exchange structure (Alexander, 2001; Mehan, 1979): an initiation, usually in the form of a teacher question; a response, in which a child attempts to answer the question; and a follow-up move, in which the teacher provides some form of feedback to the pupil's response (Nassaji & Wells, 2000; Nystrand et al., 1997). Smith and Higgins (2006) point out that the Initiation, Response and Feedback (IRF) moves provide a good opportunity for more interactions and achievement of outcomes. The following is an example of an IRF interaction between the teacher and the child that potentially leads to positive learning.

Teacher The leaves hang on the branches for a while and then what happens? (slowly lower his hands to show falling leaves)

Child They fall, I've seen them.

Teacher You've seen them, have you? And on this day grandma walks to the wood in a thick coat to pick up sticks and what do you think she saw?

It is important for teachers to provide the feedback that gives the children opportunities to think and produce their responses. A teacher's response that is merely evaluative (e.g. such as saying, "Yes, good" and that does not 'feed forward'), or closed questions asking for a yes or no answer may not encourage the child's knowledge and language development (Alexander, 2001).

The IRF pattern was explored in a study by Abd-Kadir and Hardman (2007) in Kenyan and Nigerian primary schools. This study explored the discourse of whole class teaching, to see if teachers could enhance children's learning through questions and follow-up which asked children to expand their thinking, to justify or to clarify their opinions, or to make connections to their own experiences. Findings showed that the teachers' questions were

mainly closed, requiring recall of information, and teachers' follow-ups move were often a low level evaluation of a pupil's response, thereby severely constraining opportunities for pupils' participation in the classroom discourse and higher order of thinking. Contrary to the findings of Abd-Kadir and Hardman, Alexander (2004) stated that teachers can transform the well-known IRF sequence into purposeful and productive dialogue where questions, answers and feedback (and feedforward) progressively build up on each other and develop ideas.

Much research has explored the particular type of feedback for language learners. Effective feedback for language learning was observed by Lyster (1998), who investigated how teachers and children engaged in errors that were made during their interactions. Lyster identified six types of feedback strategies commonly in use: explicit correction, recasts, clarification requests, metalinguistic clues, elicitation and repetition. In teacher-children interaction, the use of explicit correction is evident when the teacher openly tells a child, "You were incorrect" and "You should say...". Recasts refer to when the teacher is involved in the reformulation of all or part of student utterance, after an error. A clarification request is used to indicate to the children that their message is not clear. Examples are the use of phrases such as "Pardon me?" or "What do you mean...?". Metalinguistic clues include comments, information, or questions related to the accuracy of the students' utterance without explicitly providing the correct form. For example, a metalinguistic clue can be to ask the child to identify an error. Elicitation can take three forms. First, the teacher can use various questions to elicit the correct form from the child, for example, "How do we say X in Tok Pisin?" Second, the teacher elicits completion of their own utterance by strategically pausing to allow children to fill in the blanks. (For example, "It's called..."). Such moves can be preceded by some metalinguistic comment such as "No, not that. It's a...". Thirdly, the teacher asks the child to reformulate their utterance. Repetition refers to the teacher's repetition of the child's erroneous utterance. Usually the teacher can adjust their intonation to highlight the error, and in this way repetition can be quite close to reformulation.

2.4.3 Teaching approaches and strategies for effective language and literacy learning

The most important focus of this study is to identify the teaching approaches and strategies for effective language and literacy learning in a bilingual context that teachers can use to support the learning of English. Numerous authors have identified effective strategies. In the

following section, I will present some teaching approaches and strategies that can be considered for effective language and literacy learning in a bilingual or multilingual context.

2.4.3.1 Integrating content and language instruction

Language learners usually have content knowledge but find it difficult to express this in the L2. Dong (2007) claims that connecting already known content to newer content can speed up the process of using the L2 to express the newer content knowledge (as discussed in the section on scaffolding). Freeman (2007) also states that integrating interesting content provides motivation to language learning, and furthermore, children tend to learn the language forms and functions which provide access to that content. Secondly, content also provides a meaningful context within which learners can connect the L2 forms and functions. Moreover, students learn language most effectively when they need to use that language in meaningful, purposeful social academic contexts (Cloud, Genesee, & Hamayan, 2000; Snow, Met, & Genesee, as cited in Freeman, 2007, p. 11).

Met (1998) provides some practical ways of integrating content knowledge to support the L2. and specifically highlights as very desirable the explicit use of the target language for meaningful communication in authentic interactions about real life activities or tasks. An important point to remember is that English learners will learn well when they are focused on learning that calls for the inclusion of real life experiences, interesting content and teaching strategies that can motivate children to learn and use the second language (Gibbons, 2006). Explicitly teaching learners about what language functions are and how they can identify them is also helpful. An example of a language function is how to say “No”, politely or how to disagree or offer another opinion.

2.4.3.2 Integrating listening, talking, reading and writing

The four modes of language provide an excellent way of strengthening the learning of English. Kottler, Kottler and Street (2008) state that the use of language to enhance the integration of speaking, listening, reading and writing in ways that reflect natural language use is helpful for English learners. The children can be given opportunities to speak and listen when they communicate with a partner, in a group, or as a whole class. The English learner can utilise listening skills and undertake opportunities to refine his/her English speaking skills. For reading, Kottler, Kottler and Street (2008) further suggest the use of the structured

reading lessons to support the learners' reading skills. The structured reading lessons might begin with pre-reading activities that build the background of the story with reading time. After reading the children can reflect on the text by providing oral and written summaries of what they have learnt. English learners can learn English when they are given the opportunity to take part in each facet of literacy.

2.4.3.3 Activating prior knowledge

All children bring their prior knowledge and their past experiences into school.

The role of prior knowledge is particularly relevant to the issue of teaching for transfer in the education of bilingual students because if students' prior knowledge is encoded in their L1, then their L1 is inevitably implicated in the learning of the L2. (Cummins, 2008, p. 67)

The principle of engaging prior knowledge and understanding in teaching has been supported by many research studies (see for example, Gaitan, 2006; Bransford, Brown & Cocking, 2000; Cummins, 2008; Walqui, 2007) and supports what we already know about scaffolding. The prior knowledge of the children cannot be neglected and teachers are encouraged to connect the children's prior knowledge to support the learning of the L2. Donovan and Bransford (2005) point out that "new understandings are constructed on a foundation of existing understandings and experiences" (p. 4). What children already know, their skills, beliefs and concepts and experiences, can greatly influence what they learn from the new environment relating to how they can interpret their observations. In the bilingual context, when teachers are bridging from the L1 to the L2, they should provide explicit instructions that can activate the students' prior knowledge and understanding that is relevant in supporting the development of the L2. Walqui (2007) suggests that activating the children's prior knowledge could be done with a lot more deliberate planning by the teacher so that students can produce written as well as spoken language. For example, when introducing a new topic, the children could be asked to rule their page into two columns with one column about what they already know and the other about questions about the topic. The teacher and children could collaboratively fill the form. Once they have done this, children will find that they know quite a bit about the topic.

Gaitan (2006) stresses the significance of the children's prior knowledge through the continued use of their local vernacular in the English classroom. Gaitan argues that the new

knowledge that children acquire is more accessible and retained longer when it is connected to the children's prior language knowledge.

In PNG, the children bring from home to school their linguistic and cultural knowledge which should be viewed as providing opportunities to support the learning of English. If nurtured and utilised well by the teachers, the children can yield higher English language acquisition together with content knowledge.

2.4.3.4 Bridging

The term bridging in the PNG context refers to teaching strategies that make a connection between the L1 to support the learning of English. Walqui's use of the term relates more to how learners can learn. Walqui states that children may already have existing mental structures which new information can be woven into. This may well be in the learning of the new language or in content knowledge and it is important to utilise these if learning is to occur. In introducing a new topic, the teacher may ask the children what they already know about the topic and if they have any questions about the topic that they may be interested in answering. This activity can reveal a lot of information about the new topic that children have already known (Walqui, 2007, pp. 209-214).

Walqui presents other useful strategies apart from those related to activating prior knowledge. They are: modelling, contextualising, schema building and representing text.

2.4.3.5 Modelling

In modelling, the children are given clear examples of what they are being asked to produce, even if the task is of new working format. The teachers of English learners can appropriate language or other academic functions such as comparing and explaining clearly so that the children can use the correct model (Walqui, 2007, pp. 209-214). In PNG, teachers can model English sentences, phrases or questions which children can use. In addition, the use of explicit modelled writing with the whole class on a blackboard can provide ways for children to use English when they do their own writing.

2.4.3.6 Contextualising

When using contextualising, the teacher may provide a rich context that supports the learning of the new language. Teachers who share the same language and culture and experiences with the children can always refer to known contextual clues from their language and surroundings to support the L2. Teachers can also provide verbal contextualisation by creating analogies based on students' experiences that can help to involve the children more (Walqui, 2007, pp. 209-214).

2.4.3.7 Schema building

The use of schema, that is, clusters of meaning that are interconnected, can be effectively used by teachers in order to help English learners to see the connections between ideas. For example, before children start to read, the teacher can direct them to look at a book's cover, the title, the captions, etc. and have some discussions about these to prepare the children's general sense of the topic and its organisation before connecting with the new concepts (Walqui, 2007, pp. 209-214). Schema building can also be consolidated with the use of graphic organisers such as mind maps and concept maps, where knowledge is organised in a structured way, forming the basis for learners to practise English.

2.4.3.8 Representing texts

For representing texts, the teacher can ask children to engage in an activity that requires the transformation of a language structure found in one genre to be used in another genre. Walqui explains this:

For example, if the children are involved in a drama, then the teacher can ask them what is happening (as in drama or a dialogue) and what has happened (as in narratives, reports) then what happens to (generalisations in exposition) and finally, what may happen in (tautological transformations and theorising). In this fashion, children can access content presented in more difficult genres, especially those that are more easily produced. Short stories and historical can also be transformed into dramas or personal narratives. (Walqui, 2007, pp. 209-214)

Using different genres such as the writing of recounts, narratives, or instructions can provide multiple benefits in using the L2. The children can also have more opportunities to choose genre and learning styles that best suit them.

2.4.3.9 Developing metacognition

Walqui's category of developing metacognition is seen as different from those previously discussed strategies and has been identified as a separate strategy to support the English language learners. Developing metacognition refers to the ways in which children manage their thinking and Walqui (2007) provides four steps that are necessary to develop metacognition:

- (1) consciously applying learned strategies while engaging in activity,
- (2) knowledge and awareness of strategic options that a learner has and the ability to choose the most effective one for a particular activity at hand,
- (3) monitoring, evaluating and adjusting performance during activity and,
- (4) planning for future performance based on evaluation of past performance.

(Walqui, 2007, pp. 209-214).

Walqui (2007) asserts that reciprocal teaching, think aloud and self-assessment activities with rubrics are examples of metacognition strategies. Metacognition strategies need to be modelled and practised as a whole class before students attempt them in pairs and small groups. As children begin their independent use of the strategies, the teachers continue to carefully monitor the implementation.

Walqui's instructional strategies that have been discussed above can be used to support the learning of English and literacy for PNG children. Implementing these strategies will provide more exciting opportunities for ways of learning English and ease the language transition between the L1 and English.

2.4.4 Teaching strategies connecting two languages

In the bilingual classroom, teachers use various ways to connect the L1 for the purpose of supporting the learning of the L2. Many writers have agreed with the use of the L1 to support the learning of the L2 (Franken 2005; Freeman, 2007; Garcia, Bartlett & Kleifgen, 2006; Gould, 2004; O'Laorie, 2005). In bilingual approaches, the general language proficiency and literacy skills in the student's L1 should be regarded as resources to support the learning of, and learning in English (Franken, 2005). In addition, Franken (2005) and Gould (2004) assert that the continued development of the first language literacy skills is beneficial in accessing

and articulating content learning to support the academic and formal use of the L2 and the learning of the second language literacy.

Although the bilingual theory supports the use of the L1 to support the learning of the L2, Bransford, Brown and Cocking (2000) argue that many of the instructional policies for contemporary second language and bilingual programmes have been dominated by monolingual instruction principles that are largely unsupported by empirical evidence. Cook (2007) and Herdina and Jessner (2002) also argue that monolingual instructional principles are inconsistent with current understanding both of how people learn and how they become bilingual and multilingual. Cummins (2008) further argues that, “when we free ourselves from exclusive reliance on monolingual instructional approaches, a wide variety of opportunities can arise from teaching languages by means of bilingual instructional strategies that acknowledge the reality of, and strongly promote, two-way cross-language transfer” (p. 222).

2.4.4.1 The role of language transfer

In this section I explore the role of language transfer from the child’s L1 to the L2 and from oral forms to written forms. It is important for bilingual teachers to understand how these cross-linguistic and cross-modal elements can be drawn upon to support language learning and literacy development in the English learner. This is because the English learners possess oral proficiency in their L1 and will need to acquire the L2 and develop their literacy in their L2. Furthermore, the teachers will need to support the English learners’ L1 proficiency and past literacy skills in the development of the L2.

Riches and Genesee (2006) highlight five theoretical perspectives from the literature that form the basis of language transfer between the L1 to the L2 and between the oral uses of language to the written form of language. The first is Cummins’s (1981, 1991) Developmental Interdependence Hypothesis, which identifies that some language skills can be learnt in context-embedded communication. Context-embedded communication involves oral communication where speakers draw from common experiences and background information that provide for understanding of a L2. A clear example in the bilingual classroom is when the teacher uses the children’s L1 and commonly known knowledge to support the acquisition of the L2.

Porter (1990) and Rossel and Baker (1996) have counterargued that the promotion of L1 oral proficiency distracts children from their L2 development and especially the development of L2 literacy because it deprives these learners of valuable learning time in L2. This is referred to as the 'time on task' argument. This view assumes a sequential and monolingual relationship between oral language proficiency and literacy development in a given language and that the L2 and writing development should proceed autonomously from the L1 proficiency.

The second theory is the Threshold Hypothesis which has also been examined by many researchers (Riches & Genesee, 2006). To learn in the L2, the threshold hypothesis would require that the bilingual has to have a certain level of proficiency in either or both the L1 and the L2 if language and cognitive development are to be enhanced (Lindholm & Aclan, 1991). According to Cummins (1997), both the Developmental Interdependence Hypothesis and the Threshold Hypothesis raise some developmental issues concerning the cross-linguistic and the cross-modal aspect of language and their crisscrossing effects on bi- and multilingual development. This means that when an English learner does not have linguistic competence in English it may be quite difficult to transfer the oral use of language to the written use of language. For example, one needs to know the correct oral and written uses of languages before transferring them. Furthermore, Cummins argues that although the common uses of languages and background information may support language proficiency, school and classroom learning are characteristically used in decontextualized ways and need language skills that serve more complex cognitive or academic purposes usually associated with written forms of language (Cummins, 2000). This means that for English learners to successfully expand their oral and written English competence, they must have a certain amount of English knowledge to develop further.

The third perspective of language transfer can be seen in the Contrastive Analysis perspective. Lado (1957) suggests that the acquisition of the L2 can be facilitated by the similarities in the L1 and the L2 while differences in the two languages can make learning of the target language difficult. Researchers like Zutell and Allen (1988) and Fashola, Drum, Mayer, and Kang (1996) who examined similarities and differences in sounds, show some contrastive perspective in their studies. Fashola et al. (1996) administered a spelling test to Spanish-speaking and English-speaking children and found that the Spanish-speaking children made more errors in the English spelling words that were consistent with the Spanish

phonological and orthographical rules. This finding shows that acquiring literacy in the second language is tied up with and builds upon literacy in one's first language but also that this may be affected by the closeness of one language to another (Elder & Davies, 1998). Nagy, Garcia, Durgunoglu and Hancin-Bhatt (1993) and Hancin-Bhatt and Nagy (1994) also found the effect of crosslinguistic cognates on vocabulary development. Cognates are words that come from common origins, for example, the English words broom and cold are cognates of the Tok Pisin words brum and kol. Sometimes, a misunderstanding and confusion can occur as a result of a negative transfer or interference when the English learner uses language skills and patterns from the first language in their second language that do not reflect those in the second (Lightbown & Spada, 1999).

The fourth theory is based on interlanguage principles which identifies that the L2 is learned in a predictable way. Cronnell (1985) and Tompkins, Abramson and Pritchard (1999) identified patterns of L2 development that were similar to those of English L1 learners. Such effects are commonly referred to as developmental because they reflect developmental patterns that characterise native speakers of the language. Examples of errors in the use of English are evident from Brown (2000), when English learners showed some confusion between the correct use of *the* or *a* in a sentence.

A final theory which is contemporary in literacy education emphasises the need to draw on students' sociocultural experiences and their pre-existing knowledge about reading and writing, including emergent literacy. According to Maguire and Graves (2001) who collected entry journals and pictures from Muslim children in Canada, the children evidently showed written work that was related to their life experiences. Similar findings from Alexander (2001), Heath (1983), and Hudelson (1994) showed that what was happening to the teachers and the children in the classroom was impossible to change as they were directly linked to their culture and experiences. Moreover, within the sociocultural perspective the children also referred to their pre-existing knowledge about reading and writing, including emergent literacy as a basis for the development of initial literacy abilities in schools for both monolingual and English learners (Sulzby & Teale, 1991).

Sulzby and Teale (1991) found that children who had been read to in their infant years did well in their literacy work in the classroom. This finding needs serious consideration by parents and early childhood centres in PNG to expose younger children to more reading, as a major concern is the lack of reading resources. Importantly, teachers of English learners need

to respond to socio-cultural influences through lesson activities that are culturally appropriate and related to the children's experiences to promote the learning of English.

2.4.5 Bridging practices, strategies and techniques

In the following section, I discuss two major areas: metalinguistic comparison and translation. These areas are important in this study because their frequent use in the context of PNG as strategies that connect two languages can potentially be useful to support children to learn English. They are also not 'monolingual instructional strategies'.

2.4.5.1 Metalinguistic comparison

As previously identified, the common language background of the teacher and the English learner is a medium for classroom talk about the targeted language. Teachers in the bilingual classroom continuously use the L1 to talk about new English words and rules of using English. O'Laoire (2005) identified that while the L1 is used to support the learning of the L2, the heart of the language awareness theory lies in terms of the how the learners can utilise the language effectively. This means the connection between the two languages must be made explicit in the teacher-child interactions to provide for metacognitive and metalinguistic learning.

I will now compare three types of transfer of the metalinguistic components from the L1 to the L2. They are: the transfer of conceptual elements, pragmatic aspects, and specific linguistic elements.

Comparing conceptual elements

'Conceptual elements' refers to a body of knowledge or thought implicit in an English word. For example, Cummins (2008, p. 69) refers to understanding the conceptual elements of 'photosynthesis'. In transferring conceptual elements, the goal would be to transfer the mental idea or thought by means of using language. The teacher can explain the concept of the process of photosynthesis in the L1 then draw the children to see the compound word 'photosynthesis' to see how the makeup of the word relate to its concept. Usually the children would understand and explain the concept in their local language; however, their problem would be to express the L1 conceptual knowledge in the L2. English learners can learn the L2 when the teacher supports this transfer from the L1. Cummins (2008) points out that:

The presence of the underlying attribute makes possible the transfer across languages. Attributes develop through experience; in other words, they are learnt. Once they exist within the individual's cognitive apparatus or operating system, they are potentially available for two-way transfer across languages (from Lx to Ly or from Ly to Lx) if the sociolinguistic and educational context is conducive to, or supports, such transfer. (p. 69)

New development of concepts can emerge in children when they are given more opportunities to write in their L1, discuss and clarify concepts, plan group tasks, and write notes and outlines before producing work in English (Cummins, 2008). In some contexts, the teachers can ask the English learners to provide examples, models and pictures to clarify the concept that they are talking about. Using the familiar language helps to clarify a concept. In some cases, the teachers will ask the children to restate a new English word back into the local vernacular, for example, the teachers may say, "You explain this in the local vernacular". This will give the children the opportunity to express and transfer their conceptual knowledge between the two languages, which support their learning of English.

Romaine (1992) points out that the transfer of conceptual elements for some L1 and Tok Pisin in PNG is complicated because certain words in Tok Pisin are multifunctional. One word can stand for many concepts: For example, the word *garas* would stand for hair, beard, lawn, amongst other things. Furthermore, when speakers are stuck with a Tok Pisin word, they tend to describe the thing in Tok Pisin to encode the meaning of the concept, which uses many words.

Comparing pragmatic aspects

English conventional language pragmatics of conversation are quite different from language pragmatics in many cultures. This is because of the influence of cultural belief systems and practices that children grow up in and the way children communicate at home (Rogoff, 2003). In the bilingual classroom, it is the teacher's role to model and transfer the pragmatic conventions from the L1 to support the learning of the L2. Pragmatic conventions from a learner's L1 can transfer either positively or negatively and often prove too difficult for the English learner (Brown, 2000). When teachers successfully link ways of using language in the L1 and introduce the English equivalent, for example, for a request, to seek permission or other functions of languages in the classroom, then the children have opportunities to learn the appropriate pragmatics of the English language.

The issue of transferring conventional L1 pragmatics to support the development of L2 English may have implications for the children of PNG. First, with the numerous cultural uses of language: for example, the use of gesture and the culture of respect and silence in communication may clash with the L2 pragmatics and hinder the learning of English. The end result may contribute to children becoming passive and teachers dominating classroom talk.

Comparing linguistic elements

A vital area to consider in second language teaching is the transfer of linguistic elements from the L1 to support the development of the L2. In this study, I will refer to four linguistic elements in particular: phonology, morphology, lexicology and syntactic and grammatical structure of language. English learners' L2 oral proficiency would need to be built from specific linguistic elements identified from their L1 oral proficiency (Peregoy & Boyle, 1991).

Academic language proficiency is seen as part of a common underlying proficiency made up of knowledge and abilities that once acquired in one language are potentially available for the development of another language (Lanauze & Snow, 1989; Royer & Carlo, 1991). When one has learnt to read then there are many components of reading that can be used in learning to read another language. When bilinguals can speak their native language then they can make sounds to speak the L2 language. When English learners can write their L1 then they can also begin to write some L2. With this understanding, it is possible to see how the phonological elements can be transferred from the L1 to support the development of the L2.

Phonological knowledge and awareness is the study of sound systems of particular languages (Emmit & Pollock, 1991, p. 68). In the English alphabet, 26 alphabets are used to represent forty English phonemes (p. 90). Riches & Genesee (2006) assert that bilingual educators must understand this relationship between sounds and letters in the native language in order to successfully transfer language at the phonological levels. However, some research suggests that once phonological awareness is acquired then it can be used in L1 and L2 literacy development while other research has shown some complications with the transfer of phonology (Riches & Genesee, 2006; Stewart, 2004). While English learners can apply correct phonological knowledge of their L1, sometimes the phonological transfer to learning the phonemes of English may cause difficulty. Fashola et al. (1996) identified from their

study that while the English orthography and other languages use the alphabetical system, sometimes some letters occurred in one language while the other languages did not have the symbol or both languages may have both symbols but they represent two different sounds. An additional complication in transferring language at the phonological level is that the English orthographic system does not have a strong letter to phoneme relationship and this can be problematic to English learners who possess a strongly phonetic language. As identified in PNG, Laylock (as cited in Romaine, 1992) notes that the phonology of PNG speakers varies and is influenced by English. Some PNG languages do not have some alphabetical consonants as represented by *th* or *ch* and this results in a difficulty in pronouncing L2 words with these letters. Sometimes speakers use other letters to pronounce the words, for example, for /f/ they would use /p/ in words like flower and fish, or /b/ for /p/ for as word such as *pot*. PNG speakers also possess a strong phonetic L1 which can be confusing when identifying English words.

Morphological knowledge has to do with the smallest meaningful units in speech and writing, which are called morphemes. Words are formed by one or more meaningful units (Emmit & Pollock, 1991, p. 83), for example, *-ed* as in a past tense or *-s* for a plural form. In English, morphemes can be categorised as either 'free' or 'bound' which means a morpheme can be used on its own or cannot exist on its own but has to be bound to a word. For example, in the word *cats*, *cat* is a free morpheme while the *s* is a bound morpheme because it can only be used with *cat* to inform its plural form. Morphology is simpler in Tok Pisin than English. In PNG, Romaine (1992) identified significant morphophonological condensation and expansion in the use of Tok Pisin. For example, a phonological reduction of the future marker to say *I will* in Tok Pisin is *bambai* while speakers further reduce it to *bai* or *ba* as a prefix in the transition to form a sentence. Another reduction is seen in the word *suppose* to *sos* or *sopos*, or the word *us* to *mipela* or *mipela*. The reduction of morphemes can cause confusion and complication for the teacher and children when transferring the morphological elements to their learning of English.

Lexicology is the aspect of the study of words that looks at their meaning, origins and how they are formed (Emmit & Pollock, 1991). Romaine (1992) demonstrated that a lot of Tok Pisin words were derived from English and German words. English had a particularly strong influence with the creation of words like *mekim* from the word *make* or *fama* from *farmer*. Romaine's data showed that Tok Pisin had a great deal of semantic generality, greater

grammaticalization, circumlocution and multifunctionality. In semantic generality and grammaticalization, a Tok Pisin word may provide the general semantic for many concepts: for example, the general term *garas* as already explained can mean hair, beard and fur. Circumlocution is a strategy that uses syntax to make up for the lack of morphological process used to form words. A consequence of circumlocution is the lengthy use of description. For example, new knowledge like the word *chainsaw* does not have a Tok Pisin word so speakers usually borrow the English word or say, “Samting isave round round na katim diwai”, meaning something that goes around and cuts wood. Multifunctionality refers to Tok Pisin terms that cover more grammatical functions. As identified earlier, the fewer number of words can affect the definite semantic of words and concepts and have consequences in the L1 to L2 transfer and the oral and written uses of the L1.

Syntactic and grammatical elements in the English language refer to how the words are related and structured in a sentence (Emmit & Pollock, 1991). All sentences in English possess a noun phrase and a verb phrase which can be shown in the subject, verb and object (SVO) order. The sentence, *They are cooking fish* has the complete SVO order. An important point to remember is that the rules of syntax from speech and writing differ because in speaking, sometimes the sentence is not complete while in writing the sentences must be complete (Emmit & Pollock, 1991).

A common feature of non-Austronesian languages is a SOV word order (Foley, 1996). The transfer of the different linguistic elements from Tok Pisin to support the learning of English for PNG is more complicated because of the diverse linguistic elements that are associated with Tok Pisin and the L1. In addition, there are still many teachers in PNG who will need to understand about the correct oral and written structures of their languages and how best the transfer can occur to support the learning of English in schools.

2.4.5.2 Translation

In this next section, the use of translation in PNG primary schools is discussed as a common technique to support English language awareness. There has been some argument surrounding the use of translation in a bilingual classroom. Howatt (1984) discouraged the use of use of translation was discouraged because of the belief that “it could lead to the formation of cross associations and hinder the development of the foreign language” (p. 172). Several contemporary writers have supported this argument to say that bilingualism is not

about translation. In particular, Torres-Guzman (2007) disagrees when bilingual teachers translate for English learners when they see that children do not understand the L2. Torres-Guzman further emphasises that teachers should trust the long term language learning process, and to remember that when children know that something will be translated, they will devote less effort to figuring out what the second language being spoken means. In addition, it is more tiring for teachers to teach everything twice and it is more likely that some translation may be incorrectly done (Torres-Guzman, 2007).

However, recent studies have adopted a different view. Cummins (2008) argues that there has been less research to support the 'no translation assumptions' which would also be inconsistent with the instructional implications of current theory in the areas of cognitive psychology and applied linguistics. Current research by Cummins (2008) provides concrete examples to illustrate how translation can be used together with the monolingual strategies in a balanced and complementary way. Malakoff and Hakuta (1991) also demonstrated that translation skills were widely found among bilingual children by their late elementary school years noting that translation provides an easy avenue to enhance linguistic awareness and pride in bilingualism. Another study by Manyak (2004), who documented the range and functions of cross-language activities occurring in a combined grade one and two classroom in California, found that although the classroom was officially an English immersion classroom, the teacher encouraged students to use their L1 as a social and intellectual resource. Manyak (2004) claimed on the basis of his research that translation was necessary for three reasons: it promotes the acquisition of English, biliteracy development, and promotes the learners' identity of competence.

In Manyak's study, although the children spoke in Spanish, the teacher wrote in English while asking the children for help in translating their peers' words. The teacher encouraged the children to read, write and speak in their chosen language and then to translate their written and oral narratives, thereby developing literacy in both languages simultaneously (p. 15). Manyak points out that the interactional spaces created for translation established bilingualism as a highly esteemed ability, evident when children were asked to listen to stories, and then asked questions by other bilinguals. The children had the opportunities to display quick linguistic understanding of the literature knowledge which was admired by their peers. Manyak summarizes:

Translation played a key role in making activities accessible for very limited English speakers, fostering the children's language and literacy development, promoting interpretive discussions of children's literature among students of different language backgrounds, and positioning bilingualism as a special emblem of academic competence. (2004, p. 17)

O'Laoire (2007) also identifies translation as a cognitive strategy when children read and write down the L1 beside the L2 and learn it until the new words or knowledge is retained. Similarly for the learning of English in PNG, oral communication between the teachers and the children often appears to occur in Tok Pisin while writing is done in English. Tok Pisin, however, is translated into English and vice versa which potentially promotes language awareness and acquisition of English.

2.4.5.3 Code switching

A common phenomenon in the use of languages among bilinguals and multilinguals is the switching of codes in the languages. Milroy and Muysken (1995, p. 7) define code switching as the use of two or more languages in the same conversation. Many authors have noted that people switch between languages for reasons of social identity, relationships and context (Buell, 2004; Tabassum- Hadi, 2005). Other writers have also found that code switching was used functionally. For example, Martin-Jones (1995) identified from a number of different studies that code switching was used to make a quote, or to move in and out of teaching and to represent the voice of different characters. Code switching was also identified as a way of socialising and describing metalinguistic functions (Raschka, Sercombe & Chi-Ling, 2009). Raschka et al. (2009) found in their study on code switching in Taiwanese bilingual classrooms that code switching was used when the teacher introduced herself to her class, for classroom management and when teachers compared the two languages. Importantly, teachers who use code switching must take into consideration the language proficiency and the preference of the hearer and the communicative intentions of the hearers (Martin-Jones, 1995).

After identifying the many uses of code switching, this study also acknowledges the functions and uses of code switching between the indigenous language, Tok Pisin and English language in PNG schools. If the teacher notices that a child does not have proficiency in English then they speak the child's language to help them understand. The switching between the languages can be beneficial in the bilingual classroom because it allows the children to choose or speak the language that they feel comfortable in to relay specific meanings and to

support the development in English. In PNG schools, although code switching occurs automatically, the teachers are more in control of the children's use of language and they will decide for a particular language to be used, having in mind the need to practise and learn English.

2.5 Conclusion

This literature review has revealed the sociolinguistic complexity of language use in PNG, which can affect the learning of English language in the bridging programmes. Certain cultural and contextual issues have also been identified as barriers to PNG children's English learning, thus highlighting a need for effective monitoring and more research into bilingual practices. This literature has identified the models of bilingual education and suggested numerous strategies that are relevant to supporting the learning of English that PNG teachers can adapt. Quality input, output and interactions and scaffolding language have been also suggested as a way of enabling English learners to produce language. The literature review has also showed that teachers' conceptions and beliefs about English language education can have an adverse effect on the way they implement the bilingual programmes. Theories of language transfer that can connect two languages, and the roles of transfer have also been identified. In metalinguistic comparison, this review has exposed that transferring the linguistic elements from Tok Pisin to learn English can be difficult, severely affecting the expansion of the aspects of languages. New areas of the field which have not been well accepted in mainstream bilingual practices and which need further study are: the use of translation; and the use of code switching.

The next chapter of this thesis will provide the methodology and procedures that are used to answer the study's research questions.

CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter describes the approach I took to investigate my research questions and to collect the data for this study. The research questions were:

1. What are the Grade 3 teachers' conceptions and beliefs about bridging the local vernacular (and/or Tok Pisin) to support the learning of English?
2. What bridging strategies and practices do teachers use to help the children learn English?

I applied a qualitative methodology using focus groups with semi-structured interviews; classroom observations; with a post-observation recall interview. First, I discuss the data collection methods. Second, I discuss the data collection procedures, including triangulation, and validity and reliability with regard to the procedures used. Finally, I talk about the ethical considerations including the access to participants and research sites, and then explain how my data were analysed.

3.2 Data collection methods

3.2.1 Focus groups

Using focus groups was important in this study to allow the Grade 3 teacher participants to freely participate in a smaller comfortable environment. Cohen, Manion and Morrison (2007) and Bell (2005) agree that focus groups are a good tool to gather information from professionals who have had similar experiences in their jobs. Focus groups are also valuable to collect and share information about particular themes or topics and issues from the interview questions through rich interaction guided by the interview questions (Cohen, Manion & Morrison, 2007, p. 376). Furthermore, participants in the focus groups can raise common views about their experiences and provide in-depth information and reasons about what they think about the issue under discussion (Bell, 2005; Delamont, 1992).

According to Creswell (2002), focus groups ideally consist of four to six participants. The smaller number of people present in the focus groups may “agree or debate certain ideas and issues during the interview which can also become data” for the researchers, unlike large group interviews where participants may feel less comfortable to contribute their ideas (p. 206). The discussions from focus group interviews are also very useful for capturing people’s responses, feelings and experiences (Wisker, 2001). The study involved two focus groups both aimed at gathering an in-depth view about the participants’ beliefs and conceptions about bridging, and practices that they reported they used in bridging L1 to L2. This is important in the present study because the interview data could be compared with their actual practices that were collected from the classroom observation.

3.2.2 Semi-structured interview

Compared to the other methods of research, the interview has the features of collecting data using verbal interactions between the interviewer and the interviewee for in-depth understanding of issues and trends and to capture the natural contexts of the respondents (Cohen, Manion & Morrison 2007; Patton, 2002). The interview enables a face-to-face discussion with participants which provides space for the researcher to see their social space and their faces and expressions when talking about certain issues (Cohen, Manion & Morrison, 2007; Wisker, 2001). This is important in the present study because it gave me additional affirmation of the communal voice from the interviews.

Creswell (2002) states that semi-structured interviews can consist of both closed and open-ended questions. The use of closed responses can gather useful information to support theories and concepts in the literature, however, they can limit the response the interviewees give and do not always enable them to think deeply or test their real feelings and values (Wisker, 2001). Open-ended responses, on the other hand, can allow the participants to provide personal experiences that may be outside or beyond those identified through the closed questions (Ary, Jacobs, & Razavieh, 2002). Furthermore, open-ended questions also provide greater flexibility and potential to explore responses to emerging issues for the participants. “Researchers can elicit almost endless responses that would give a good idea of the variety of ideas and feelings that interviewees have as they would enable them to think and talk longer and show their feelings more fully” (Wisker, 2001, p. 141).

I used semi-structured interview questions, some of which were closed and others open (refer to Appendix A). Appendix A shows that a few questions were demographic in nature to begin the interview. My semi-structured interview questions were based on six themes (a) teacher's conceptions and beliefs about bridging (b) bridging strategies (c) language (d) literacy activities in use with bridging (e) bridging resources and (f) children's language proficiency and bilingualism. The semi-structured interview questions were used to identify the teachers' beliefs and conceptions about bridging because, as indicated in the literature review, these are assumed to underpin their bridging practices. My delivery of the semi-structured interview was flexible and provided the opportunity for participants to elaborate in-depth on their responses and also to gather a common perception about the six themes as identified. Furthermore, the face-to-face interviews were to clarify points related to the issues discussed (Cohen, Manion & Morrison, 2007). Responses can also capture motives, beliefs and identify the tone of voice, or maybe some hesitations (Delamont, 1992). In this way, interviews can potentially yield richer information and contents compared to the other research methods (Bell, 2005).

The focus group interviews for this study were audio-taped so that note taking would not be a distraction. The audio records of the interview were valuable for later analysis. I was able to replay the original tapes to accurately and selectively transcribe the data.

3.2.3 Classroom observations

The classroom observations of the participants were conducted using a schedule. The schedule for this study was tailored specifically for the English as a second language context involving bridging. The schedule was derived from the Classroom Literacy Observation Schedule (CLOS) (Louden & Rohl, 2003, as cited in Louden, Rohl, Barratt-Pugh, Brown, Cairney, Elderfield, House, Meiers, Rivalland, & Rowe, 2005) and the Communicative Orientation of Language Teaching (COLT) by Spada and Frohlich (1995). Spada and Frohlich designed the COLT as "an instrument for observing teaching and learning in ESL classrooms" (p. 1). The CLOS is a tool to observe the effectiveness of teachers using the literacy teaching activities.

My use of CLOS was modified to a simple observation sheet (refer to Appendix B) to identify the literacy activities and strategies teachers were employing while using the local vernacular and/or Tok Pisin to teach the English language. My observation schedule

consisted of two sections: the ‘teachers talking’ and the ‘students working’. From the ‘teachers talking’ section, I had to identify the activities during the observation and the language used and the connections occurring between the languages. A main focus of my observation schedule was to identify the metalinguistic aspects of language use by the teachers that supported the English learning of the phonemes, vocabulary, grammar/syntax and discourse and how the teachers were using language to scaffold the learning of the English language. In the ‘students working’ section, I wanted to observe the opportunities available for the children to learn English from the modes of language: reading, writing, listening and speaking and interaction, and the use of the different languages. There was also space to identify the teachers’ use of feedback to support the learning of English.

The main function of using the modified CLOS and the COLT was to see how the teachers were using languages (Tok Pisin and their local vernacular) to support the children’s knowledge and acquisition of English in the classroom. Furthermore, the findings from the observation schedule would be invaluable evidence of whether or not the teachers’ practices aligned with their conceptions and beliefs and what they actually said they did in practice, as gathered from the interviews.

3.2.3.1 Teachers talking

The aim of the ‘teachers talking’ section from the classroom observation schedule was to identify the way in which the teachers established the connections between the children’s L1 to the L2. The ‘teachers talking’ and the ‘students talking’ sections were horizontally placed and the activities were placed vertically on a grid (refer to Appendix B). The ‘teachers talking’ section consisted of four main sections: the language that the teacher was using (English, Tok Pisin and the vernacular); the connections he/she was making between languages, that is, the nature of any focus on metalinguistic talk about language (about the phonology, vocabulary, the grammar/syntax, the discourse and the conventions of print); and finally, how the teacher was scaffolding language to support the children’s learning of English. The scaffolding section was aimed at collecting any data that showed how the teachers scaffold ideas and experiences using the different languages to enhance the children’s learning of English. The activity section identified the different activities that the children were involved in at a given time as planned and set up by the teacher.

3.2.3.2 *Students working*

The ‘students working’ section on the observation schedule included the four modes of language: reading, writing, listening and speaking and interaction. The aim was to identify which mode was being used at a given time and the languages that the children were using in those modes.

3.2.4 Post-observation prompt sheet

Post-observation prompt sheets were discussed with the teachers a fortnight after carrying out the observations (refer to Appendix C). The prompt sheets listed the bridging strategies and techniques I had identified during the classroom observations. The teachers were asked to explain and justify why they had used a particular strategy and if there were other techniques they could have used. The post-observation sheets were a source of data themselves and also a means to elaborate on the data from the observation schedules.

3.3 Data collection procedures

The semi-structured focus group interviews were conducted at each of the two schools, after school hours in one of the classrooms. The classroom observations were conducted during normal class time during a block that was most appropriate for the teachers. The observed teachers continued with their normal routine while I recorded entries on the observation sheet at time intervals of 10 minutes and for a period of 1 minute. It was important to join in the natural settings of the participants while collecting data for this study. Cohen, Manion & Morrison (2007) state that, observations require the observer to be in the field or present in the natural settings where the phenomenon under study takes place.

The children’s work samples and teachers’ blackboard work were photographed or hand copied by me. This was done to capture what was done during the duration of the observation. Teachers’ conversation during the interviews and classroom observations were also audio-taped and transcribed. The interviews were transcribed while I was still in PNG as the transcriptions had to be forwarded to the participants to read and to comment on if they wished to two weeks after the data had been collected. The post-observation prompt sheet was discussed after teachers had had the opportunity to comment on the transcriptions.

For safety purposes, all the electronic data were stored in my personal laptop computer. All written transcripts and audio tapes used were stored and will be archived or disposed of in accordance with Waikato University's Human Research Ethics Regulations (2005).

3.4 Triangulation

Patton (2002) discusses the fact that triangulation strengthens a study by using two or more sightings of the findings from different angles. He identifies four types of triangulation: (1) data triangulation, the use of a variety of data sources in a study (2) investigator triangulation, the use of several different researchers (3) theory triangulation, the use of multiple perspectives to interpret a data (4) methodological triangulation, the use of multiple methods, for example, using a survey, questionnaire or an observation to study a single problem.

The use of the three data collection methods: focus group interviews, classroom observations and the post-observation prompt sheets, provided a way to triangulate the data. On the other hand, the three methods of data collection could have also acted as separate methods to capture and answer the different aspects of the research questions of this study:

1. What are the Grade 3 teachers' conceptions and beliefs about bridging the local vernacular (and/or Tok Pisin) to support the learning of English?
2. What bridging strategies and practices do teachers use to help the children learn English?

The focus group interview collected the participants' conceptions and beliefs about the bridging. In terms of looking at practice, it was also the case the the interview collected data about what teacher said they did to implement bridging. The classroom observations identified the observed practices of the teachers, and the prompt sheets allowed the teachers to justify their practice, that is, they gave the teachers the opportunity to engage in the reflection process and explain their bridging practices.

3.5 Validity and reliability

Many researchers have stressed the importance of validity and reliability in both qualitative and quantitative research. For example, Lincoln and Guba (1995) define research validity and

reliability as how the researcher can persuade his/ her audience about the trustworthiness of the data. Cohen, Manion and Morrison (2007) and Burns (1995) further state that in a qualitative study, the researchers strive to understand and interpret the world in terms of its actors which to them means that the interpretation of the data is important.

Lincoln and Guba (1995) also assert that because of the “contrasting nature between the objectivity and the subjectivity of quantitative and qualitative research respectively, the two cannot adapt similar conventional notions to test their validity and reliability” (p. 300). They argue that validity and reliability in the qualitative paradigm must draw on credibility, transferability, dependability and conformability to determine the value of the study. Therefore, because of the qualitative nature of this research, I have opted to ensure that the trustworthiness of this study aligns with the notions of “credibility, transferability, dependability and conformability in a naturalistic paradigm” (Lincoln & Guba, 1995, p. 301).

Credibility in this sense is equivalent to the internal validity. The credibility of a qualitative study can be achieved through various techniques. Lincoln and Guba (1995) assert that credibility of the research findings can be assessed firstly through the researcher’s prolonged engagement and persistent observation. Prolonged engagement and persistent observation refers to how long a researcher spends time with the subjects to know them well and to see if they have performed normally or have over reacted because of the presence of the researcher. The persistent observer can identify the characteristics and details that are most relevant to the issue being investigated.

Credibility was achieved in this study because the data findings were confirmed through their occurrences from the different data collection methods. Also, my previous experience as a co-worker with the participants also equipped me with some background knowledge about the participants, the work, culture and context under study. In addition, the return of the original transcription of my findings and the post-observation sheets, allowed the participants to check the correctness and consistency of the data they had provided.

Another strategy that I used to enhance credibility was peer review, which was used in two ways. First, I was working with my supervisor and our regular meetings provided advice and feedback that challenged my analysis and interpretations of the data. The feedback from the supervisor was always to maintain the integrity of the data. I also had a co-worker, a master’s graduate whom I allowed to review my data. I had trust in this person as he was aware of the

ethical obligations involved. We had agreed that the information from the data was confidential and he knew the participants only via pseudonyms.

Furthermore, I adhered to The University of Waikato (UOW) Ethical Conduct in Human Research and Related Activities (2008, p. 1) which includes in their preamble that; “any member of the University community who undertakes research is expected to conduct the research in a manner that conforms with ethical standards set down by the University”.

The “transferability of the findings refers to the external validity” (Lincoln & Guba, 1995, p. 316) which one can only set out working hypothesis together with the description of the time and context which the findings were found. The researcher can do this but cannot assume that the findings can be transferred to other contexts. In this study, the findings were data from the context at that time and cannot be generalised to other contexts, although some aspects of the findings could be relevant for other contexts in PNG and the broader region. The fact that findings cannot be generalised but may be relevant to similar contexts is discussed by Bouma (1996) and Merriam (1988).

The dependability of the study refers to the reliability, that is, whether the findings are stable, consistent, predictable and replicable (Lincoln & Guba, 1995). The participants either agreed or disagreed with the initial finding of the observation and were given the opportunity to elaborate or remove specific findings. The participants were also able to comment on why they had used certain strategies and this enhanced the dependability of the data.

Finally, the notion of conformability equates with the term objectivity (Lincoln & Guba, 1995). Objectivity can be achieved through the use of multiple observers agreeing on the phenomena through their collective judgement. In this study, collective judgement was made by the members of the focus group interview and when the data was returned to them to re-read and agree on its objectivity. My peer review and participant check also supported the objectivity of the data.

3.6. Ethical considerations

A number of ethical considerations were taken into account in the conduct of the research at all stages. The first involved access to participants and research venues.

3.6.1 Access to participants and research venue

Ethical procedures must be followed by the researcher so that the participant's wellbeing and autonomy are protected during the research (Cohen, Manion & Morrison, 2007; Cresswell, 2005; Guillemin & Gillam, 2004; Wilkinson, 2001). This begins with access to the research site itself. It cannot be assumed that research sites can be entered without permission because institutions have authorities and boundaries which must not be trespassed on. It is therefore a strict protocol of research that permission and cooperation is granted by the participants in a research project (Bell, 2005; Cohen, Manion & Morrison, 2007; Wilkinson, 2001).

Permission to access the research site and to approach potential research participants was done through letters to the Provincial Education Advisor (PEA) (refer to Appendix D) and the respective school principals (refer to Appendix E). I received a written approval from the PEA (refer to Appendix F) and verbal approval from the two school principals allowing me to access the research site and my participants. The school principals verbally informed the Grade 3 teachers of both schools about the study. Those who agreed to be participants then arranged a time and date for me to meet them at their respective schools so I could provide them with the research information sheets (refer to Appendix G).

3.6.2 Recruiting procedures

Official permission is needed from appropriate officials such as the chairperson of the governing council board, principals, head teachers, classroom teachers, parents and the children before a researcher conducts research. The stakeholders and participants need to know the purpose and aim of the research either in writing or verbally so that they can be ready for what is expected. Researchers also need to be open about the purpose and method of research with teacher participants (Bell, 2005; Bell & Cowie, 1999; Cohen, Manion & Morrison, 2007).

For my research, the Provincial Advisor of Education in the East New Britain Province was informed of my wish to conduct this research in the two provincial primary schools. A copy of my research proposal and an introductory letter was sent to the Provincial Education Advisor in Rabaul introducing myself and my research. It requested his permission and authorisation to visit the two schools to conduct the focus group semi-structured interview

and to follow-up with classroom observations and the post-observation prompts sheets with the four Grade 3 teachers.

I also delivered two introductory letters to the school principals and verbally explained my wish to use up to four teachers in each school as participants for my study. During this time we agreed on a time for me to discuss the research study and the data collection expectation. At the agreed time, I returned to the principals with the information sheet and the consent form for the participants. Both school principals told me that they had verbally explained to the Grade 3 teachers my intention to collect data for my research study. The principals gave me permission to contact my participants, which I did at the time agreed by my participants. I approached the interested Grade 3 teachers and had some informal discussions about what my intentions were. Upon receiving the teacher participants' verbal approval, I then asked them to suggest the dates for the focus group interviews. A date was set up for the different focus group interviews. I returned to the schools with my information sheets (refer to Appendix G) that detailed my research and also provided the teachers with the consent forms (refer also to Appendix G) to be signed. After that I went through the information sheet with my focus group participants and convened the interviews. As part of the interviews, the selected teacher participants were given a demographic information sheet which they filled in using tick boxes.

Similarly, the teachers for the classroom observation were approached after the interview sessions so they could suggest dates they would be willing to have me observe their teaching. During that time, I also managed to give the respective class teachers the parents' information and consent forms (refer to Appendix H) to be given to the parents of the children in the classes that were to be observed.

In our Melanesian culture, it is appropriate to negotiate with the authorities of the schools using informal oral communication to get an indication of their interest in taking part in a research study. The letters and other more formal documents can be passed on when the school authorities have given oral acceptance to our access. The initial informal discussion may elicit a need for more clarification about aspects of the research. The approach I took with my participants was user friendly, educational and culturally appropriate. This was important because most of our school teachers found becoming a research participant a new experience.

3.6.3 Informed consent and confidentiality

Informed consent is important for the researchers and the participants (Kimmel, 1988) as it protects and respects the rights of both. Informed consent is a sign of respecting the boundaries between the researchers and the participants and it forms the close agreement and relationship between the researcher and the participants (Cohen, Manion & Morrison, 2007). It was also important for me and a sign of respect for my participants in seeking their consent, as I have been a teacher in PNG.

Informed consent also protects the privacy of participants, which can easily be violated during the research (Diener & Crandall, 1978). For this study, informed consent was sought to give participants time to say whether they wanted to be involved in the study. I visited my research participants at the agreed time and went through the information sheet with them. Once the participants had indicated that they fully understood the information and the details of the research I asked them to sign the consent form. The participants were also informed of the possibility of my research findings being used in future publications and seminar presentations. Participants were assured of utmost confidentiality by my not disclosing the source of information in the thesis and the use of pseudonyms.

3.7 Participants

Two primary schools were involved in this study and my choice of these schools was based on their involvement in pioneering the education reform. Another reason for the choice of these two schools was their status as demonstration schools as they provide modelling programs for teacher trainees at the two teachers' colleges attached to them. I had hoped that for these reasons, the teacher participants of these two schools would have fully implemented the bridging policy and would be models of bridging teachers.

3.7.1 Sample

One focus interview group had five teacher participants who were either current Grade 3 teachers or had some experiences in teaching Grade 3, while the other focus group had three current Grade 3 teacher participants. These were conducted at the two schools respectively. Altogether, the total sample for the research was two focus groups comprising eight teachers

and four teachers for the classroom observation (two from each school). The four observed participants were also part of the focus group interview.

3.7.2 Participant requirements

Eight participants took part in 2 focus group face to face semi-structured interviews. Four participants from this group (two in each school) took part in the classroom observations. They were asked to continue their normal teaching routines while I conducted the observations.

Approximately 20 minutes was given to each of the focus groups to go through the information sheets so that participants could sign the consent forms before the 60 minute interview. The teachers who were observed were visited twice, supposedly for one hour 30 minutes each time, however, the observation time was much shorter for all the teachers because of delays in starting the lessons and also because of school programmes prior to the observation time, for example, whole school assemblies. Reading and filling in the feedback forms of the post-observation sheets took 30 minutes. Two participants were not available for these discussions, and consequently, they were given their prompt sheets to answer and return to me which they did.

I recognise that the parents, families and the communities have an influence on the children's learning of English, but given the scope of this research, I decided that only the teachers would provide the data for this study. Although the children were included in the observations the focus of this study was specifically on the teachers.

3.8 Data analysis

I obtained three forms of data: data from the focus group interviews, data from the observations and data from the post-observation prompt sheets to see how teachers support the learning of English using the local languages. For the interviews, I combined the data from both schools and identified the findings using common themes from the interview questions. For the class observations, I identified all occurrences of teachers making explicit connections between languages that were possible to be identified from taping; however, not all could be retrieved. I have chosen to combine all occurrences among the teachers because

the purpose is to document and recommend effective bridging practices for the teachers' professional development.

While the results of the analysis of the observations are combined across teachers, I have interpreted some of the teachers' strategies used when I discuss the post-observation prompts. Common emerging themes were also found from the observations and the post-observation prompt sheets, and I have presented these under themes as well.

3.9 Conclusion

The qualitative approach taken in this study appeared appropriate to answer the research questions. The focus group semi-structured interview, classroom observations and the post-observation prompt sheets were also most suitable for investigating the participants' beliefs and bridging practices. Ethical considerations, in accordance with the University of Waikato ethical regulations (2008) ensured that the research participants were respected, and culturally appropriate processes were followed in the conduct of the study. The data analysis procedures were designed to interrogate the data as thoroughly as possible to answer the research questions. The need to ensure the validity and reliability of the data was of paramount consideration in this study. The next chapter provides the findings of this study.

CHAPTER 4: FINDINGS

4.1 Introduction

The aim of the research was to investigate the participants' conceptions and beliefs about bridging in particular, and about language use and multilingualism in general. The aim was also to identify and document the bridging strategies that Grade 3 teachers use to help the children learn English. The data concerned what teachers said they did as well as what they actually did in practice. While it would be possible to analyse the differences in these two forms of data, this was not the major outcome planned. The major outcome is to understand how teachers think and what they do, with a view to helping them to implement bridging more effectively.

This chapter reports on the findings generated from an analysis of themes in the different sources of data:

- conceptions and beliefs represented in focus group interviews with the researcher
- rationales presented to the researcher in response to prompts in the post-observation interviews with individual teachers.

Findings were also generated from patterns of language use and discourse:

- as captured by the observation sheets
- and as recorded and/or transcribed from classroom interactions between the teacher and the students.

4.2 Participants

Before explaining the data findings, this section provides information about how I have referred to the schools and teacher participants in the study. The two research sites have been labelled as school K and school G. School K is situated a five minute drive from the provincial centre while school G is in a rural location approximately 45 minutes drive out of town.

Table 1 below lists each of the teachers involved in the study, their teaching experience and what exposure they may have had in their pre-service training or professional development in relation to content and pedagogical knowledge about bridging. The first four participants in

Table 1 (two from each school) participated in all the data collection methods: the focus group interview, the classroom observation, and the post-observation questioning. They have been given the pseudonyms: Alice, Benny, Clare and Daisy. The second set of four teachers participated in only the initial focus group interview. As explained in the methodology chapter, this was because the first four teachers provided a sufficient amount of data. They have also been given pseudonyms instead of their real names. They are identified as: Esther, Fay, Gail and Hannah. In all, eight teacher participants provided the data for this study.

Table 1. Two groups of participants, their teaching experience and preparation for bridging

Involvement in research	Name	School	Time teaching	ITE* or PD* to support bridging
in focus group interview, classroom observation and post observation interview	Alice	G	2 years	Provincial In-Service Training (PIST) by school inspectors
	Benny	G	2 years	Provincial In-Service Training (PIST) by teacher trainers
	Clare	K	4 years	Diploma in Education Primary Inservice (DEPI) programme
	Daisy	K	2 months	None
In initial focus group interview only	Esther	G	3 years	Pre-service by college lecturers
	Fay	K	10 years	None
	Gail	K	4 years	None
	Hannah	K	1 years	None

Notes: ITE: Initial Teaching Education
PD: Professional Development

Table 1 shows that the participants not only have had different bridging training experiences to prepare them to teach Grade 3 classes, but have also varying levels of experience teaching. The most inexperienced teacher in a bridging class is Daisy with two months, while the most experienced is Fay with ten years. Two out of eight participants have had professional development (PD) support in the area of bridging which was delivered through provincial in-service training programmes. Another two referred to their initial teacher training programmes from the teachers' college lecturers as having provided knowledge about bridging, while the other four participants have had no training or professional development on bridging. Daisy and Benny were local vernacular teachers which means that the majority

of their children in their classes were proficient speakers of the indigenous languages of the area, while Alice and Clare taught the Tok Pisin speakers. The teachers' and children's language knowledge and proficiency were important to help the bridging from the local vernacular to learn English.

Below are the data from the study, presented in three major sections: conceptions and beliefs about bridging generated from the focus groups interviews; language use and discourse patterns as captured from the classroom observations; and rationales presented about strategies and practices observed by the researcher in her observations.

4.3 What teachers said they do

All eight participants shared their conceptions and beliefs about bridging in two separate focus group interviews, conducted at the two different schools.

4.3.1 A transitional bilingual conception

In the focus group interviews with teachers, they explained bridging in the following ways:

Alice: We do bridging to have the local vernacular and the pidgin before English.

Fay: We use the first language first then you use the second language.

Fay: The children learn in their local vernacular before English for early translation from the local vernacular to English to help understanding.

The teachers aligned bridging with the transitional model of bilingualism. They saw that the first language (whether that be Tok Pisin or the local vernacular) is used first and then children move to English.

4.3.2 Bridging as translation

When asked how they implement bridging in their classrooms, the teachers mainly represented the bridging process as one of translation. Teachers did not explicitly say that they made use of metalinguistic comparison, as explained in the literature review. When asked how they implement bridging, Alice responded in the following way:

Alice: Yes, through translation.

The teachers explained their views that it was necessary to begin using bridging as translation from the vernacular to English in the early years at school, Fay's view was that this should occur well before children reached Grade 3.

Fay: If they can translate vernacular to English at an early stage, then understanding of English will be easier. The children will understand English if translation is done earlier in the elementary level.

Fay's next statement indicates that she viewed the continued use of the vernacular as a problem.

Fay: When they do not do early bridging or translation, and when they [the children] end up in Grade 3, the teachers find it difficult because children are still speaking the local vernacular in class.

4.3.3 Using different languages in translation

It should be remembered that teachers are generally equating bridging with translation and so this view affected their use of different languages. The teachers tended to favour the use of two languages in the bridging process, i.e. from vernacular to English or from Tok Pisin to English. Benny's comment is positive about bridging between the vernacular and English.

Benny: A lot of teachers have said the local vernacular direct to English helps the children to learn English.

Not surprisingly, Alice, the Tok Pisin teacher, showed a preference for using Tok Pisin vocabulary then introducing the English version of the word.

Alice: We use the local pidgin then use the English word and show the picture. We need pidgin before English.

Alice also expressed the view that bridging as translation can work in the reverse, from English to Tok Pisin.

Alice: Fifty percent of time we would say a sentence in English, and then interpret it in pidgin.

The teachers commented that using bridging with two languages was better than having to contend with a third language, although sometimes they did switch between three languages as can be seen in the following statements. The researcher asks:

R: So from the Kuanua² language you help them to learn the targeted language which is English?

Daisy: No, from Kuanua I go to pidgin then to English.

This is expressed again in the following exchange:

R: If you connect vernacular to English, do they get it?

Daisy: No, It is easier for children to use the local vernacular to pidgin then to English.

4.3.4 Scaffolding

Some of teachers expressed quite clear views about how Tok Pisin in particular can be used effectively. Tok Pisin can be effectively used to elaborate on meaning. In the statement below, Alice explains how Tok Pisin can be used to anchor meaning for the children by scaffolding on what children already know.

Alice: What we do is, we say it in English first, and then we use pidgin to make the ideas clear, to make them understand. We connect from English then interpret in pidgin.

Daisy has a similar view about the role of Tok Pisin. She also believes this is a function that the vernacular can provide too. She explains:

Daisy: Tok Pisin is used to make ideas clear and to make children understand. All our blackboard writing is done in English but the local vernacular and pidgin are used to clarify the English words used.

It is interesting to note that Daisy sees a clear role for English in literacy – it is used in blackboard writing, while Tok Pisin and the vernacular are seen as having a oral and meaning explaining and elaborating role.

The following two statements show one teacher explaining how she scaffolds using three languages:

Daisy: I have to do it in English, then pidgin, then in the local vernacular. We say the English word, for example, *bird*, then show picture, and then say *pisin*, [bird]. Then go back to the local vernacular language *beo*.

² Kuanua is the local vernacular for the Rabaul people.

Daisy: I switch from language to language to help them understand. For example, Last week I had a lesson on nouns. I explained what nouns were in English and asked them to give me some examples of nouns. The children were just watching, then I repeated the same instruction with pidgin and yet none of them was able to give me any nouns. Then I explained in the local vernacular [Kuanua] and then children were able to give me some examples of nouns.

4.3.5 Activities and resources for bridging

The teachers explained the kind of activities and resources that they used in bridging. The teachers identified big books, games, picture words and sets of alphabet cards as tools for bridging the learning of English. It is interesting to note that the teachers appear to be reporting a significant amount of vernacular resources.

Fay: We use big books that are written in two languages and we connect the two languages. We also use games and puzzles, a vernacular web board, which we use with what we call character and adopting. We write a story in both languages. We let children swap words from the local vernacular to English. The strategies we find helpful in bridging the local language to English are using the big books, and adopting.

Alice: We use games, picture-words, and set of cards A-Z. We get the students to say words and form words.

In one instance, Alice explained in detail how resources such as pictures can be used in conjunction with translation and the writing of English forms on the blackboard. The language aspects that Alice targets as a part of this bridging strategy appears to be vocabulary knowledge with some attention paid to developing phonemic awareness.

Alice: You say the language word, for example, *boroi*, and then you show the picture of a pig and then you write the English word for pig, *p-i-g*. Another example is *fish* in Tokples you say *aihen* then the teacher shows the picture and says the English word *fish*. Then you also say *fish* in English then you sound /f/ /ə/ and /ʃ/. Children learn not only to say the English word but to attack the phonemes that make up the word.

Interestingly, one teacher saw language resources as not only in the hands of the teacher and in the context of school. She drew attention to resources outside the classroom. Hannah identified that watching television at home was a way that some children could learn English words.

Hannah: Children also learn English from the TV at home. However few parents have TV.

However, as Hannah comments, very few children have the opportunity to learn this way because most children did not have a television set at home and the school did not have a set.

Only one teacher expressed a role for written forms of the vernacular in the focus group interview. Esther stated that she allows the children to write English stories into their local vernacular.

Esther: We write a story in English, then group children in their language group and ask them to write the same story in their local vernacular.

4.4 What teachers said they thought about bridging

While the focus group interviews generated data that suggested all the teachers had some understanding of the principles of bridging and did implement bridging practices – mainly using translation, not all the teachers had positive attitudes or strong beliefs in the benefits of bridging. Some like Fay, compared the present with their own experience of learning English.

Fay: When we went to school the teachers taught us English right away, and we could speak English better.

Some of the teachers also admitted their strong dissatisfaction of the use of the local vernacular as a bridge to English. This can be seen in Alice's statement below.

Alice: Teaching children in their mother tongue is a waste of time. Those of us teaching Grade 3, we say it is a waste of time. We were born with that, no need for anyone to teach us our mother tongue again.

In fact, Fay in highlighting the need to consider three languages in the bridging process, expressed the point of view that this is potentially confusing to children.

Fay: Now we have pidgin and local vernacular and it is blocking children in learning English.

The teachers tended to see the learning of English as the most important outcome. There is some but not a deep understanding of using the child's local vernacular or L1 as a resource and advantage to support the learning of the L2 which is English. Teachers did not generally have a commitment to consolidating the learning of their first language, whether it was the local vernacular or Tok Pisin. This was not part of their conception of what bridging meant in practice.

4.5 What teachers said are factors that impact on implementing effective bridging

Having an understanding of attitudes is important, and part of understanding what teachers think, is to understand why they might have negative attitudes. This section therefore presents what teachers thought were factors impacting negatively on their ability to implement effective bridging.

4.5.1 Linguistic challenges and teachers' knowledge

Teachers' knowledge is also important when working between two, or more, languages. A number of times, teachers identified the relationship between languages - Tok Pisin and English as being problematic, while that between the vernacular and English was not.

Benny: From vernacular to English is easy but when I use pidgin, that is where the problem is, but when I use the local vernacular then bridge it to English I don't think I'll have much problem.

Daisy's comment about Kuanua also expresses this, and presents it as an issue of language proficiency.

Daisy: The local Kuanua speakers find it difficult to speak pidgin. Kuanua is their dominant language.

Teachers clearly reported use of the translating strategy, but that this was not always easy. It would seem that this may be affected by their language proficiency. They found that translating only one word was more easily managed than translating a phrase or a sentence as the following comment indicates.

Fay: Translating one word is easy but not a sentence.

The teachers said translation into English involved fewer words and was relatively easy. The teachers believed that translating into the local vernacular was more challenging as it involved longer descriptions as some English words did not have equivalents or cognates. This is expressed by Alice, Gail and Fay.

Alice Also, translations in English use fewer words, while translation in vernacular use more words.

Alice: In English, few words create meaning, while in vernacular, we need more words to clarify meaning.

Gail: This is a hindrance to our teaching. In English expression, a one word concept will require descriptions in pidgin to get the meaning of the same word.

Fay: Even with the story, English will be short, vernacular will be long.

Particular aspects of the language system seemed to be especially difficult for the teachers, for example tenses. This aspect is identified by Alice and Fay.

Alice: Yea, translating one word is easy but translating sentences is difficult because of the tenses.

Fay: Some languages do not have tenses.

It is interesting to note Fay's comment about some languages (vernaculars) not having tenses. This suggests that the teachers may not have a very good linguistic understanding of the vernaculars that they or their children speak.

The teachers seemed very aware of differences and similarities between three possible languages, which impact on reading. Benny explains this below:

Benny: In Kuanua we refer to *rat* as *galang*. In Grade 3 they write the same spelling as *rat* in English which sounds like *rut* in pidgin. This is our Grade 3 problem.

The teachers focused on the differences between English and Tok Pisin. They all identified that the difference in English orthography and Tok Pisin is that Tok Pisin spelling is a mainly phonetic. The challenge of English orthography seems to motivate teachers to begin with phonemic awareness and teaching letter-sound relationships, as expressed by Alice.

Alice: English has 26 alphabet and the pidgin alphabet minus 3 - *c, k, q, x, z*, and there is a created alphabet - *ng*. We feel children must know the letters, blends, and diagraphs and so on. We feel we have to start with phonics. The first thing is for children to master the phonemes, the sound of all the alphabet then they can be able to read.

As mentioned above, teachers noted that Tok Pisin has excluded or combined some English letters (for example, Tok Pisin regards the letters *c, k, q*, as representing one phoneme, and represented by the letter *k*). There is also the addition of the phoneme represented by the letter digraph, *ng* in Tok Pisin.

Teachers did not say they contrasted language features such as phonemes with students, but they did say that they spent much teaching time sounding out the English alphabet, and much time sounding out English words. Alice described the progression when teaching phonics to words to sentences.

Alice: The progress of the lesson begin with a single letter *a* in English for words *cat*, *mat* and *rat* to help the sound but the meaning can be seen in *the cat ate the rat on the mat*. That's why we read those simple books to make the meaning clearer of the new English words.

In the above example Alice follows a progression from letter-sound knowledge to vocabulary knowledge to the reading of words in books. This represents a bottom-up approach to learning to read in English.

I have discussed what linguistic challenges teachers face, in particular, when they use translation as the strategy for bridging, and how teachers focus on the contrasts between languages especially at the phonemic level. I now talk more generally about broader issues of language diversity. The teachers identified certain issues about languages that they think affect their bridging practices. One major issue is the diversity of languages and particularly vernaculars used.

Clare: PNG pidgin is so diverse; we find that the pidgin language that we use is so diverse in the regions of PNG. For example, there are differences in words like *bed* to *bet*, *blong* to *bilong* and *gras* to *garas*.

Fay: The variation in the PNG pidgin affects our speaking of Tok Pisin in different cultures. For example, my pidgin is different from the New Guinea Islands. This difference will interfere with the ideas and concepts from children. Sometimes I find it difficult to transfer ideas because of the different dialect I use in pidgin. This is not beneficial to PNG children in bridging from pidgin to English. We may have the ideas but the expression will be difficult and confusing because of the variation in dialect of pidgin.

Alice commented on the fact that Kuanua makes use of a number of English or Tok Pisin words.

Alice: Nowadays some of our local vernaculars are pidgin type. For example, if I say *I want to drink*, In Kuanua I would say, *Iau mainge pina momo na ti tara kap*. *Ti* and *cup* are English or pidgin words used in the local vernacular. So anyone from another language will say, he said *kap* and *ti* so that person can relate *ti* and *kap*, so pidgin is the popular language. In Tolai, a *pot* is *kabala*, but now people are using *pot*, instead of *kabala*.

Language diversity is a challenge in terms of some teachers' own language proficiency. The teachers agreed that it was important for all Grade 3 teachers to know the language of the children so that communication was understood. They considered that fact that many Grade 3 teachers do not speak the same local vernacular as their Grade 3 children causes problems.

Fay: With the local communication, if the teachers speak the local vernacular then that is fine because the teachers can better translate the local vernacular to the English and the children can better understand English. If a teacher is not from the local community and does not speak the local language of the children then it will be difficult for the teacher to communicate with the children because all the elementary children are learning in the local vernacular. If teachers do not know the local vernacular and they want to communicate, it will be very difficult to communicate and to understand the teachers.

However some teachers have positive strategies to deal with this, as explained by Alice:

Alice: If I find a problem to speak the local vernacular, I ask a child who knows the language to help express the ideas in that local vernacular to help make the meaning clear or I can invite a local villager to explain the concepts to the children.

While the diversity of vernaculars used is an identified problem, so to is the variation in Tok Pisin. This is a problem when teachers from one region are using their variety of Tok Pisin to teach children from another region.

4.5.2 Children's language knowledge

Multilingualism is common among the children in PNG. The teachers acknowledged the fact that many of their children were multilingual, mainly due to intermarriage.

Alice: Some children know their father's language or mother's language. And the place they are at, they might learn the language that is spoken. Some may speak the language, some only hear and understand, but cannot speak the language.

The teachers acknowledged that Tok Pisin was the most commonly known and used language. When asked what language teachers speak to these multilingual children, teachers from both schools said that they used Tok Pisin. Alice and Benny's statements are reported below:

Alice: Pidgin because it is common.

Benny: We use pidgin for multilingual children because it is common. Also, if the teacher can speak those other languages then they can speak to them, otherwise only pidgin is used.

Alice in her statement below suggests that the predominant use of Tok Pisin does not present a problem for children.

Alice: Everyone knows pidgin.

However not all the teachers shared this view. Some said that children who knew little Tok Pisin experienced some difficulties.

Clare: These children try to understand English and pidgin.

Gail: The local Kuanua speakers find it difficult to speak pidgin. Kuanua is their dominant language. The pidgin speakers will pick up while the local speakers feel scared to speak.

With respect to children's knowledge of English, teachers from both schools said that some children arrived at school with some good level of English while other children had very little or no exposure to English.

Fay: Only few children come to school with some English words but are not fluent speakers of English. Some children come with no English at all.

Clare: Children who come into the schools with English are those that are transferred from private schools or are exposed to some English from home. I have a child who came in from a private school with good level of English. Children who come from the private schools know English because these private schools begin school with English, that is why these children can speak better English than our local schools who begin schooling with their local vernacular.

Alice: Some of them know at least one or few English words, but cannot form English sentences, that's why we have to apply phonics and bridging to support these children.

In response to the statement about supporting the child with a high level of language proficiency the teacher Clare replied as follows:

Clare: I just let her with the majority of the children. I find it difficult to find special resources for her. I also have no time to provide these resources. Let her be with the others. She can read and write already, which is good.

The teachers' comments indicate that children come into their classrooms with different languages, and very diverse levels of English and that individual children's language needs

are not taken care of. Teachers may not be aware of how to provide this assistance. The question is how teachers can support children who already speak English in a classroom with others who have less English proficiency.

4.5.3 Resources to support effective bridging

While the section above, where teachers explained how they used resources, suggests that teachers had ample access to resources, the teachers said that this was an area of concern. They said that they needed to be equipped to perform effective bridging. When asked about the appropriate resources that they feel are needed for bridging two participants commented:

Fay: Phonics, paper and big books.

Esther: Pictures and charts for the learning of new words, stationery, paper – we need a lot of paper for children’s writing.

In these quotes, the teachers identified the lack of school support to implement their bridging roles. The quotes suggest that now the teachers must provide a lot more of the resources.

Alice: This current reform is hard. Before was good. I am comparing and finding out that teachers must come up with their own class activities.

Hannah: School support is poor and producing materials is left entirely on us.

4.5.4 Guidelines for teachers

There appears to be a the lack of access to content to build knowledge and awareness of the bridging process. Teachers from both schools responded negatively when asked if they were aware of any model of bridging that they were drawing on to guide their practice in class.

Daisy: Nogat ia.
[None].

Benny: We have no idea about the kind of model that is used. Instructions from the Department of Education do not come with models which will make us aware defining what and how teachers will teach.

As there appear to be no clear guidelines about the kind of bridging models that teachers should be using to help the children to learn English, teachers found their own way of bridging the local vernacular to learn the English language. Teachers in both schools claim

they were using the traditional teaching style and were coming up with their own ways which they feel suited them to help the children's learning of the English language.

Esther: Literacy activities in use with bridging are not clear. The bridging strategies are not clear; you need to understand it in your own way. We do bridging in our own ways.

Alice: The reform does not really specify how to use the bridging strategies. People interpret the bridging information in their own ways and will also come up in their own ways to use the strategies. At the same time, we know that the reform requires us to create our own strategies. For example, phonics is not specified on how teachers will use it; so teachers create own strategies for phonics. From the syllabus they provide bridging ideas for the use of big books and games. But before we introduce the big books and games etc, how will the children know the sounds to be able to read?

Teachers do not really understand the bridging strategies and so implement what they think can support the children's learning of English. When asked about their conceptions of bridging, teachers represented this process mainly as one of translation; and they clearly also focus on phonemic awareness. These two areas are clearly ways of doing bridging "in our own ways".

Fay said that, while some teacher resources in the form of books were available to support bridging, they did not have the time to study and to how to use them.

Fay: We are not aware that bridging materials are found in the New Reform Books. We are aware that some books were given to us but we do not have enough time to go through the books.

Teachers clearly felt the need for more support, as expressed in Clare's statement:

Clare: I need more help about bridging.

4.6 What teachers did: Language use from classroom observations

The previous sections in this findings chapter have focused on what teachers think about bridging and what they say they do. This section reports on what four of the teachers (Alice, Benny, Clare and Daisy) actually did when they were observed on two occasions.

4.6.1 Teachers' talk

The teachers' main choice of languages when interacting with the children was an important feature to consider in this study to identify which best supports the children's learning of English. The languages used were Tok Pisin (TP) and English (E) with Tok Pisin used more than English. What is of particular note is that no vernacular use was recorded, even for Daisy and Benny whose children were first language speakers of a vernacular, either Kuanua or Baining. Code switching and translation commonly occurred between Tok Pisin and English between intervals and also at the time of coding. This is why the results are described in terms of the main language.

Table 2 shows the teachers' use of language in the classroom across all lessons. It should be noted that overall I observed approximately 18 intervals per teacher but not all intervals are presented below because they did not involve the teacher and teaching. Rather, they involved students working independently. In total 45 intervals were analysed.

Table 2. The relative frequency* of the main language used by teachers across all lessons

Teacher	Vernacular	Tok Pisin	English	Total
Alice (1) G		3	4	7
Alice (2) G		4	1	5
Benny (1) G		5	0	5
Benny (2) G		3	4	7
Clare (1) K		6	0	6
Clare (2) K		3	1	4
Daisy (1) K		4	1	5
Daisy (2) K		3	2	5
Total		32	13	45

Note: This was measured at 10 minute intervals

There were some differences in the participants' use of Tok Pisin and English. In one of the observations Alice spoke more English than Tok Pisin but in the other she spoke more Tok Pisin than English. Benny and Clare used no English in one observation and in the other they used some English. Daisy used more Tok Pisin in both observations. This would suggest that rather than having a fixed pattern of language use, the teachers vary their language use according to the context (lesson type and content).

4.6.2 Language use and language modes

As with the teachers, I was interested to see what languages the students used, specifically across different language modes: reading, writing, listening and speaking. I was also interested in what language activity they were most involved in. This helps us to evaluate whether the language used in the classroom supported the learning of English.

The data in Table 3 cover 69 intervals. This is more than those of the teacher as in this case the data include intervals when children were working independently. One overwhelming finding was that there was no recorded intervals in which the vernacular was used by any of the teachers, or the students.

In terms of language mode, the data show that listening was what students did most in class as a result of the overwhelming amount of teacher monologue. This was the case for 26 of the 70 intervals and constituted 37.5% of the total class time.

Table 3: The relative frequency* (and percentage) of the main language used by the teacher, and the modes students engaged in across all lessons.

Teacher	Reading		Writing		Listening to teacher's monologue		Listening and speaking Teacher/student dialogue	
	TP	E	TP	E	TP	E	Individual	Group/Class
Alice (1)		2				1	3	3
Alice (2)				1	4		2	2
Benny (1)					6		2	0
Benny (2)		1			4			4
Clare (1)	1	3	1		4		2	3
Clare (2)					3			3
Daisy (1)		2		1	2		2	2
Daisy (2)				3	2			1
Total	1 (1.5)	8 (11.5)	1 (1.5)	5 (7)	25 (36)	1 (1.5)	11 (15.5)	18 (25.5)
	9 (13)		6 (8.5)		26 (37.5)		29 (41)	

Note: Relative frequency was measured at 10 minutes intervals

The findings revealed that the children spent a great deal of time listening to teacher monologue and that this was most often in Tok Pisin. Across the entire classroom observations the children spent 25 intervals (36% of the time) listening to the teachers' monologue in Tok Pisin. There was also teacher/student dialogue, but this was mainly in the form of seeking a choral response from the whole class, or a group. This accounted for just over a quarter of the class time. Individuals did have the opportunity to speak on occasions. However, this was in the context of being nominated to answer a teacher's question. The discourse in the class where the teacher elicited or tried to elicit either a whole class or individual response accounted for about 40% of all class time.

Reading in English took up 8 intervals (11.5% of time) and writing in English took 5 intervals (7% of time) while reading and writing in Tok Pisin each took up only 1 interval (1% of the time). This was observed in Clare's class when the children were asked to read Tok Pisin after the teacher from the big book. The Tok Pisin writing also in Clare's class was observed when the children were asked to write a sentence in Tok Pisin about the big book story that they had read. The students therefore had few opportunities in reading and writing in Tok Pisin, but participated mainly in listening in Tok Pisin.

4.6.3 Teachers' discourse strategies

The previous section presented quantitative data of teachers' and students' language use. This section presents transcript data to describe the way in which the teachers used language in their interaction with students. One important aspect is their use of metalinguistic language. Metalinguistic talk refers to the way teachers talk about aspects of language: about words, grammar and syntax and phonemes to support the learning of English. It may, or may not include translation; and it may or may not include comparing and contrasting languages. The following sections provide examples of teachers' metalinguistic talk observed in the classrooms.

4.6.3.1 Direct translation

The teachers talked about respective languages and often distinguished between the English word and the Tok Pisin word. This can be seen in the following examples:

Benny: *Better life* i min gutpla life.

Benny: *Communication* is way blong toktok.

Daisy: *Large* mins bikpla.

Alice: *After* means behain, *before* means pastaim.

As in the case above, the teachers often just gave the Tok Pisin equivalent for the English word. There is little English language context given with this type of direct translation. Teachers seem to like presenting even two contrasting or opposite words at the same time, as in the case above presenting *before* and *after*. An important comment to make is that presenting language items in contrast or opposition can cause problems for students' learning (Nation, 2001).

4.6.3.2 Metalinguistic comparison

The next two examples show the teacher expressing how a word is said in English and its Tok Pisin version. This is a more explicit contrast between English and Tok Pisin terms.

Benny: In English we say *past* in pidgin we say *bipo*.

Benny: In English we say *present*, in pidgin we say *nau*.

When this strategy was used, students were provided with more contextual information, not just a translation. A common way of framing the translation strategy was for teachers to say, "In English we say *x* and in Tok Pisin we say *y*" or "In Tok Pisin we say *x* and in English we say *y*".

Teachers sometimes supplemented the use of metalinguistic comparison with other strategies such as pointing to the word. For example, in a language lesson, Daisy was seen asking the children to read the question, "Will Bernard comb his hair?" After the children had read the question from the big book, she then said, "This word is hair" (while pointing to the word *hair*). The teacher then said, "In pidgin we say *garas*. In English we say *hair*".

4.6.3.3 Elaboration

Teachers often talked about language and language comparisons and contrasts at length. This would to some extent account for the high proportion of teacher monologue observed. When additional information was given, it was often given in Tok Pisin. The following statement has a great deal of elaboration in Tok Pisin.

Alice: Long long taim ago, *bipo*, but it is English *before*, emi oli kopi tasol long dispela. *After* mins behain. *Before* means pastaim.
[Long long time ago, *before*, but it is English *before*, they just copied. *After* means later. *Before* means before].

Teachers' more extended metalinguistic elaboration focused mostly on vocabulary, as shown in the example above. The teachers also talked about phonemes (letters and sounds) in Tok Pisin to support phonemic awareness in English and orthography. Benny explains the difference in the pronunciation of *tap* and *tape*.

Benny: Sopos nogat *e* bai *tap* sopos igat *e* bai yumi tok *tape*.
[If there is no *e* it will sound as *tap*, if there is a *e* we will say *tape*].

In the two examples below, Alice is relating English phonemes to Tok Pisin orthography.

Alice: Mi raitim leta *i* antap long *e* so that you will know that letter *e* emi karai tupla kain karai.
[I am writing letter *i* on top of the letter *e* so that you will know that the letter *e* can have two sounds].

Alice: Long word *before* leta *e* emi karai /i:/.
[In the word *before*, letter *e* sounds like /i:/].

In two of Alice's examples above, it is interesting to see her use of codeswitching. In the next example, Alice provides background information about the English alphabetical system.

Alice: Consonants em ol letter olsem /b/ /s/ /k/ /f/ /g/.
[Consonants are letters like /b/ /s/ /k/ /f/ /g/].

Ol letas we oli no vowels /æ/ /i : / /æ/ /eʊ/ /jʊ : / em ol consonants.
[All the letters that are not vowels /æ/ /i : / /æ/ /eʊ/ /jʊ : / are consonants].

So yumi gat 26 letters of alphabet, 21 consonants na 5 pla vowels.
[So we have 26 letters of the alphabet, 21 consonants and 5 vowels].

So everybody say vowels, 5 vowels and 21 consonants.
(The children chorally repeat)

The following is an example of Daisy (the vernacular teacher) using Tok Pisin to explain an aspect of morphology – the marking of plural. When she gives a specific answer to sum up her explanation, she does this in English.

Daisy: Wanpla bai yumi tok *dormitory*, sopos planti bai yumi tok *dormitories*.
[For one we will say *dormitory*, if there are many we will say *dormitories*].

Daisy: *Singular* i min olsem wanpela tasol. Long number tu *plural* emi min olsem more than one or planti, so bai yumi adim *s*.

[*Singular* means only one. For the second one, *plural* means more than one or many, so we will add an *s*].

I have three books so I will add *s* to the word *book* to make it plural *books*.

The following sequence shows a similar strategy on the part of a different teacher, Alice, to explain the use of the 3rd person singular pronoun:

Alice: Sapos em meri bai mi tok wanem?
[If she is a female what will I say?].

S: *She*.

Alice: Okay *she*. Na sapos em man bai mi tok wanem?
[And if he is a male what will I say?].

S: *He*.

Alice: Sapos mi no usim neim blong ol em dispela tupela words bai mi usim. Klia?
[If I am not using their proper names then these are the two words that I will use, clear?]

This section has described three major types of metalinguistic talk that arose in the data documenting the teachers' discourse strategies: direct translation, metalinguistic contrast, and elaboration, especially in Tok Pisin. The metalinguistic talk concerned vocabulary, phonemes and morphemes, or non-content words such as pronouns. Metalinguistic talk about grammar and syntax seldom if ever occurred.

4.6.3.4 Teacher elicitations

As shown in the data on the use of language modes, children were often exposed to teacher monologue, but were also involved in frequent number of teacher-student interactions. It is these that are the subject of the following sections. This section discusses this, and tries to describe the patterns of teacher elicitations.

Teachers often began interactions with students by attempting to elicit a response, particularly to elicit students' knowledge of English words. This is the question from of direct translation. Sometimes the teachers used English and sometimes Tok Pisin as in the following sequence.

Alice: *Hen* is what?

Ss: Mama kakaruk
[Mother chicken].

Alice: *Hen* em wanem?
[*Hen* is what?].

S: Kakaruk
[Chicken].

Alice: Mama kakaruk.
[Mother chicken].

The end of the sequence is interesting as the teacher in her feedback move provides the more correct Tok Pisin equivalent.

The teachers used Tok Pisin elicitation for the whole class to respond to in English word. In this example, the teacher's elicitation in Tok Pisin was for the whole class to respond to:

Alice: *It* emi save sanap makim wanem?
[*It* usually represents what?].

Ss: Name

Some initiation moves were conducted entirely in Tok Pisin. In the following case this was to elicit a simple pronoun form, resulting in a chorus answer from the children. The teacher concluded the interactional sequence by summing up to consolidate the meaning of the pronoun forms.

Alice: Sapos emi meri bai mi tok wanem?
[If she is a woman, what do I say?].

Ss: *She*.

Alice: Na sapos em man bai mi tok wanem?
[What if he is a man, what do I say?].

Ss: *He*.

Alice: Sapos mino usim neim blong ol em dispela tupela words bai mi usim. kilia.
[If I do not use their names, then these are the two words that I will use, clear!].

Alice: But yu ken usim *it* to a thing, tree or animal.
[But you can use *it* to a thing, tree or animal].

Similar sequences were observed with other words like prepositions as in the following two sequences.

- Alice: *Before* emi minim wamen?
[*Before* means what?].
- S: Pastem.
- Alice: Pastem, samting emi kamap pastaim.
[Before, something that occurs earlier].
- Alice: *After* emi minim wanem,
[*After* means what?].
- S: Bihain.
[Later on].
- Alice: Okay, bai mi usim dispela tupla word *before* na *after*.
[Okay, I will use these two words, *before* and *after*].

In this case the same teacher also tried to elicit a direct translation.

- Alice: Husat emi nap explainim dispela word *after*?
[Who can explain the word *after*?].
- Alice: Peter, *after* means what?
(No response)
- Alice: *Bihain*, samting emi kamap bihain. Dispela samting pastem na behain long en, em dispala samting i kamap. Wampela samting ken is stap.
[*Later*, something that happens later on. Something happens first then after that thing, then that thing occurs. There is something else there].

Teachers also used English for the elicitation move at the beginning of an interaction sequence, as in the following example.

- Alice: Spot is whose name?
(Children search through the books for the answer)
- Alice: Tingim dispela stori, em husat neim bilong em spot?
[Remember, the story, who was named Spot?].
- Ss: Dog

Likewise the next sequence began with an English elicitation but was followed by a Tok Pisin one. When no response was given the teacher codeswitched between Tok Pisin and English in her elaboration.

- Alice: What is the next word, Ben?

S: *If.*

Alice: *If em wanem?*
[*If is what?*].

(No response)

Alice: *Sopos - we will play if the rain stops. Bai yumi pilai sopos rain emi stop.*
[*if - we will play if the rain stops. We will play if the rain stops*].

Not all teacher elicitation resulted in a response from students as the following example shows. In this case where the teacher's elicitation did not result in a response from the children, the teacher answered her own question, providing elaboration in Tok Pisin.

Alice: *Tap em wanem? Tap mins wanem?*
[*Tap is what? Tap means what?*].

(No response)

Alice: *Okay tap ia wara isave kamout long em. Ol i skruim igo long tank.*
[*Okay, tap is what water comes out of. It is joined to the tank*].

At times when the students did not respond to the elicitation, the teacher repeated the elicitation again and used Tok Pisin for an extended explanation.

Alice: *Before means what? Yu explainim in pidgin.*
[*Before means what? You explain it in Tok Pisin*].

(No response)

Before means pastaim, after means behain.
[*Before means happening first and after means later*].

Alice: *Before means what?*
(Teacher points to a child)

Alice: *Yu explainim long pisin.*
[*You explain it in Tok Pisin*].

(No answer)

Alice: *Okay, before emi tok long taim bipo, em sopos yu putim long pidgin bai yu tok bipo, bipo tru ol tumbuna blong yumi oli save wokim ol liklik haus blong ol long silip long em, nau oli wokim wanem?*

[*Okay before means if we put it in Tok Pisin, you will say, a long long time ago our ancestors made little houses to sleep in, but now what do they do?*].

Ss: *Haus.*
[*House*].

In the following example, the teacher, Alice followed an initial English elicitation with a one in Tok Pisin to help the children connect what they already know with concepts in the story. This can be seen as scaffolding and drawing on prior knowledge.

- Alice: Next word.
- S: *Net*.
- Alice: Give me an example of a net.
- Wanem kain net? Net blong ketsim?
[What kind of net? Net to catch?].
- Ss: Fish.
- Alice: Wanem tu?
[What else?].
- Ss: Volleyball net
- Alice: Na?
[And?].
- Ss: Mosquito net

On a number of occasions, teachers used code switching in their elicitation move and then elaborated in Tok Pisin in the feedback move.

- Alice: Can I say *it* to a man? Inap mi tok *it* igo long man?
[Can I say *it* to a man?].
- Ss: Nogat.
[No].
- Alice: Nogat ia emi funni, yumi ol man.
[No, it is funny, we are humans].

In the following example the teacher did not give the children enough time to respond to the elicitations she provided before answering the question herself.

- Alice: Sopos yu no usim neim bilong dispela samting bai yu ken usim *it*. Olsem dispela ia what's this? *The desk, the desk is long*, ah? Sopos mi no laik usim *desk* bai mi tok wanem?
[If you do not use the name of something then you can use *it*. Like this one, what's this? *The desk, the desk is long*, ah? If I do not want to use *desk*, what will I use?].
- Ss: *It*.

T &Ss: It is long

Alice: Na taim mi pointim na mi usim *it* yu save pinis olsem em desk ia, emi refer long desk.

[And when I point to *it* and I use *it* you already know that, it is the desk, that's being referred to].

(Teacher pointing to the desk)

In the next example, Alice provided the elicitation in English and did not wait for a response and then switched to asking a child to act out his understanding of the word. The teacher's feedback move was mainly a summing up with elaborations of the word in Tok Pisin.

Alice: What is *leg*? Show us which part is your leg.

(The child touches his leg)

Alice: Okay, em mining blong dispela word.

[Okay that is the meaning of that word].

Alice: What does *top* mean?

S: Antap.

[On top].

Alice: Antap long samting, Top of the desk or top of maybe the self.

[On top of something].

In this instance the teacher used English elicitation with the students responding using a single word and the teacher summing up at the end.

Alice: What is the next word?

Ss: *Lot*.

Alice: *Lot* means group, a group of boys or a group of girls.

The teacher in this interaction initiated English elicitation for the children to respond with a single word in English. After the children had responded chorally the teacher provided feedback with a Tok Pisin elaboration as well as summing up using some contextual knowledge.

Alice: What is the next word?

S: *Nut*.

Alice: Nut emi gat hard shell arasait na insait emi gat wanem,

[Nut has a hard shell outside and inside what has it got?].

Ss: Kaikai.
[Food].

Alice: Example, coconut, betelnut, galipnut

Alice: What is the next word?

S: *Hat.*

Alice: Hat emi wankain olsem cap. Cap yu putim long het emi longpla olsem but hat emi karamapim olgeta, olsem cowboy hat, Tolui, handiman blong yumi isave werim.

[A hat is like a cap, a cap you put it on your head, it is long like this but a hat covers all your head like a cowboy hat, Tolui, our handyman wears it].

The findings also show that this particular teacher, Alice, controlled the flow of interactions and the choice of the language in use. She was very directive at times when she wanted the students to respond in Tok Pisin.

4.6.4 Teachers' use of repetition and elaboration

The teachers also used a great deal of repetition in their classroom oral communication. The following is an example.

Benny: Listen to these words. Bai mi kolim ol words na yu harim na yu taraim painim sound blong em. First group of words, namba wan group long ol words, na bai yu harim na yu tokim mi long sound.

[I will say some words and you will listen to and try to identify their sounds. First group of words and you will listen to and you tell me their sounds].

In this example, the teachers gave two sets of instructions in English then repeated the same instruction in Tok Pisin. At other times the teachers provided considerable elaborations of the ideas and concepts that they were talking about. This is shown in this example.

Alice: What is the next word?

S: *Hat.*

Alice: Hat emi wankain olsem cap. Cap yu putim long het emi longpla olsem but hat emikaramapim olgeta, olsem cowboy hat, Tolui, handiman blong yumi isave werim.

[A hat is like a cap, a cap you put it on your head, it is long like this but a hat covers all your head like a cowboy hat, Tolui, our handyman wears it].

(The teacher demonstrated the shape of a hat and cap over her head)

In this example the teacher asked for a word and was given the correct word, *hat*. After the response the teacher's feedback move went on to differentiate a hat from a cap and also demonstrated the differences using actions. The teacher further elaborated by referring to a cowboy hat worn by a worker from their school that the children knew.

In a way, this example and the earlier example of the extended interaction around the word *net*, are examples scaffolding also. In this case the scaffolding is accompanied by much repetition and elaboration.

4.7 Teachers' explanations for their language use, discourse and other strategies from the post-prompt sheets.

This section reports on how the teachers explained some of their strategies in bridging.

The teachers stated that they made connections between the languages for clarification and for children to understand the new English concepts from their known vernacular. Alice explains the process:

Alice: This is to practise oral talking, for children to understand the meaning of *before*. After I speak, the children need time to process and visualise the information. For example using *before* and *after*, the children needed time to listen then to visualise the word and the pidgin word helps them to process the information and to find the answer. Tok Pisin helps the children to know the English word.

The teachers also stated their reasons for switching between languages.

Daisy: I switch from pidgin to English to make the meaning clear to the children. I explain and repeat in English then I explain in pidgin because the children use the pidgin pronunciation to say English words.

Alice: I switched because I try to help the children get the meaning for understanding from the known language.

Alice: We find translation very useful because it helps us to link Tok Pisin to English. Translation helps bridging.

In the following example, the teacher explained that he used translation as a way to help the children understand the new English concepts.

Benny: I used a lot of translation because the ideas and concepts in English are new to the children.

The teachers explained their extensive use of elaboration and repetition.

Benny: It is for understanding.

Alice: The English ideas and concepts are new to the children. I have to repeat and elaborate the ideas to the children.

Daisy: Sometimes children do not admit that they are not clear, that is why I keep asking them. It is important for children to admit. I have to know that they understand what I am saying, to make the meaning clearer.

All the observed participants switched between the local vernaculars to English with repetition to help the children's understanding of the new English concept.

Clare: I use both languages to make the meaning clearer

Daisy: I try to help the children to get the meaning of what is being said.

In the next example, although repetition was also expressed as a common practice, the teachers acknowledge that Tok Pisin supported the pronunciation of the new English words.

Alice: Children need more practice to remember and process the meaning between the English and the pidgin. I explain and repeat in English then I explain in pidgin because the children use the pidgin pronunciation to say English words. Children need to listen to the repeated sound for correct pronunciation.

Daisy: The pidgin sounds are familiar to some of the children, that's why it would be easier for them to relate to the English sounds to say English words.

Daisy and Alice claim that they use Tok Pisin sounds to support the learning of the English sounds and words because the children are familiar with Tok Pisin and so easily relate the Tok Pisin sounds to say a new English word.

4.8 Summary

These research findings have been presented to investigate the research questions of this thesis, which are:

1. What are the Grade 3 teachers' conceptions and beliefs about bridging the local vernacular (and/or Tok Pisin) to support the learning of English?
2. What bridging strategies and practices do teachers use to help the children learn English?

In order to answer these questions, findings were presented in the following areas:

- What teachers said they do,
- What teachers said they think about bridging,
- What teachers said are factors affecting implementation of effective bridging,
- What teachers did in their classrooms, and
- How they explained what they did.

When teachers talked about their conceptions of bridging and how they implemented bridging, the model of bilingual education that seemed to be guiding the participants' idea of bridging is the Transitional Bilingual model, where the L1 is replaced by the L2. When teachers talked about how they implemented bridging, they represented it as a process of translation from one language to another. Some teachers expressed the view that this could be two-way translation, from the L2 to English, and from English to the L1, and sometimes that three languages (the vernacular, Tok Pisin and English) were involved in the translation process. Teachers talked about the use of both Tok Pisin and the vernacular in terms of scaffolding learning of new words. They said they explored concepts and meanings in the L1 first and then moved on to the word in English. Some teachers said they had vernacular resources and used the vernacular in activities. Visual resources were mentioned in particular.

When asked what they thought about bridging, it seemed that many did not see a value in continued support of the L1 – in that bridging was to get the children to learn English as soon as possible. They did not express very positive attitudes about the use of the vernacular or Tok Pisin.

When asked to comment on what factors affected implementation of effective bridging, they identified language as an important factor. This included the differences between English and the vernacular and Tok Pisin, English orthography, and the range of languages used. They talked about their own language proficiency and the fact that they found it hard to translate beyond the word level. They also talked about the level language knowledge of the children.

Teachers also identified lack of resources as a problem. They said that they are left to make a lot of their own resources. They also said that they have to make sense of bridging for themselves, and that that they implement it in their own way as there is not a lot of guidance or direction from the Department of Education.

When observed, teachers made no use of the vernacular. Students in their classrooms spent a great deal of the time listening to teacher monologue (nearly 40%). When there was interaction, it was only between the teacher and the students – not between the students themselves. Teacher and student interaction was often in the form of elicited responses from the whole class or group – not individual responses. Individuals were nominated to respond to the teacher just over 15% of all class time.

Of the discourse strategies observed, direct translation was common. This confirms what the teachers said they do. However, teachers also made extensive use of metalinguistic contrast something they had not explicitly mentioned. In a number of cases, the observation showed that the teachers work to provide elaborated metalinguistic explanations, and at times they codeswitch extensively in these explanations. The metalinguistic talk in general (not just contrast), focused on all language levels except grammar. This is consistent with teachers saying they it was easier to focus on the word level when ‘translating’.

As seen in the language use data, teachers often interacted with the class more at the whole class level than at the individual level. To do this they used a variety of elicitation strategies – both in Tok Pisin and in English. One teacher in particular, Alice, provided examples of extended sequences of elicitation and response. She showed extensive use of both Tok Pisin and English and codeswitched often both within and between her utterances. Teachers used elaboration and repetition extensively.

When explaining what they did and why the teachers mainly focused on the idea of helping students understand the meaning of concepts rather than learning the language forms.

The next chapter will discuss these findings and what they might mean for the children’s learning of English, and their maintenance of their first language.

CHAPTER 5: DISCUSSION

5.1 Overview of this chapter

This chapter discusses the findings of the data collected for the present study which aimed to document the bridging strategies and practices that teachers use to support the learning of English in Grade 3 classes. As a part of this, teachers' use was identified and their patterns of language and discourse were observed, as recorded in the observation sheets. Teachers' conceptions and beliefs about bridging the L1 (the local vernacular or Tok Pisin) to learn English were also investigated. A number of clear findings arose in the data, and possible explanations for the findings as well as their implications for the children's language learning will now be discussed. The major areas focused on are: the teachers' extensive use of Tok Pisin; teacher-centred input; choral responses as output; teachers' elicitation of English language forms; teachers' feedback for consolidating language forms; translation for elaborating information; the use of metalanguage to compare and contrast aspects of the L1 and L2; codeswitching for connecting with students; and a limited commitment to and support for bridging.

5.2 Teachers' extensive use of Tok Pisin

Tok Pisin was used as the L1 for all the classes and was found to be used more than English throughout the observations while local vernacular use was nonexistent. Interestingly, this study found that the local vernacular class teachers said they used three languages in the bridging process, but clearly they did not in the observations in this study. The finding about Tok Pisin use corresponds to those of Nidue (1988) and Seigel (1997) which showed that PNG teachers favoured the use of Tok Pisin to facilitate the learning of English in the classrooms.

The lack of orthography for the vernacular languages (Gould, 2004) might explain to some extent why they are not used at all in the classroom. The teachers' choice to use Tok Pisin rather than the local vernacular may also be the result of the common informal usage of Tok Pisin in social practice. What is practised in the home and community has been shown to be transferred and utilised in the classroom language contexts. Honan (2003) found that the people of PNG use Tok Pisin to converse with speakers of other languages. However the

finding that no teachers used the vernacular, even those who were supposedly vernacular teachers, is of interest. If a number of the children spoke the vernacular as their first language but were experiencing bridging in Tok Pisin and English, this may make their acquisition of English more difficult and their continued development in their vernacular unlikely.

A reason why teachers use Tok Pisin, and no vernacular may be because many Tok Pisin words come from English and this may facilitate the learning of English, unlike the local languages that have very different words from English. At times, the teachers were employing the use of Tok Pisin cognates to support the learning of English words. Anthony's (2008) and O'Laoire's (2007) findings that connections were made through the use of L1 cognates to support English language development between languages, were fairly similar.

5.3 Teacher-centred input

The teachers' monologue dominated the classroom talk while the children spent most of the time listening. The unbalanced distribution of language use between the teachers and the children indicates a teacher-centred approach. The teacher-centred approach was practised by PNG teachers before the education reform and the teachers were themselves taught using the teacher-centred approach. This no doubt has influenced the teachers' instructional strategies. However, exposure to input, even if the source is primarily the teacher, does enhance acquisition as discussed in the literature review.

5.4 Choral responses as output

This study found the use of whole class choral responses to be a common way of producing language, while individual responses were evident when the teachers nominated children to speak. The teacher-centred approach may again be the reason the teachers were employing the choral responses.

The teachers said that choral responses and their repetition helped the children to grasp the concepts and pronunciation. This use of choral repetition as an output strategy for English language learners can be beneficial in this way and Anthony (2008) adds that because the children can correct or adjust their pronunciation in an anonymous way, they can feel confident instead of being held individually responsible for a mispronunciation. O' Laoire's (2007) study found that rehearsing orally and writing down were useful strategies to enhance

L2 acquisition and control of language forms. Anthony (2008) suggests that choral reading is a strategy that bilinguals can use because it gives the opportunity for learners to hear and develop their fluency.

However, some researchers are concerned when children merely repeat language that the teacher speaks and do not speak and expand language themselves. Chesterfield and Chesterfield (as cited in Cummins, 2000 p. 20), found that the use of repetition and memorisation lowered the awareness of language and limited communication.

The findings relating to children's use of language from the four modes of language (listening, speaking, reading and writing) showed that there was a need to involve more writing, reading and speaking to allow for exposure to other types of input and output. This finding identifies that teaching approaches in class must accommodate more production of the L2 through speaking and writing, as meaningful and enhanced input alone does not promote the development of L2 accuracy (Fotos & Hinkel, 2007).

5.5 Eliciting students' production of English forms

Consistent with the teacher-centred style is the fact that teachers spent a lot of classroom time eliciting responses from children. The type of teacher elicitation found in this study aimed to elicit a response, particularly the students' knowledge of English words. Teachers mostly aimed at getting a single word answer. This finding relates to the study by Abd-Kadir and Hardman (2007) who identified teachers' questions as mainly closed and requiring simple recall of information. The teachers tended to use the L1 first (e.g. *X i minim wanem?* [*X means what?*]), and then translate it to the L2, usually to find the English equivalent of a word. When the children failed to provide an English word, the teachers often explained the meaning of the L1 word. Sometimes if children did not respond, the teachers repeated and used Tok Pisin for an extended explanation with examples and contextual clues to identify an English word. Frequently the L1 was used to unpack the meaning, and to explain and elaborate further on a new concept to compensate for the lack of knowledge of the English word.

The large amount of repetition of language in these interactions may not be positive. Although elicitation could support the transfer of concepts and linguistic awareness, over-repetition and potentially strains the teachers (Torres-Guzman, 2007). The children also

might become passive listeners with too much information to digest. Too much repetition can also become boring and can draw the children's attention away from the purpose of communication, thus hindering the bridging process.

5.6 Feedback for consolidating language forms

The findings of this study showed that teachers did not explore the potential of feedback to support language development. Much of the participants' feedback did not encourage the children to produce language, and the feedback that was given was limited. The discourse data showed that the feedback move tended to be for the purpose of repetition using the L2, or for further clarification and elaboration of the word and summing up of the concept being identified in the children's responses. The teachers' feedback moves in this study again relate to Abd-Kadir and Hardman (2007) who found that the teachers' follow-up feedback moves were typically a low-level evaluation of a pupil's response, thereby severely constraining opportunities for pupils' participation in the classroom discourse and higher order thinking.

Black (2002) and Black and William (1998) identify that sometimes teachers answer their own questions when children do not respond to teachers' questions. This was the case in this study as well. Teachers answered their own questions with little wait time given for the children to process the information to provide a response. This practice can make children expect the teachers to answer any questions asked and therefore not attempt to respond.

The study has found a need to improve the teachers' initiation, responses and feedback (IRF) moves to maximise the opportunities for productive language from English learners.

5.7 Translation for elaborating information

The teachers were of the view that translation helped the children to understand the meaning of the new English concepts and that the process of translation allowed them to elaborate or expand further on the concepts. This study found the use of translation very common in the classroom interactions through teachers' elicitations and statements.

Cummins (2008; 2007b) argues that translation is a viable pedagogical strategy in the second language context. Cummins argues that translation from the L1 to L2 and the L2 to L1 can be a powerful tool to develop language and literacy skills and increases metalinguistic

awareness. Similarly, Manyak (2004) found that engaging children in translation in the classroom is a practical and powerful way to draw on linguistically diverse students' ability and socio-cultural resources to facilitate children's language and literacy learning.

One of the complications that this study identified regarding the use of translation between Tok Pisin and English was that Tok Pisin uses more words than English. The lack of definite Tok Pisin names for certain things means that the concepts were not available in the Tok Pisin lexicon. For example, a teacher in the study introduced the English word *transport*, which has no definite Tok Pisin equivalent. The teacher resorted to providing examples of different types of transport which took up more words to explain the concept and might not have provided the correct conceptual understanding. This finding again relates to Romaine's (1992) concept of circumlocution which uses the syntax to compensate for morphological processes to find new words. This also explains why Tok Pisin speakers borrow English words such as *transport* to use in their Tok Pisin language, and use inductive reasoning to explain concepts and words from a Tok Pisin point of view.

5.8 The use of metalanguage to compare and contrast aspects of the L1 and L2

The teachers in this study made extensive use of contrasting aspects of L1 and L2. Developing a strong connection between languages, allows for development of metacognition and metalinguistic awareness across to the children, as is proposed by Cummins (2009).

When teachers elicited a response by means of a question like, "*Boroi i minim wanem?*" [*Pig means what?*], children are essentially comparing and contrasting languages. When the teachers say, "In Tok Pisin we say *kaikai* and in English we say *eat*", children are also comparing and contrasting languages but in a more explicit way. In some cases where there was a close connection between the form and meaning of the Tok Pisin word and that in English, we can assume that transfer was supported (as discussed by Cummins, 1981, 1991; Garcia, Bartlett, & Kleifgen, 2006; Riches & Genesee, 2006).

One aspect that featured in teachers' use of metalinguistic language use was their explanation about Tok Pisin "circumlocution" to express single English words. Romaine (1992) explains that Tok Pisin involves semantic generality, greater grammaticalisation, and circumlocution and that this can be confusing to children when transferring the linguistic elements to their

learning of English. As explained above, this may have limited their use of direct translation at times.

Comparison and contrast operated most frequently at the lexical level. However it did occur at the phonological and morphological level, but not at the grammatical level.

The phonological transfer from Tok Pisin to English phonemes may have occurred because the children's familiarity with Tok Pisin sounds enabled them to transfer what they already knew to saying the new English words.

The lack of relationship between the L1 (Tok Pisin) and the L2 may result from the lack of definite morphological equivalents in Tok Pisin and English. Moreover, the complicated features of Tok Pisin (Kale, 1990; Romaine, 1992) may have caused the teachers to avoid making connection between the L1 and the L2 at this level.

Morphological and particularly grammatical comparison and contrast is dependent on in-depth knowledge of a language, and the ability to talk about it (metalinguistic knowledge). This may be an area of weakness for the teachers.

5.9 Codeswitching for connecting with students

The findings of this study reveal very extensive use of code switching between Tok Pisin and English in the teachers' instructional process. Code switching and mixing were observed in all forms of oral communication connecting the L1 and the L2 in single words, between sentences, and in whole sentences.

This finding may have several explanations. With the children's limited English proficiency, the teachers had to translate the L1 to aid the understanding of the new English word or concepts. The switching between the languages may have been to check the children's content and language understanding instead of speaking only the L1 or English. The teachers may have been codeswitching as a way of creating a connection with the children. Code switching between the L1 and the L2 may be considered as a strength when it is used as a sociolinguistic tool to aid the understanding of another person who is not adept in both languages (Hughes, Shaunessy, Brice, Ratliff, & McHatton, 2006). Buel (2004) asserts that in code switching the speaker shows their relationship to the listeners or readers and how they understand their context and the communicative tools that are available to them. All of these

functions can be read into the teachers' switch to the check-up question tag at the end of the explanation: *Emi clea?* [Is that clear?].

The finding of extensive codeswitching shows a direct link to the styles of interactions in the wider community outside the classroom where codeswitching is widespread, and is a communicative norm among the community of speakers in PNG. Accommodating socio-cultural continuity is a benefit which has been noted by several studies (Heath, 1983; Hudelson, 1994; Konishi, 2007; Maguire & Graves, 2001).

5.10 A limited commitment to and support for bridging

In the main, the teachers did not see any advantages in using the local vernacular before English. They saw this as a waste of time which only drags children back and takes time away from English. This finding illustrates the 'time on task' argument (Porter, 1990; Rossell & Baker, 1996). This finding also relates to a study by Shameem (2004) in Fijian schools where the teachers favoured the introduction of the English language rather than the use of the local vernacular in the early years of schooling.

The teachers claimed that they are confident in implementing the bilingual bridging programmes and understand that bridging means to use the L1 version of a word then introduce the English word to the children. They say they teach language according to what they think best supports the learning of English language, in the absence of guidelines from the Department of Education. The results correspond to those of Richards, Tung, and Ng (1992).

The study though showed heavy use of the L1 which in this case is Tok Pisin to support the learning of English. What is lacking when teachers draw on the L1, however, is the use of its written form. The teachers supported the oral use of the L1, but not the written use.

This study revealed that the teachers had some but not enough access to resources such as big books, card games and pictures to support the learning of English. This indicates teachers' need of more resources and materials to support the bridging from L1 to English. This correlates with the findings of Lotherington (2008). It also suggests that when teachers do not have the necessary resources for bridging they may think of themselves as the major resource for language learning and hence dominate classroom talk opportunities.

This study also found that the teachers had some bridging documents that were supplied by the PNG Department of Education to support bridging, but these resources were not effectively used. The teachers did not have the time to study the books and would need a lot more explicit demonstration to use these bridging strategies.

5.11 Summary

The discussion has focused on the following major areas: the teachers' extensive use of Tok Pisin; teacher-centred input; choral responses as output; teachers' elicitation of English language forms; teachers' feedback for consolidating language forms; translation for elaborating information; the use of metalanguage to compare and contrast aspects of the L1 and L2; codeswitching for connecting with students; and a limited commitment to and support for bridging. The discussion has included possible explanations of these findings, as well as a consideration of the way in which they may impact both positively and negatively on students' learning of English, and the maintenance of their L1.

The next chapter provides the conclusion for the study with implications for practice and recommendations for further action and research in the area of bridging in PNG.

CHAPTER 6: CONCLUSION

6.1 Overview of chapter

Providing support to PNG bridging teachers to more effectively implement bridging will need to take into account the wider context of the country, a country that is socially, culturally and linguistically complex. It will also need to operate at a number of levels, from the individual to the government. In this final chapter, it is appropriate that I provide some suggestions to improve the effectiveness of the L1 to English bridging practices of PNG Grade 3 teachers. In addition, I present some recommendations that the PNG Department of Education could consider to support these teachers. I also suggest several points for future research in the area. Lastly, I highlight the implications and limitations of the study and conclude my thesis.

6.2 What teachers can do

I would like to provide some recommendations that can be integrated with existing teaching activities to support the learning of English by Grade 3 children.

1. For a sustainable and workable language transition, children should be encouraged to use both languages in learning in order to develop proficiency in both the L1 and English. In this way they are enabled to engage in the language that they feel comfortable with. Teachers can use the child's known language (and Tok Pisin) to orally support the development of English. If a new concept is taught then it must be taught in the L1. If the concept is known then it can be taught in the L2. It is important not to force the children to use English if they have not developed enough proficiency in the language as this can be detrimental to their subsequent learning.
2. Teachers need to make use of a much wider range of strategies. Teachers need to remember that they are not just teachers of language forms, they are also teachers of content. They can integrate the learning of English through interesting content knowledge and prior knowledge that children bring into Grade 3.
3. Most importantly teachers need to allow the children to use language much more in spoken form, but also very importantly in written form. They need to engage in output

to better learn how English is used. Teachers need to make much wider use of writing specifically. Teachers can explicitly model writing in English using the different genres (recounts, narratives, etc) with the whole class. Then children write individually. They can encourage other culturally appropriate and familiar ways of language expression: as in traditional art work, carving and storytelling to convey their messages.

4. They can also integrate literacy tasks (e.g. talking, drawing, writing, reading, listening) in the L1 then have children translate their ideas to English.
5. Teachers can put children in language groups or other common groups to allow for more practice and to support other modes of literacy. For example, allow children to have time for dialogue in pairs and groups, to draw their own pictures and write stories about their pictures and tell others about their pictures or read their stories in L1 or L2.
6. Teachers can more extensively support the transfer of linguistic elements from the L1 to L2; and also concepts from one context to another.
7. To support children to produce language in a meaningful way, teachers can also make much more effective use of teacher-student interaction and teacher feedback. A teacher's response should allow the child opportunities to say something. In the feedback move the teacher can consolidate the child's response and expand further with another question to continue the dialogue, to help the child to produce language and to express their knowledge about certain concepts.

The learning of English, and the use of effective bridging which values and draws on the L1 should be a whole school commitment. It is important that schools utilise the bridging study documents that have already been provided by the PNG National Department of Education, and also that they support teachers in their efforts. But it is also clear that teachers require much more in the way of research informed professional development in the area of bridging.

6.3 What agencies can do

An important point learned from this study is that the teachers' conceptions and beliefs and bridging practices clash with the expectations of language policy and the education reform, which in return no doubt affects children's learning of English. Although the reform and language policy have brought in some needed changes in bilingual education, these changes have also presented many challenges. The government and the PNG Education Department should be ready to support schools and staff because in this way they will also support children's learning of English.

I would like to provide four immediate responses as urgent recommendations if the Grade 3 bridging programme is to be a success. The bilingual education of young PNG children needs to be reassessed, not least because it inevitably affects their subsequent learning outcomes.

1. The PNG National Department of Education and the Provincial Educational Authorities should support the bridging process through professional development of teaching staff by expert personnel. The call also covers the need to make explicit use of the study guides that were earlier distributed to the schools. In addition, the teachers need extra support from the Department of Education and the teachers' colleges to plan classroom work that meets the individual language needs of the children.
2. The teacher education division which trains primary school teachers should include a module on transitional bilingual education. It is essential that this be responsive to PNG's diverse linguist context and provide bridging strategies that support the transfer of L1 to help the learning of English.
3. The curriculum division in Port Moresby should be proactive in providing language support programmes to support bridging. For example; there is a need to publish and produce English big books for the schools which can be added to the teaching curriculum resources. Moreover, there is a need to develop an English programme that can support the learning of the different aspects of English for schools.
4. The provincial school inspectors must be fully informed about bridging in order to support teachers' practice. The bridging performance of the teachers must be assessed, with evaluations and support for the teachers.

6.4 Recommendations for future research

This study was conducted in the East New Britain Province of PNG and specifically investigated how Grade 3 teachers bridge the L1 to support the learning of English. It identified teachers' conceptions and beliefs about bridging and described their bridging strategies, and practices. As can be seen in the recommendations for agencies above, the research suggests the need to critically evaluate the teaching training and professional development provided for bridging teachers.

However in terms of research I have the following comments to make and suggestions of critical areas for future research.

1. Because the research was intended for a Master's qualification, the number of participants was small and the study was concentrated only in one area, in East New Britain Province, and did not collect representative data from other parts of the country. For that reason, the result should not be regarded as a generalised representation for other parts of PNG. It would be interesting, and it is important to replicate the study using the data gathering tools in other areas of PNG.
2. As this study focussed on the teachers only, future studies can be aimed more specifically at children and how they experience language learning opportunities to offer a balance in the findings.
3. A significant finding of this study is the positive use of translation, and metalinguistic contrast and comparison between languages as a way of bridging. It also found extensive use of codeswitching. Therefore, I would suggest future studies could investigate these strategies more closely to analyse their effectiveness in the PNG context.
4. This study demonstrated that teachers' cognition, that is, their background experiences and beliefs, are in opposition to what teachers are expected to perform in bridging the L1 to L2. Future research studies in teachers' conceptions and beliefs could make an important contribution to understand the way PNG teachers implement bridging strategies.

5. Finally, I would suggest the framing of studies to trial language intervention programmes that support the development of all aspects of language. For example, how can the commonly used word-level bridging strategies be expanded to cater for other aspects of language.

I believe executing more studies into the areas highlighted would shine more light on the bridging practices that teachers provide to support English learners in PNG. In this way, the teachers' bridging work would be supported and their students' language transition would benefit greatly from quality bridging that suits the children of PNG.

6.6 Conclusion

As one of the first studies into the bridging practices of Grade 3 teachers in PNG, this research has unveiled Grade 3 teachers' conceptions and beliefs about bridging practices and has gathered some useful data about the bridging strategies that teachers say they use, and that they actually use to support their classes' learning of English.

Bilingual theories and practices as advocated by international experts may not fully support or be entirely relevant to bridging practices in PNG. Much more needs to be clarified about PNG's uniquely complex situation if the best type of bridging practice is to be made available to the nation's children.

The study is significantly useful because its findings can contribute to the development of bridging policy and implementation, and support PNG's bridging teachers, who were previously unaware of what others like themselves were doing. This study will be valuable if its findings open a new thought in every stakeholder able to be proactive in the learning of English for the children in PNG.

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APPENDIX A: Semi-structured interview questions for the focus group

Demographic questions

1. Name:
2. School:
3. No of years you have been teaching grade 3:
4. Have you done any bridging courses or Professional development (PD) to support your bridging approaches in your teaching?
5. Who provided the in-service training?

Conceptions and beliefs questions

A: Teacher's beliefs, attitudes about bridging

1. As a Grade 3 teacher, what challenges do you face?
2. Explain what you understand about your role?
3. Now tell me what you know about bridging?
4. Do you know why it is important to teach the children in their local vernacular before teaching them in English?
5. Do you feel confident in implementing the bilingual bridging to your children? Explain why you said that?
6. What have you identified that may hinder your bridging process?
7. Do you have any problems or needs with how to bridge the local language to the English language?
8. How do you try to solve these problems?

B: Bridging strategies

1. Are you aware of the model of bridging that you have been using in class?
2. Tell me the strategies that you use to bridge the local vernacular to learn the English Language?
3. Can you explain how you use this strategy/ies?
4. Which strategies do you find helpful in bridging the local language to English?
5. Why do you say this?
6. Do you experience any problems while bridging the languages?

C: Language

1. Tell me about the languages that you use during teaching?
2. In a day, what instructional language would you use most of the times?
3. How does your interaction support children to learn English? In what way?
4. Do you find yourself using another language, instead of the child's local vernacular, eg. pidgin?
5. Why does this happen?

6. How much time do you spend using the child's local language and when?
7. How much time do you spend using the targeted language/ English and when?
8. What do you know about translation when bridging the L1 to L2?

D: Literacy activities in use with bridging

1. You may know that the Department of Education has described bridging strategies in the syllabus. What do you think about these and about the way they have been described? Do you think they are well explained/ effective and sufficient?
2. What literacy activities do you use to help children to learn English?

E: Bridging resources

1. Does your classroom and school have the resources to support your classroom bilingual approach? Explain more.
2. Is your school supporting you to effectively implement the bridging processes?
3. Do you feel that you need more help and support in bridging?
4. Are you aware of any bridging packages that were released by the Department of Education to support the Grade 3 bridging teachers? Tell me more about this?
5. What are the very appropriate resources that you feel are needed all the time for bridging? Explain more.

F: Children's language proficiency and bilingualism

1. Do you find some children coming into your classroom with some English?
2. If yes, what do you do with these children?
3. If no, what do you do with these children?
4. How confident are these children in their English speaking?
5. Why could this be so?
6. Do you find multi lingual children in your class?
7. Tell me more about them?
8. What language do you speak to these children?
9. Are there any children in your class that do not speak the dominant local vernacular?
10. Where do these children fit in when you are using the dominant local vernacular?
11. How do you support these children?

G: Any other comments

APPENDIX B: Classroom Observation Schedule

School:

Teacher code:

Class:

Date:

Time	Activity	TEACHER TALKING													
		Language used			Making connections between languages			Metalinguistic						Scaffolding	
		V	P	E	VP	PE	Other	Focus on aspects of language				Conventions of print	Ideas & experiences	Language	
								Phonology	Vocabulary	Grammar/ syntax	Discourse				
.00															
.10															
.20															
.30															
.40															
.50															

STUDENTS WORKING											Blackboard
Reading		Writing		Listening	Speaking & interaction						
V	E	V	E		Producing		Teacher giving feedback				
					Individual	Group	Error correction	Repeating	Repeating with expansion	Seeking clarification	

APPENDIX C: Post-observation prompt sheet

Name:

School:

Date:

1. There are a number of observations around teaching practices, strategies and techniques that I have made from watching you and your students in the classroom. Could we go through each of them?
2. Could you comment on these?
3. Can you explain what your thinking was at the time? Why did you use that strategy/practice or technique?
4. Could you have used a different teaching strategy/ practice or technique?

APPENDIX D: Letter to the Provincial Education Advisor

4/71 Firth Street
Hamilton East,
New Zealand.
10 February, 2008.

The Provincial Education Advisor
Gazelle District/ Kokopo District
Vunadidir
East New Britain Province

Re: Permission to conduct research in Primary Schools

Dear Sir/Madam,

My name is Matilda August and I have been a teacher in the East New Britain Province for the last 10 years.

I am enrolled in the Master of Education (Early childhood) Degree at the University of Waikato in Hamilton, New Zealand. I am currently here in PNG to conduct a research study as part of my thesis. My research topic will look into the bridging processes and strategies that teachers use to support the children's English languages from the local vernacular. I also would like to investigate the beliefs and practices and the literacy activities that Grade 3 teachers use in the bilingual transitional programs.

I would like to seek your permission to conduct my research in Gaulim and Kabaleo Demonstration Schools. My choice of these schools is because of their status in pioneering the reform in this province and also because of their attachments to the teacher training colleges. Teachers' participation will be required in this research project. My data collection methods will require two focus groups involved in a semi-structured interview which will take approximately 60 minutes each session. I will also need to conduct a classroom observation on two occasions for 4 Grade 3 teachers, ie; two teachers from each school. Each classroom observation will run for one hour thirty minutes totalling three hours observation time per classroom. The focus group interview will be conducted after school in the afternoon, while the classroom observation will be carried out in the normal class time.

This research project is being carried out under the supervision of Dr Margaret Franken. My supervisor can be contacted at the University of Waikato on (0064) or through her e-mail, franken@waikato.ac.nz

I believe that the findings of this research will contribute to improving the bridging practices that teachers are currently using as they implement the language policy to our new reform. It is also envisaged that the findings of this research will contribute to our children's learning when schools improve their bridging practices. A copy of my research proposal is attached for your perusal.

I look forward to your approval and support.

Yours sincerely,

Matilda August

APPENDIX E: Letter to the Principals

4/71 Firth Street
Hamilton East,
New Zealand.
10th February, 2008.

The Principal/ Head teacher,
.....
.....

Re: Request permission to interview and do classroom observations on Grade 3 teachers in your school

Dear Sir/ Madam,

My name is Matilda August. I am enrolled in the Master of Education (Early childhood) degree at the University of Waikato in Hamilton, New Zealand. I am currently here in PNG to conduct a research study as part of my thesis. My research topic will look into the bridging processes and strategies that Grade 3 teachers use to support the children's English languages. I will also investigate the teachers' beliefs and attitudes on bridging and identify the literacy activities that teachers use in their bilingual transitional programs.

I wish to request your permission to be able to collect the data from your teachers. I would be grateful if I could have a focussed group of about 4 to 6 participants for the semi-structured interview, inclusive of Grade 3 teachers and those who have had experiences in lower primary bridging. I will also conduct 2 classroom observations for the two Grade 3 teachers. An information sheet for teachers is attached for more details about this research.

The interviews will be conducted after school hours. This is to ensure that teachers' teaching time is not affected, while the classroom observations will be conducted during the normal class time of the children.

Your support and assistance for this research will be highly appreciated.

Yours faithfully,

Matilda August.

APPENDIX F: Letter of approval from the Provincial Education Advisor



EAST NEW BRITAIN PROVINCIAL ADMINISTRATION

DIVISION OF EDUCATION

PHONE: 9837483/9837484
FACSIMILE: 9837109
E:mail: **peaenb** @ datec.net.pg

PO Box 922
KOKOPO
EAST NEW BRITAIN PROVINCE

Date: 09 March 2009
Ref: PR5-3-3
A/O: K Varpit
Des: SPA HS/SS & TVET

Ms Matilda August
4/71 Firth Street
Hamilton East
NEW ZEALAND

Dear Madam

REF : APPROVAL GRANTED TO CONDUCT RESEARCH IN PRIMARY SCHOOLS

The Division of Education in East New Britain Province acknowledges receipt of your correspondence regarding the above.

Thus, this letter serves to advise you that your request to conduct your Research in primary schools in this province had been approved.

For your information.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Pius Gawi'.

PIUS GAWI
Provincial Education Advisor

APPENDIX G: Information sheet and consent form for teacher participants

My name is Matilda August and I am enrolled in the Master of Education (Early childhood) Degree at the University of Waikato in Hamilton, New Zealand. I am currently here in PNG to conduct a research as part of my thesis. The purpose of this research is to look into the bridging processes and strategies specifically drawing on the use of meta-languages that Grade 3 teachers use to support the children's English languages from the local vernacular. I also would like to investigate the beliefs and practices and the literacy activities that teachers use in the bilingual transitional programs.

This research is significantly necessary to investigate the bridging implementations of the curriculum principle (bilingual education) in the PNG's new reform language policy in grade 3. It is hoped that the findings of this research will support the bridging strategies that Grade 3 primary school teachers use when supporting the children's learning of English.

The data collection methods for this study are the focus group interviews and the classroom observations. It is hoped that the interview will be conducted in approximately 60 minutes for each of the focus groups. The focus group interview will be conducted after school in the afternoon, while the classroom observation will be carried out in the normal class time at a time suggested by the class teacher.

The classroom observations will be conducted 2 times for each participant for 1 and a half hours each. The observations will be done during the normal block either from 8:30 am to recess or from 10:30am to 12: 00 noon. An extra 30 minutes will be needed to complete the follow-up prompt sheet. The transcriptions will be given to the participants for viewing and amending if they wish. I will then proceed with my analysis once the participants have viewed and made changes to their raw data.

The identity of the participants will not be disclosed in the report. Maximum effort will be taken to ensure that the source of information gathered is not identified. Furthermore, names of schools will not be disclosed or mentioned in the research findings; however, the province and the country name will be identified. As a precaution, the interviewees will not be identified by their individual names. The study will identify them as focus group No: 1 and focus group No: 2. The teacher participants in the classroom observation will not be identified in the research as pseudonyms will be used instead. Participants are allowed to make changes or withdrawals to any information when the raw data is given back.

My choice of..... primary school is because of its status in pioneering the reform in this province and also because of your attachments to the teacher training colleges.

I believe that the findings of this research will contribute to our children's English learning through the bridging efforts that teachers are implementing in the schools. A copy of my research proposal is attached for your perusal.

In the case of any problems or questions, I can be contacted by phone on 72520814 or mailed to: Kabaleo Teachers College, Post office Box: ... Kokopo, East New Britain Province, PNG up till the end of April. If problems don't get resolved then my supervisor can be contacted through the University of Waikato on (0064) or through her email, franken@waikato.ac.nz.

Please sign the consent form to show your willingness to participate in this study.
Thank you for your willing participation to support the course of this research study

Yours sincerely,

Matilda August.

Consent Form

I declare that I have understood the details and expectations regarding this research.

I understand that:

- I do not have to provide answers for questions that I am not comfortable with.
- The interviews and observations will be audio taped and snapped with a camera and will be transcribed and returned to me for amendments, comments and changes at the end of each data collection phase.
- The feed back prompt sheets will require my comments if need be for improvement.
- The researcher will maintain my confidentiality by using pseudonyms.
- Information gathered will be used to inform the researchers' masters' thesis and future publications and presentations.

I hereby give my full consent to participate in this research.

Name:

Signature:

Date:

APPENDIX H: Information sheet for parents

Information for the parents about observation of their children

My name is Matilda August and I am conducting a research in your Grade 3 child's classroom. I would like to see how your children are learning to speak, read and write in English from the use of your local vernacular. The results of this study will be used to support and improve the children's learning in English. I would appreciate for you as parents to give me permission to take photos and work samples from your children's work. Please sign the informed consent sheet and return it to me. Thank you.

Toktok klia long bilong ol mama/papa

Naim blong mi Matilda August. Mi laik toksave long yupela olsem mi bai conductim wanpela research long clasrum blong Grade 3 pikinini blong yu. Long dispela study mi laik lukluk long lanim bilong ol pikinini na painim out olsem wanem oli save lainim long rid, rait na toktok long inglis. Dispela study em i impotant bicos, i ken halivim ol tisa long halivim gut lainim blilong ol pikinini bilong yumi. Mi bai amamas sopus yupela iken tok orait long mi kisim poto and sampela work bilong pikinini bilong yupela. Plis sainim dispela tok orait na salim ikam bek long mi.

Consent Form for the parents

I understand that:

- my child will be observed and photographed.
- the researcher may collect work samples or hand copied work from my child.
- the researcher will maintain my child's confidentiality by using pseudonyms

I hereby give my full consent to allow my child to participate in this research.

Name:

Sign:

Date:

Tok orait bilong mama/papa

Mi kilia

- na tok orait bai yu ken kisim poto na sampela wok bilong pikinini bilong mi.
- na tok orait tu olsem bai yu noken yusim naim turu bilong pikinini bilong mi tasol bai you givim em narapela neim.

Mi tok orait long pikinini bilong mi bai involve long dispela research.

Naim

Sain:

Date: